



**TURKEY  
BRIEF:**

# **The U.S. - Turkish Relations**

**March 2008**



**TAİK**

**TÜRK - AMERİKAN İŞ KONSEYİ  
TURKISH - U.S. BUSINESS COUNCIL**





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# I. COUNTRY PROFILE: INTRODUCING TURKEY

## 1.1 HISTORY, GEOGRAPHY, POPULATION AND ECONOMIC DEVELOPMENTS

Turkey is a dynamic, strategically located country in the Eurasian region with a young population and a robust economy, often described as the "China of Europe."

It is a nation steeped in rich history and cultural life; a realm of sprawling cities and vast rural areas; of coastal towns and tiny fishing communities. It is mountainous nation with mist-hidden plateaus, combined with enormous steppes and fertile river valleys.

Sixty percent of the country is located at altitudes of 3,300 feet above sea level or higher. Located in eastern Turkey, Mount Ağrı at 16,976 feet is the nation's highest peak and the biblical resting grounds of Noah's Ark.

More than 99 percent of Turkey's population is Muslim, but the nation is a secular state with a definite western perspective. Christian and Jewish communities also exist in the big cities like Istanbul, Izmir and Adana.

Conservative Sunni Muslims make up the large majority of the country's Muslim population. But about a sixth of Turkey's population is Alevi, an Anatolian offshoot of the Shiite branch of Islam.

## TWO CONTINENTS

Located on two continents -- Europe and Asia -- Turkey has always served as a bridge between the Occident and Orient. The Silk Road, the traditional trade passage connecting Europe to China, began in the ancient cities of what is now western Turkey.

Eight countries border Turkey: Bulgaria in the northwest, Greece in the west, Georgia in the northeast, Armenia, Azerbaijan and Iran in the east, Iraq and Syria in the southeast

Turkey is the third biggest nation in Europe in terms of territory after Russia and Kazakhstan--- nearly twice the size of the state of California. Three percent of Turkey lies in Europe. Known as Thrace, European Turkey forms the southeastern tip of the Balkans. Ninety-seven percent of Turkey is located in Asia and is known as Anatolia. A bulging peninsula, Anatolia is surrounded by the Black Sea, the Bosphorus, the Sea of Marmara, the Dardanelles, the Aegean and the Mediterranean and has been home to many civilizations, including the Hittites, and the Carian, Lydian and Phrygian empires. Anatolia served as the granary of the Roman and Byzantine Empires. Its loss to the Turks in the 11th century deprived the Byzantine Empire of its agricultural wealth and led to its eventual demise.

Turkey is a key member of NATO and has the second biggest standing army in Europe after Russia. It is a member of the United Nations, the Organization for Economic Cooperation and Development and other international bodies.

## **THE FARMING NATION**

Turkey is a huge agricultural country, one of the few nations in the world still largely self-sufficient in food production. It is the world's biggest producer and exporter of hazelnuts, figs and pulses. It also turns out large surpluses of wheat, tobacco, cotton, barley, oats, sugar beets, fresh fruit and vegetables. Wide use of fertilizers and farm tractors since the 1950s has led to a green revolution.

An ambitious \$30 billion dams and irrigation project on the Euphrates and Tigris Rivers is expected to turn the neglected region of Southeastern Turkey into a Middle East breadbasket and provide badly needed electricity. The undertaking is simply known as GAP and calls for the construction of 15 dams, 18 hydroelectric plans and hundreds of miles of irrigation tunnels and canals. Officials predict the project will produce \$6 billion in food surplus annually in the next decade - most of it for exports to arid the Middle East.

The country is endowed with rich mineral resources. It is the world's largest producer and exporter of chromites, meerschaum and boron. It also produces large quantities of metals, and minerals such as aluminum, lignite coal, copper, iron ore and turns out sufficient amounts of sulfur, manganese and lead for exports.

## **YOUNG PEOPLE**

Turkey is a nation of young people. More than half of its population is under the age 25. The country's population has grown from 13.6 million in 1927 to over 75 million in 2008. By the end of 2013, Turkey is expected to have 79 million inhabitants. It already has the third largest population in Europe after Russia and Germany and is expected to surpass Germany in the next 8 years.

About 150 million ethnic Turks live outside Turkey, primarily the Balkans, and the former Soviet Caucasus and Central Asia, Iran, China, Cyprus, Iraq and Syria.

Nearly 3.5 million expatriate Turkish nationals work and live in the European Community. Turkish nationals make up about 3 percent of Germany's population.

Since World War II, millions of peasants from the countryside seeking work opportunities and higher living standards have migrated to the cities.

About 70 percent of Turkey's population lives in cities today, compared to only 25 percent in 1950. By the year 2015, 75 percent of Turkey's projected 80 million will be living in urban areas. Some 17.8 percent of Turkey's population already lives in Istanbul - a nightmare scenario for the city's urban planners.

The shift in population from rural areas to the cities in the past five decades has financially overstretched government resources, compelling state planners to find ways to create millions of new urban jobs and invest billions of dollars in new housing projects, infrastructure, health services and schools and universities in the metropolitan areas of the country.

## **ATATÜRK'S REFORMS**

Turkey was proclaimed a republic in 1923, emerging from the ruins of the Ottoman Empire which ruled the Middle East, North Africa, the Balkans and parts of Eastern Europe for over 450 years. The Ottoman Empire crumbled after its disastrous World War One defeat as an ally of the Central Powers.

From 1923 to 1938, Kemal Atatürk, the founder and first president of the Turkish Republic, carried out sweeping reforms that transformed the country from a backward, feudal state to a progressive nation with a western outlook. The Sultanate was abolished. Atatürk replaced the Shariah, or Islamic holy law, with civilian, trade and criminal codes adopted from Switzerland, Italy and Germany.

In 1925, the fez and the turban, symbols of Islamic backwardness, were banned, replaced by the şapka, or western-style hat with a brim. Three years later, the Latin alphabet replaced the Ottoman script, allowing masses of illiterate Turks to learn to read and write.

Atatürk established state economic enterprises, or state-owned industries, as a solution to Turkey's economic underdevelopment. Enormous government-owned textile mills, mines and mineral processing plants, oil refineries and petrochemical complexes came into being. State banks with huge branch networks were also set up to help finance industrial growth and commerce.

## **PRIVATE SECTOR**

Atatürk's successors encouraged the creation of private industry. Until the 1980s, authorities protected local industry from outside competition by imposing severe restrictions on imports, including steep duties and customs barriers. The motor vehicle industry, synthetic fibers and yarns manufacturing, ready-wear and apparel, home textiles, pharmaceutical products, military aircraft and armored vehicles, household appliances, home electronics were some of the sectors that thrived as a result of the liberalization of the economy.

In the past 22 years, the government has privatized many major industries that were originally established during the early years of the Republic, including, steel plants, pulp and paper mills, oil refineries, clothing and textile factories, and cement factories to make the economy more responsive to market forces

## 1.2 FUTURE PROSPECTS

### CHALLENGES AND EXPECTATIONS

Turkey is one of the fastest growing large economies of the world. It has had high growth rates over the past four decades. But growth has come in spurts and stalls, resulting in high inflation, budgetary and current account deficits and political instability. From 1960 through 1980, the country had three military interventions.

International Monetary Fund-backed programs have helped Prime Minister Recep Tayyip Erdoğan's government push down inflation to single digits from around 69.5 percent in 2001, revalue the Turkish Lira against the dollar by 32 percent since October 2001, introduce a new currency, the new Turkish Lira, achieve six years of strong growth and help draw record foreign investment and capital.

In the past three decades, Turkish leaders have adopted free market policies designed to integrate Turkey with the world economy. Under the late President Turgut Özal and his successors, the government encouraged Turkish companies to do business abroad.

In 2007, Turkey exported motor vehicles and automotive parts and components to more than 187 countries and autonomous regions and 14 free zones on five continents.

Exports of textiles and apparel, iron and steel, chemical products, electrical appliances, color television sets, textiles and textile raw materials, nonferrous metals, mineral products, grains, pulses, oil seeds, cement, ceramic tiles and sanitary ware and jewelry, have also boomed. Imports, chiefly in crude oil, natural gas, boilers and machinery, iron and steel, motor vehicles, electrical machinery, plastics, valuable metals and stones, organic chemicals, pharmaceutical products and optical equipment have also rocketed.

Turkey's foreign trade increased 39.6-fold in the past 28 years from a mere \$7 billion in 1979 to \$277 billion in 2007, according to the State Statistical Organization (TUIK) Exports have risen from about \$2 billion to \$107.153 billion in 2007. Imports have ballooned from \$5 billion to \$169.986 billion in 2007.

Many imported items previously banned in Turkey, such as computers, foreign-made automobiles and commercial vehicles, mobile phones, furniture, and food stuffs, are now available on the market and compete with domestic products.

Turkish political and economic influence has grown in the Balkans and in the Turkic Republics of the former Soviet Caucasus and Central Asia since the breakup of the USSR and Yugoslavia. Turkish companies are among the biggest foreign investors in Romania, Bulgaria, Russia, Egypt, Ukraine, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Turkmenistan and Iraq.

During the past three decades, the nation completed a key part of its infrastructural development. New highways linking Europe with the Middle East, scores of new hydroelectric dams, power

plants, modern telecommunication networks were constructed. Phone lines were installed in every village and hamlet in Anatolia.

Turkey's economy grew an average 4.1 percent in real terms between 1980 and 2001. The country's Gross National Product (GNP) growth averaged annual growth rates of over 6.2 percent over the last six years, making Turkey the fastest growing economy among members of the Organization for Economic Cooperation and Development (OECD).

But Turks are paying a high price for their fast growth with record current account deficits that are unsustainable, rising foreign debts and a stubbornly high unemployment rate that defies to be beaten back. Economists were also warning that the economic growth and reforms haven't filtered down to low income groups -- some 12.930 million Turks were living under the poverty line, according to the Turkish Statistics Institute. Turkey's foreign debts stood at \$237.322 billion at the end of September 2007, one of the highest in the world -- and \$147.589 billion of this stemmed from the private sector, the Undersecretariat of the Treasury reported. Its domestic debt was around \$215.560 billion.

The country in 2007 had a current account deficit of \$37.996 billion, about 7.6 percent of the Gross National Product (GNP). "The external current account position is Turkey's Achilles' Heel," Lorenzo Georgianni, mission chief for Turkey of the International Monetary Fund, told an IMF meeting in Washington D.C. on November 19, 2007. At the end of November 2007, Turkey's unemployment rate stood at 10.1 percent, one of the highest in Europe.

## **THE EU ACCESSION PROCESS**

An associate member of the European Union (EU), Turkey began accession talks with the world's biggest trade bloc on October 3, 2005. Turkey also forged a customs union with the Union, when it removed all trade barriers in 1996 against industrial goods produced in the 27-nation emporium in return for the lifting of all quotas against Turkish textiles. It also enacted laws to protect copyrights, patents and brands and other intellectual property rights and adopted the lower tariff system of the Union against industrial products from third countries. About 56 of its exports went to the European Union and about 40 percent of its imports came from the 27 members of the Union in 2007.

But membership talks have moved forward at a snail's pace because of differences between Turkey and the Union over Cyprus and human rights.

Negotiations on only one chapter of 35 chapters, or policy areas -- science and research -- was begun and provisionally completed in June 2006.

Negotiations on five other chapters, enterprise and industrial policy, financial control, statistics, consumer and health protection, and Trans European networks opened in 2007.

Turkey has submitted position papers on the chapters of education and culture, and economic and monetary policy, and EU positions were awaited.

The nation must complete reforms for negotiations to begin in 14 other chapters: public procurement, competition policy, free movement of capital, social policy and employment, agricultural and rural development, taxation, intellectual property law, customs union, food safety and veterinary and phytosanitary (plant health) policy, company law, financial services, free movement of goods, rights of establishment and freedom to provide services, and the environment.

Screening reports are awaited on the other chapters.

Eight chapters have been blocked since the end of 2006 because of Turkey's refusal to open its ports and airports to ships and aircraft of EU member Greek Cyprus.

Turkey in return demanded that the Greek Cypriots open its ports to Turkish Cypriot ships and airplanes and urged the Union to end its 34-year embargo against the Turkish Republic of Northern Cyprus, the Turkish Cypriot ministate in the northern two-fifths of the divided Mediterranean island. Turkey refuses to recognize the Greek Cypriot administration in the southern part of the island as the sole government of Cyprus.

Cyprus has been divided since Turkey sent troops to the Mediterranean island in June 1974 to protect the Turkish Cypriot minority in wake of a coup against the Cypriot government, engineered by the junta then ruling Athens, aimed at uniting the island with Greece.

Despite the obstacles, the European Union in 2007 provided \_497 million in aid to Turkey in the form of grants, and this figure is expected to increase incrementally each year until reaching \_653.7 million in 2010. But large-scale EU funding for Turkey's huge agricultural sector and economically underdeveloped eastern parts of the country aren't forthcoming until Turkey itself carries out massive rural reforms.

Nevertheless, the European Investment Bank provided \$3.1 billion in loans to Turkey from 2003 to 2005, including financing of a natural gas pipeline from Turkey to Greece to carry energy supplies from the Caspian region to Western Europe.

Additionally, some 370 projects of Turkish universities, industries and government organizations were designated to receive substantial grants through of the EU's Seventh Research Framework Program (2007-2013). The projects cover research in the fields of health, energy, food and agriculture, biotechnology, environment, climate change, transport, space and security, nanotechnology, social and economic sciences, competition and innovation and information and communication technology.

Furthermore, thousands of Turkish university students and lecturers have received EU-funded scholarships and fellowships to study and teach at universities in member countries of the EU. Turkish companies are also allowed to bid for contracts in the EU.

Accession talks have also resulted in a stampede of European, American, Japanese and Arab investment into Turkey's banking, insurance sectors and brokerage services and a flurry of mergers and acquisitions in the fields of energy, health services, telecommunications, building materials, real estate development and other industries and services. The appetite for Turkish investments continues today, despite a tightening up of global liquidity.



## II. TURKEY-U.S. ECONOMIC RELATIONS

### 2.1 LEGAL FRAMEWORK

The U.S. and Turkey have had a Joint Economic Commission and a Trade and Investment Framework Agreement for several years. In 2002, the two countries indicated their joint intent to upgrade bilateral economic relations by launching an Economic Partnership Commission.

#### BILATERAL AGREEMENTS AND INITIATIVES

- 1929 Agreement on Trade and Navigation
- 1980 Agreement on Defense and Economic Cooperation
- 1985 Agreement on Reciprocal Encouragement and Protection of Investments (BIT) (Entered into force in May 1990)
- 1991 Main Donation Agreement
- 1994 Agreement on Science and Technical Cooperation
- 1995 MOU on Agricultural Cooperation  
Global Learning and Observations to Benefit the Environment Agreement
- 1996 Agreement on Avoidance of Double Taxation  
Customs Operation Agreement  
MOU on establishing the Turkey-U.S. Business Development Council  
Joint Communiqué on Turkey-U.S. Joint Economic Commission
- 1998 MOU on Establishing Commercial Consultations Mechanism between Turkey and the U.S. Council on Trade and Investment (TIFA) (Other meetings held in 2001, 2002 and 2003)
- 1999 Agreement Concerning the Development of Trade and Investment Relations  
Cooperation Agreement for the Peaceful Use of Nuclear Energy  
Joint Statement for Bilateral Cooperation with respect to the Successful Financing and Development of Irrigation Projects  
Agreement on the Activity of Alpha Station in Turkey and the Transfer of Management Rights from the U.S. Military Offices to the Boğaziçi University Kandilli Observatory and Earthquake Research Institute  
Protocol of Intentions between the Federal Emergency Management Agency and the Ministry of Public Works and Settlement General Directorate of Disaster Affairs of the Republic of Turkey on Cooperation in Natural and Man-made Technological Emergency Prevention and Response
- 2001 Technical Assistance to Promote Trade, Anti-corruption Measures and for Other Purposes
- 2002 Economic Partnership Commission (EPC) (Other meetings held in 2003 and 2007)  
Business Partnership Initiative Project  
The Customs Mutual Assistance Agreement
- 2006 MOU on Strengthening of Turkey-US Business Partnership  
Agreement on Shared Vision and Structured Dialogue to Advance the Turkish-American Strategic Partnership

Source: U.S. Embassy, Undersecretariat of Foreign Trade

## 2.2 ORGANIZATIONS IN TURKEY

Turkey and the United States hold consultations on commercial and economic matters. Within this framework, the main platforms include the following:

- **Joint Economic Commission (1996):** Based on an agreement dated 1996, this commission meets once a year in Turkey and the U.S. alternately. The last meeting was held in 2000.
- **Council on Trade and Investment (1999):** This Council, which is based on the Trade and Investment Framework Agreement (TIFA) of September 1999, aims at opening a permanent dialogue and a negotiation forum on agricultural and industrial standards, intellectual property rights, customs procedures, services, investment, and other basic issues of trade. The fourth and last meeting was held in January 2006.
- **Economic Partnership Commission (2002):** The convening of the Economic Partnership Commission in February 2002 in Ankara was the first initiative to upgrade economic relations to the level of close strategic alliance. The second meeting was held in 2003 and the third in 2007. The fourth is scheduled for April 2008.
- **Business Partnership Initiative (2002):** This is an initiative proposed by the U.S. Chamber of Commerce and carried out under the leadership of the Turkish Union of Chambers and Exchanges (TOBB), the Foreign Economic Relations Board, and the Turkish-American Business Council. In the first meeting, held in April 2002, it was resolved that small- and medium-sized enterprises (SME) in both countries would start a dialogue over the Internet.
- **TAIK and ATC:** These two business associations are dedicated to enhancing the promotion of US-Turkish commercial, defense, technology and cultural relations. The annual conferences of TAIK and ATC create an opportunity for member companies to exchange views on economic and political issues introduced by experts. These joint conferences in Washington attract hundreds of business people as well as high-level government representatives from both countries addressing key issues in various sectors.
- **Turkish - American Business Association - TABA / AMCHAM TURKEY:** The Turkish - American Business Association (TABA) was founded in 1987 as a non-profit organization, with its head office in Istanbul and five branches in Turkey. It has over 650 members. As the representative of the American Chamber of Commerce in Turkey, its goal is to enhance trade relations between the USA and Turkey, encourage American investments into the country and assist its members by connecting them with potential strategic partners. It also helps solve trade-related issues and contributes to Turkey's promotion abroad. TABA/AmCham is a member of the Chamber of Commerce of the USA (COCUSA), member of the European Council of American Chambers of Commerce.
- **ABFT (American Business Forum in Turkey) (2004):** As an affiliate of the U.S. Chamber of Commerce, the ABFT represents approximately 70 American firms operating in Turkey. In the three years since its establishment, ABFT has held a variety of events, hosted numerous U.S. and Turkish government officials and conducted research on behalf of its members and to develop the bilateral commercial relationship.

## 2.3 BUSINESS ACTIVITIES IN 2007 AND 2008

- February 2007: **The Turkey-United States Economic Partnership Commission (EPC)** was held in Istanbul and Ankara on February 8 and 9, 2007. This was the third EPC and the first since December 2003. Members of the Turkish and U.S. delegations met with business representatives in Istanbul, in a "Business Forum" hosted by TOBB and DEIK, while the two government delegations met in Ankara at the Ministry of Foreign Affairs. The U.S. Delegation was led by Assistant Secretary of State for Economic, Energy and Business Affairs Daniel Sullivan and included representatives of the Departments of Commerce, Energy, Treasury, and the United States Trade and Development Agency. The Turkish Delegation was led by Undersecretary of Foreign Affairs Ertuğrul Apakan and included representatives of relevant Turkish agencies. The two delegations discussed bilateral trade and investment; business cooperation, including small- and medium-sized companies; science, technology and culture cooperation, economic conditions and policies in both countries and globally, energy security, and opportunities for commercial cooperation in third countries. During the meetings, Turkish and U.S. officials discussed ways to boost economic and commercial ties between the two countries, discussed issues concerning energy, health, culture, science, and transportation.
- February 2007: **Promotion of "A Guide to the US Market"** in Istanbul. A US market accession guide, prepared as part of the US-Turkey commercial partnership project under the auspices of the Turkish Union of Chambers and Commodities Exchanges (TOBB) and the US Chamber of Commerce, was launched with a press conference in Istanbul. The guide was prepared in the framework of the Project for Strengthening of Turkey-US Business Partnership. The project presents market and networking opportunities for Small and Medium Sized Enterprises (SME) in Turkey by means of conferences and seminars. U.S. Assistant Secretary of State Daniel Sullivan for Economic, Energy & Business Affairs was among the participants.
- March 2007: The Turkish-American Business Council (TAIK) and the American Turkish Council (ATC) held their annual conference in Washington, D.C. Under the title "**Turkey & US: In the Business of Success**," the conference focused on electricity and energy, oil and gas, banking and finance, agriculture and food. It also covered defense and foreign relations, construction, textiles and the European Union process and its effects on Turkish-American relations.
- October 2007: **U.S. Medical Trade Mission** in Istanbul to promote American medical technologies. The Department of Commerce, U.S. Commercial Service, the International Trade Administration and Office of Global Trade Programs organized the mission.
- January 2008: The **Turkish-American Clean Energy Technologies Conference** was held in Istanbul, covering a wide range of issues, including cooperation in clean coal, hydroelectric power, wind and solar energy, and bio-fuels and nuclear energy. The conference was sponsored by the U.S. Department of Energy and the Turkish Ministry of Energy and Natural Resources (MENR) and organized by the ATC, Turkey's Foreign Economic Relations Board (DEIK), TAIK and the Turkish Scientific Technological Research Organization (TÜBİTAK).

- March 2008: The **Annual Investment Conference** was held in New York City. Under the title "**Turkey: Beyond 2008**" The conference aimed at focusing on the future of Turkey as an investment site. DEİK/TAİK organized the conference, sponsored by GE Money and Garanti Securities.
- April 2008: The Turkish-American Business Council (TAİK) and the American Turkish Council (ATC) are to hold their annual conference in Washington, D.C.
- April 2008: A new meeting of **the Turkey-United States Economic Partnership Commission (EPC)** is scheduled for Washington, D.C.

## **BILATERAL TRADE AND INVESTMENTS**

The U.S. is Turkey's seventh largest export market and the fifth biggest import market. The U.S. market represents only 3.9 percent of Turkey's exports and only 4.8 percent of its imports. Turkey's share in U.S. trade is trivial, with 3 per thousand in American imports of around \$2.2 trillion. Business leaders say that Turkey, which ranks as the world's 19th largest economy and 22nd largest exporting country, deserves a greater share of the U.S. import market and a bigger expansion of trade.

"Turkish-American economic ties in the past have been defense-based. As strategic partners, we have to enter other areas of business activity," Ali Koç, vice president of the Turkish-American Business Council (TAİK), told the Turkish-American Clean Energy Technologies Conference in Istanbul in January 2008.

Over the past 2.5 years, U.S. companies have been rushing headlong to acquire shares in Turkish banks, energy companies, brokerage houses, medical services and franchising to capture a greater share of Turkey's booming economy. In the first 10 months of 2007, U.S. companies carried out the largest foreign direct investment among all nations in Turkey, with \$3.589 billion in foreign direct investment (FDI), excluding investments in real estate development. Major examples of American investment in Turkey in 2007 economy include:

- In January 2007, **Citibank Overseas Investment Corp** acquired a **20 percent stake in Akbank**, Turkey's second biggest private bank, from **Sabancı Holding** for \$3.1 billion. Citibank in December also acquired **Opus Securities** from the Büyükhanlı family for an undisclosed sum.
- A unit of **General Electric Co.** will invest at least \$3 billion to build power plants in Turkey and the Middle East with its Turkish partner **Gama Holding** after buying a stake in **Gama's energy company** in December 2007 for an undisclosed sum.
- The newly created **Krea Group**, the local operating partner of **Merrill Lynch Global Principal Investments**, has developed a shopping mall in Eskişehir, in northwest Anatolia, and is investing in three other shopping centers in Turkey, including two in Istanbul and one in the city of Adapazarı. Merrill Lynch acquired the Neo Shopping Center in Eskişehir in February 2007 for \$94.5 million

- **Citigroup Venture Capital International** in May 2007 acquired a 50 percent stake in fashion house **Beymen** for \$145 million and a 30.05 percent share in department stores operator **Boyner Büyük Mağazacılık** for \$48 million from the **Boyner Group**.
- **Colony Capital LL.G** in April 2007 bought a 55 percent share in Turkish entertainment venture **Mars Entertainment Group** for \$44.9 million.
- The U.S. **Templeton Strategic Emerging Market Fund** in May 2007 acquired a 10.34 percent stake in processed food manufacturer **Tat Konservecilik** for \$17.8 million.
- Leveraged buyout specialist **Kohlberg Kravis Roberts & Co. (KKR)** bought a 97.6 percent interest in roll-on-roll-off transport ships' operator UN Ro-Ro for \$1.284 billion.

The US-Turkish partnership, which has been characterized as a security-dominated relationship, has diversified and trade and investment volumes increased over the last decade. One-third of the American firms doing business in Turkey started their economic activities after 2003. In this framework, Turkey declared 2006 as "Trade year with USA", planning to highlight the economic dimension of the relations by the new commercial initiatives. The U.S. provided a \$400,000 loan to the Union of Chambers and Commodity Exchanges of Turkey for enhancing the cooperation between small and medium sized enterprises of the two countries. The Council of American Investment and Trade meeting and Economic Partnership Commission meeting, which could not be gathered over the three years, were held in 2006 and 2007, respectively.

The Turkey-US trade volume in the year 2000 was \$7 billion. In 2007, this figure reached 12.289 billion. Yet the pace of growth in Turkey's trade with the U.S. has been much slower than the growth of its commercial ties with many European nations and China. Furthermore the trade has been lopsided with U.S. exports to Turkey nearly twice the amount of Turkey's exports to the U.S. This necessitates new initiatives particularly to expand Turkish exports so that trade growth is more balanced.

In 2007, Turkish exports to the U.S. fell 20.6 percent from 2006 to \$4.144 billion, while imports spiraled upward 27 percent to \$8.144 billion. Experts cited the U.S. mortgage crisis and the weak U.S. dollar/strong Turkish lira as the principal reasons for the plunge in Turkish exports and rise in U.S. foreign sales. Particularly hard hit were exports of ceramics and ready-wear, which has been in a steady decline. Textile and apparel exports of Turkey to the U.S. fell from \$1.8 billion in 2004 to \$963 billion in 2007.

In face of increasing competition from low-cost Chinese textiles flooding international markets, more than 50 Turkish textile companies, led by the nation's number one apparel manufacturer **Şahinler Holding**, have invested in manufacturing operations abroad. The companies are seeking to benefit from low labor and energy costs, maintain their markets in the U.S. and the European Union and penetrate new markets, such as Africa and Asia. These companies have invested in Tunisia, Bulgaria, Egypt, Uzbekistan, Jordan, Moldova, China, Russia, Pakistan, Sudan and the Czech Republic and the Gaza Strip.

"I resisted for two years from leaving Turkey, but couldn't resist any longer," Şenol Şenkaya, chairman of Yeşim Tekstil, one of Turkey's biggest ready-wear manufacturers, said. Yeşim has invested in a factory in a special industrial zone in Egypt, where labor and energy costs are a fraction of Turkey. Yeşim exports its products to international companies as **Nike, GAP, Banana Republic, Zara, and Marks & Spencer**. Another 100 Turkish firms, mainly ready-wear and textile companies, are planning to invest a total \$4 billion in a special Turkish industrial zone in Egypt, to export to the U.S., the Egyptian General Authority for Investment and Free Zones (GAFI) said.

### TURKEY'S TRADE WITH THE UNITED STATES

	Exports		Imports		Trade Volume	
	Turkey's Exports to the U.S. (\$ Mn)	U.S. Share of Turkey's Exports (%)	Turkey's Imports from the U.S. (\$ Mn)	U.S. Share of Turkey's Imports (%)	Turkey's Volume with the U.S. (\$ Mn)	U.S. Share of Turkey's Volume (%)
1985	506	6.4	1,150	10.1	1,656	8.6
1995	1,514	7.0	3,724	10.4	5,238	9.1
1996	1,639	7.1	3,516	8.1	5,155	7.7
1997	2,032	7.7	4,330	8.9	6,362	8.5
1998	2,233	8.3	4,054	8.8	6,287	8.6
1999	2,437	9.2	3,080	7.6	5,517	8.2
2000	3,135	10.8	3,911	7.2	7,046	8.6
2001	3,126	10.0	3,261	7.9	6,373	8.8
2002	3,356	8.5	3,099	6.0	6,279	7.4
2003	3,751	7.0	3,496	5.0	7,246	6.2
2004	4,860	7.6	4,475	4.8	9,517	5.9
2005	4,911	6.6	5,376	5.1	10,192	5.4
2006	4,996	5.9	5,920	4.3	10,916	4.9
2007	4,144	3.9	8,144	4.8	12,229	4.4

Source: Turkish Statistical Institute

Except for the 2002-04 period, the United States has consistently maintained a trade surplus with Turkey - one of a handful of countries where U.S. exports still exceed imports. This reached \$4 billion in 2007.

U.S. exports to Turkey draw on a wide range of sectors. America's top ten exports to Turkey are in unequivocally different industrial categories. Leading exports in 2006, include nuclear reactors, boilers and machinery; iron and steel, organic chemicals and pharmaceuticals, cotton and cotton and optical instruments and medical equipments.

**BREAKDOWN OF TURKEY'S IMPORTS FROM  
THE UNITED STATES, 2004-07**

\$ Million

	2005	2006	2007*
Boilers, Machinery	1,085	1,091	1,077
Iron and Steel	401	773	1,099
Organic Chemicals & Pharmaceuticals	684	730	656
Cotton	564	530	687
Optical Instruments & Medical Equipments	493	500	433
Chemicals & Plastics and Articles Thereof	420	448	724
Vehicles, Aircraft, Spacecraft, and Parts	364	397	228
Mineral Fuels and Oils	297	272	269
Food, oilseeds & vegetable oils	207	227	299
Paper products	188	205	161
Turkey's Top 10 Imports from the U.S.	4,703	5,173	5,663
Turkey's Total Imports from the U.S.	5,376	5,920	8,144

*\*January-October 2007*

Source: TURKSTAT

In contrast, the export profile of Turkey to the U.S. consists of a limited variety of sectors and products, hindering a meaningful increase in the trade volume. The commodity breakdown of trade between the two countries shows that the United States penetrates the Turkish market with a far greater range of goods than that with which Turkey is able to tap the American market.

**BREAKDOWN OF TURKEY'S EXPORTS TO  
THE UNITED STATES, 2005-07**

\$ Million

	2005	2006	2007*
Textile & Apparel	1,590	1,315	803
Iron and Steel	699	923	417
Processed natural stones & sanitary ware	393	448	329**
Vehicles, Aircraft, Spacecraft, and Parts	262	387	108
Mineral Fuels and Oils	517	383	502
Boilers, Machinery	250	327	300
Jewellery	373	295	266
Food	208	229	175
Tobacco	164	139	128
Copper products	60	98	93
Turkey's Top 10 Exports to the U.S.	4,516	4,546	3,121
Turkey's Total Exports to the U.S.	4,911	4,996	4,144

\*January-October 2007

\*\*Excludes ceramic floor and wall coverings

Source: TURKSTAT, TIM

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Turkey's exports to the United States are limited largely to textiles and apparels, which constituted some 23.2 percent of Turkish exports to America in 2007, compared to 45% in 2004. This decrease,

which was mainly attributable to the developments in the post quota period, was compensated to some degree by the increase in the mineral fuels and oils and natural stones exports. Textile/apparel exports are followed by iron and steel and its products in export revenues.

As Turkey has set an export target of \$500 billion export target for the year 2023, the 100th anniversary of the Turkish Republic, the US economy remains an important market. On one occasion State Minister Kürşad Tüzmen said: *"The geographical distance, tough competition, and the unique characteristics of the US market, and also the fact that the companies which wanted to enter the market didn't determine long term strategies led to the development of these relations falling behind the desired level. The US market is a specialized market which requires long term policies in marketing and has tough competition conditions. Moreover, for a long time only textile and ready-made clothing industries saw the US market as a target; only recently have industries like ceramics, iron and steel, or jewelry been approaching the US market. Our aim is to increase the number of such examples and put the US among our target markets. Our activity program within the U.S. covers the period 2006 - 2008 and is focused on increasing exports on a "state-based" and "sector-focused" strategy, which involves organizing special activities in the six target states (New York, Texas, California, Illinois, Georgia and Florida.)"*

## ENCHANCING TRADE VOLUMES

Below are some quotations from the Turkish officials on the Turkish-American trade:

**Kürşat Tüzmen, the Minister of State:** *"It is now high time to increase trade volume between Turkey and the United States to \$30 billion after witnessing development in defence and security cooperation in the last several years. Of the 600 American firms doing business in Turkey, fully one-third of them started their economic activities here within the last two years, which shows the increasing level of international confidence in our economy. We see clothing, ceramics, marble, jewellery, automotive, machinery and metal sectors as target areas within the scope of new strategy."* Noting that Turkish and U.S. companies have successful cooperations especially in construction sector, Tüzmen said that U.S. companies are also cooperating with Turkish firms to work with third countries.

**Rifat Hisarcıkloğlu, TOBB Chairman:** Delivering a speech at the MOU signing ceremony, Rifat Hisarcıkloğlu said *"The trade volume between Turkey and the US was merely \$10 billion as of 2005, while that between Turkey and the EU was \$ 87 billion. Turkey's foreign trade volume with the EU grew by 129%, while the increase in the trade volume between Turkey and the US remained at 43%. TOBB, as the roof structure of the business world, is not pleased with the current trade volume between Turkey and the US. Therefore, we attach great significance to enlarging the trade volume between the two countries."*

On another occasion Mr Hisarcıkloğlu said that dialogues between Turkey and the US in political and military fields were satisfactory despite some difficulties in Turkish-US relations and added, *"However, we can't make same evaluations for economic and commercial relations. In other words, economic and trade aspect of our relations aren't satisfactory.."*, *" Within the business progress project conducted jointly by TOBB and US Chamber of Commerce, the Turkish companies will learn the rules to enter the US market. Our cooperation with US Chamber of Commerce will include third countries. There is serious potential to boost cooperation between our companies in regions such as Middle East, Central Asia, and Black Sea."*

## THE U.S. REVIVES ITS INTERESTS IN TURKISH EXPORTS AND ENERGY

**Dan Sullivan**, the US Ministry of Foreign Affairs Assistant Under Secretary in charge of Economy: He stated that there are many significant opportunities ahead Turkey on the new natural gas production project in the region in the speech he made at the Common Commission Meeting. Sullivan said: *"Turkey could link a new generation of gas production projects to pipeline projects and feed Central and Southern Europe from the East. There can be a natural gas pipe line passing over South and East Europe. Turkey will have a significant role in the Greece-Italy natural gas pipeline."* Sullivan also stated that their support in regional energy project will go on to fortify the partnership of the USA and Turkey. (February 9, 2007)

**Ross Wilson**, the U.S. Ambassador to Turkey: *"We have regretted that U.S. business is a little behind Europe and various Arab countries in the privatization race that is taking place in Turkey. We are trying to address this by re-launching the Economic Partnership Commission (EPC)."* On another occasion, he said: *"The Turkish economy has achieved extremely impressive economic results over the course of the last four years in terms of the growth of Turkish gross domestic product, this country's success in taming inflation, this country's success in improving the climate for business and foreign investors, and resolving outstanding problems that companies, including American companies, have had in previous years All of that has led to a substantial increase in American investor interest here. Some of that has translated into specific commitments that have been made. The decision of General Electric Capital to invest in Garanti Bankası is one big example. There have been several others in the news over the course of the last couple of months, and I hope and expect that there will be more."*

## 2.4 TRADE RELATED ISSUES

**Generalized System of Preferences (GSP):** Turkey, which, together with Russia, Brazil and India, was among a group of 13 countries that could lose preferential trade benefits granted by the United States under a review conducted 2006, was relieved by the approval of the system by the U.S. Congress in January 2007. The Bush administration's review followed complaints from some in Congress that countries such as Brazil and India, which get duty-free benefits from the United States, had not been helpful in efforts to achieve agreement in the Doha Round of global trade talks.

GSP covers some 20 percent (\$1 billion) of Turkey's export to the United States and Turkey wants to continue with this system. *"If Turkey was excluded from this system, around 4-5 percent tax would be taken from the products it exports and this would have a negative impact on competition of Turkish export products in the USA market,"* the State Minister Tüzmen said. Indicating that the system would be reviewed in 2008, Tüzmen said lobby activities would continue in order to prevent Turkey from being excluded from this system.

**The Joint Production Zone:** The Qualified Industrial Zones concept, which Turkey kept on the agenda since 2002, is now set to be replaced by a joint production zone. Turkey regarded QIZ as a crucial tool for improving economic relations with the U.S. and discussed the issue last time during the TIFA meeting in January 2006, when the Turkish State Minister Kürşad Tüzmen said that *"We wish to include the textile and ready made garment industry in such zones. If we can agree with the U.S. authorities, we can sell more ready made garments to this country and increase our trade volume significantly."* Meanwhile, the concept of a joint production zone was developed during

the third EPC meetings in order to replace the QIZs. Both parties concluded that further steps would be taken on the issue, regarding the site selection and product/sector identification.

**Palestinian Free Industrial Zone (PFIZ):** The Union of Chambers and Commodity Exchanges of Turkey (TOBB) has recently undertaken the revitalization of Erez Industrial Estate Project in the Gaza strip - now renamed as "Palestinian Free Industrial Zone" (PFIZ). The Turkish companies -especially textile companies, to be operational here would be able to export freely to the USA and the EU. In March 2006, the Chairman of TOBB, held meetings in Washington regarding the future of Enez industrial zone with U.S. Undersecretary of Defense Department Eric Edelman, officials of U.S. State Department and World Bank officials about the issue. The agreement, which envisages reconstruction of Erez industrial zone and its management by TOBB, was signed in the beginning of 2006. However, the project's future has become uncertain because the United States decided to put sanctions on new Palestinian administration led by Hamas.

**Turkish Industrial Zone in Egypt:** President Abdullah Gül laid the foundation for a Turkish industrial zone in Egypt's 6<sup>th</sup> of October City in mid January 2008, during a state visit to the Middle East nation. The area will include 150 factories for producing textiles, ready to wear clothes, cars, electronics, and flat glass at investments of \$4 billion, the Egyptian General Authority for Investment and Free Zones, reported. Turkish investments in Egypt stood at Egyptian Pounds 400 million as of mid 2006. Trade between the two countries stood at a total \$1.6 billion in 2007. Turkish companies aim to export products to the U.S. from this base without trade limitations.

## **DEVELOPING REGIONAL TRADE AND INVESTMENT WITH THE US**

Dissatisfied with the low performance of commercial transactions between two countries, Turkey launched the Trade Development Strategy with America in 2006, aiming to reach six states directly. This is an extension of the Trade Development Strategy with Neighboring and Surrounding Countries, initiated in 2000 by the Undersecretariat of Foreign Trade. The strategy, which incorporates 50 countries around Turkey, has yielded very positive results, raising Turkey's trade volume with the concerning countries by 125% during 2000-04.

During the launch of the strategy, the Undersecretary of the Prime Ministry for Foreign Trade Tuncer Kayalar said: *"Our approach will be sector and region specific, creating new and direct markets for our products and also attracting investment into Turkey especially in high technology areas. The new approach targeted initially six states; namely, New York, Illinois, Georgia, Florida, Texas and California. The strategy is not limited to trade. On the contrary improving economic cooperation and encouraging direct investment are the keys for the strategy's success. We believe Turkish companies also have much to offer on this front. Turkey presents a significant opportunity to access other regional markets like Africa, the Middle East and Central Asia, where Turkish companies are experienced in operating in difficult business climates."* This strategy involves opening, in addition to New York and Washington, D.C., trade offices in Los Angeles and other cities, holding conferences, conducting a public relations campaign to raise people's awareness of Turkey in the states of Georgia, California, Illinois, New York, Florida and Texas, establishing extensive relationships with local administrations in these states, providing support for Turkish participants in 200 trade exhibitions across the United States

as well as organizing 10 Turkish exhibitions in the country. The Undersecretariat of Foreign Trade also plans a trade council trip to California and Florida and smaller scale boutique trade councils to New York and Chicago in 2007.

The statement of Mr. Kayalar coincided with that of Donnelly, Assistant US Trade Representative for Europe and the Middle East, who on the occasion of the latest TIFA meeting stated that Turkey is a strategic country: *"We plan to develop joint projects and make investments with Turkey in the Caucasus, Central Asia and Middle East"*.

### **TURKEY'S MUHTAR KENT TO BECOME CHAIRMAN OF COCA COLA CORPORATION**

Muhtar Kent, Turkey's best known international businessman and executive, has been chosen to become the next chairman and chief executive officer (CEO) of Coca Cola Corporation, the U.S. soft drinks company. He will succeed E. Neville Isdell, on July 1, 2008.

Kent has been chief operating officer (COO) of Coca Cola since December 2006, after serving as chief executive officer of Coca Cola International from February 1, 2006 to November 2006. As COO, he oversees all Coca Cola operations inside and outside North America, including 200 countries, 100 factories and more than 300,000 employees. Five regional presidents report to him. Kent, who is based in Atlanta, Georgia, reports directly to Isdell.

Born in Ayvalık, Balıkesir, in 1952, Kent grew up in New York City, New Delhi, Warsaw and Stockholm, where his father, Necdet Kent (1911-2002), served as Turkey's Ambassador.

Kent received a B.Sc. in econometrics from Hull University and an M.Sc. in managerial economics from the University of London.

He joined Coca-Cola in 1978 as brand manager at corporate headquarters in Atlanta and was sales coordinator in Rome from 1979 to 1981. He was director of international accounts in Amsterdam from 1981 to 1985 and general manager for Turkey from 1985 to 1990.

Kent served as president of Coca-Cola's East Central European division from 1990 through 1995, when he was named managing director of Coca Cola Amatil Europe in Vienna. He left the company and served on the board of Turkey's Alternatifbank from 1997 to 1999. From 1999 to March 2005, he served as president of the Efes Beverage Group, a Coca-Cola bottler and beer brewer with investments in several countries.

He returned to Coca Cola in May 2005 becoming its president for North Asia, Eurasia and the Middle East, effectively heading operations of the multinational beverages company in 100 countries. He speaks English, Turkish, Italian and French.

Currently more than 600 American companies are active in Turkey. One-third of them set up shop in Turkey after the year 2003. Turkish and American companies carry out joint construction projects in a wide geographical region from Afghanistan to Lebanon. Enlarging these partnerships to other sectors will turn these commercial contacts into joint investments. Meanwhile, the U.S. companies and BOTAŞ, the state oil pipeline company, have been conducting discussions to cooperate on the hydrocarbons in Iraq.

## III. MAJOR EXPORTS OF TURKEY

### 3.1 AUTOMOTIVE

#### MOTOR VEHICLE PRODUCTION REACHES 1.132 MILLION IN 2007

Turkey has one of the fastest growing motor vehicle industries in the world.

The country in 2007 produced a record-breaking 1,132,932 motor vehicles, including 632,883 automobiles, a 10 percent increase from the same period in 2006 and more than a fivefold increase from 1990, the Automotive Manufacturers' Association (OSD) reported. Turkey manufactured a total 1,024,987 motor vehicles in 2006, 914,315 motor vehicles in 2005, 430,947 vehicles in 2000 and 209,150 in 1990. It produced only 3,000 vehicles in 1963 - all farm tractors. Today, 14 out of every 1,000 motor vehicles produced in the world are manufactured in Turkey.

All the major foreign automotive companies have operations in Turkey, including Ford, Toyota, Mercedes Benz, Hyundai, MAN, Renault and Fiat. Turkey has 16 large motor vehicle manufacturers. Most of these

companies in the sector are either foreign-owned or joint ventures with foreign manufacturers. Some produce under license agreements with foreign manufacturers. In addition to passenger cars, farm tractors, trailers, light and heavy-duty trucks, pick-up trucks, passenger buses, mini and midi buses are produced in Turkey. The country also has thriving components, parts and tire industries.

Many of the vehicles produced in Turkey are now domestically designed and manufactured only locally and nowhere else.

The automotive industry has developed spectacularly since the launching of Turkey's customs union with the EU in 1996, with most of world's major manufacturers deciding to establish production bases in Turkey for sales both to domestic and export markets. A boom in exports has driven production increases.

#### TURKISH AUTOMOTIVE PRODUCTION 1990-2007

YEAR	TOTAL VEHICLE PRODUCTION	AUTOMOBILE PRODUCTION
1990	209,150	167,556
1995	282,440	233,412
2000	430,947	297,476
2001	270,685	175,343
2002	346,565	204,198
2003	562,466	294,116
2004	862,035	447,152
2005	914,359	453,663
2006	1,024,987	545,682
2007	1,132,932	634,883

Source: Automotive Manufacturer's Association (OSD)

### TURKISH MOTOR VEHICLE PRODUCTION IN 2006-2007 IN UNITS

	2006	2007	% Change
<b>AUTOMOBILES</b>	545,682	634,883	16
<b>COMMERCIAL VEHICLES</b>	441,898	464,531	5
--Midsize Trucks	29,831	28,388	-5
--Light Trucks	7,195	6,156	-14
--Pick up Trucks	369,862	391,737	6
--Buses	6,019	6,946	15
--Minibuses	20,728	21,999	6
--Midi bus	8,263	9,305	13
<b>FARM TRACTORS</b>	36,018	30,998	-14
<b>TOTAL MOTOR VEHICLE PRODUCTION</b>	<b>1,026,427</b>	<b>1,132,932</b>	<b>10</b>

Source: Automotive Manufacturers' Association

### TURKISH MOTOR VEHICLE EXPORTS IN 2006-2007 IN UNITS

	2006	2007	% Change
<b>AUTOMOBILES</b>	420,420	504,353	17
<b>COMMERCIAL VEHICLES</b>	266,268	316,017	19
--Pick up Trucks	254,159	295,585	16
--Minibuses	1,809	2,695	49
--Trucks	4,007	9,398	135
--Midi buses	2,168	2,987	38
--Buses	4,125	5,352	30
<b>FARM TRACTORS</b>	9,714	9,509	-2
<b>TOTAL MOTOR VEHICLE EXPORTS</b>	<b>706,402</b>	<b>829,879</b>	<b>17</b>

Source: Uludağ Exporters' Associations (UIB)

The nation in 2006 ranked sixth biggest motor vehicle manufacturer in Europe and 16th largest in the world, according to the International Motor Vehicle Manufacturers' Association (OICA). In Europe, only Germany, France, Spain, England, and Italy manufactured more vehicles than Turkey in 2006.

**TURKISH AUTOMOTIVE INDUSTRY EXPORTS 2006-2007**  
(IN U.S. DOLLARS)

Sector	2006	2007	% Change
<b>Motor Vehicle</b>	<b>9,921,815,775</b>	<b>12,948,711,105</b>	<b>31</b>
<b>Exports</b>			
-- Passenger Cars	5,683,364,186	6,849,650,057	21
-- Buses	724,611,420	1,099,543,073	52
-- Others	3,513,840,169	4,999,517,975	42
<b>Total Side</b>	<b>4,508,490,757</b>	<b>6,321,835,073</b>	<b>40</b>
<b>Industry Exports</b>			
--Spare Parts and Components	3,668,803,672	5,225,143,516	42
--Tires and Tire Tubes	717,230,911	896,635,235	25
--Batteries	50,020,679	103,262,890	106
--Safety Glass	72,435,495	69,794,232	34
<b>Total Automotive</b>	<b>14,350,824,949</b>	<b>19,270,546,978</b>	<b>34</b>
<b>Exports</b>			

Sources: *Uludağ Exporters' Associations (UIB) and Central Anatolian Exporters' Associations (OAIB)*

Turkey is Europe's third biggest producer of light commercial vehicles (LCVs -- pick up trucks and minibuses) after Spain and France, and its largest manufacturer of passenger buses. It is expected to become the largest producer of light commercial vehicles in Europe and move up a couple of scales in car production in 2008 as a result of new massive investments. A major project in this field is the development of the Minicargo vans by automaker Tofaş. Under this project, the company is spending \$410 million to design and produce the commercial vehicles for Fiat, PSA Peugeot and the Citroen Group. It plans to turn out 135,000 commercial vehicles a year for eight years, starting in 2008. Ninety-five percent of production would be exported, one-third to Fiat, one-third to PSA Peugeot and one-third to Citroen.

Turkey's biggest motor vehicle manufacturer, Ford Otosan, a joint venture between Ford and Turkey's Koç Group, plans to export its Ford Transit LCVs to the U.S. starting in 2008.

The motor vehicle industry is export-oriented - nearly 80 percent of all automobiles and 69 percent of all commercial vehicles are sold abroad. About 70 percent of all of its vehicle exports are destined to the nations of European Union.

*"If someone had told me 15 years ago that we planned to produce 2 million vehicles a year in Turkey, I would have fainted. Now, I believe it is a distinct possibility," Toyota Turkey's Chief Executive Officer Tamer Ünlü, speaking at the First International Istanbul Automotive Congress (Automotivist) in November 2007, said.*

The OSD has set a target to double production by 2012 to over 2 million vehicles and make the automotive industry the biggest sector of Turkey, overtaking the combined apparel and textiles, carpet and leather industries. According to the OSD, the industry could employ 600,000 people, three times more than it does today and earn \$60 billion annually from exports. It earned a record \$19.270 billion in exports in 2007, a jump of 34 percent from 2006, according to the Uludağ Exporters Association, a trade group.

**DEVELOPMENT IN THE AUTOMOTIVE MARKET, 2000-2007**

000 Units

	2000	2001	2002	2003	2004	2005	2006	2007
Production	468	286	357	562	862	914	1,024	1,132
Exports	105	202	262	360	518	561	706	828
Sales	659	195	175	401	754	763	670	641
Imports	342	94	83	223	436	438	384	359
Share of Exports, %	22	71	73	64	60	61	69	73

*Source: OSD (Automotive Manufacturers' Association)*

The main strengths of the sector include:

- Existence of capacity suitable for the economies of scale
- Strong auto parts industry with a diversified product portfolio
- Strong cooperation with foreign partners and development in R&D capacity
- Growth potential in the domestic market

- Proximity to developing and developed markets
- Alignment with international technical legislation and quality system and perspective for EU accession
- Qualified and relatively cheap labor.

## PROSPECTS FOR THE AUTOMOTIVE AND COMPONENT INDUSTRIES

Despite increasing exports, domestic demand is crucial for future investments in the automotive industry. In this framework, the level of income, interest rates and consumer confidence are critical determinants in the development of domestic demand. Due to its low saturation level, there is a high potential in domestic demand for automotive products.

### AUTOMOTIVE PENETRATION RATES, JUNE 2007

	Turkey	EU
Vehicles / 1,000 persons	176	556
Passenger cars / 1,000 persons	88	476

Source: TURKSTAT

The high quality of the industry in terms of production technology, innovation capacity and human resources is appreciated worldwide. Geographical position and logistic opportunities make Turkey an attractive location for automotive investments. Turkish companies are aware of the importance of these factors for global competition. Turkey is also showing good progress in harmonizing its legislation and regulations on the automotive sector with those of the EU in matters such as fair competition, consumers, patents, machinery directives etc. The country's legislation is generally in line with international rules of free trade within the context of the Customs Union and WTO (World Trade Organization).

*"It has become much too costly to produce motor vehicles in western Europe. European Union motor vehicle manufacturers are outsourcing their production to the new accession countries of Hungary, Slovakia, Poland, and Romania and to candidate country Turkey," Ercan Tezer, secretary general of the OSD, said in an interview. "The present day success of Turkey's motor vehicle industry is the result of investments made in the past. If the nation wants to maintain its position and to make new moves it must make new investments. Foreign direct investment is the key in this area."*

## Automobiles

Turkey has five automobile manufacturers:

Oyak Renault, a joint venture between Turkey's Armed Forces Pension Fund (OYAK) and France's Renault.

Toyota;

Tofaş, a partnership between Italy's Fiat S.p.A. and Turkey's Koç Holding.

Honda Turkey.

Hyundai Assan, a joint venture between South Korea's Hyundai and Kibar Holding of Turkey.

The domestic market is dominated by imports - about two-thirds of all cars sold in Turkey in 2007 were imports.

### TURKISH MOTOR VEHICLE PRODUCTION IN 2007 BY COMPANIES (IN UNITS)

Companies	Passenger Cars	Commercial Vehicles	Agricultural Tractors	Total
Ford Otosan		286,356		286,356
Oyak-Renault	263,656			263,656
Tofaş	102,357	110,136		212,493
Toyota	161,516			161,516
Hyundai Assan	83,691	6,499		90,190
Honda Turkey	23,663			23,663
M. Benz Türk		19,014		19,014
Türk Traktör			18,350	18,350
Uzel			13,914	13,914
B.M.C.		10,369		10,369
Karsan		9,720		9,720
Temsa		9,328		9,328
Anadolu Isuzu		7,842		7,842
Otokar		2,534		2,534
MAN Turkey		2,069		2,069
Hattat Tarım			1,254	1,254
Otoyol*		585		585
Askam **		79		79
<b>TOTAL</b>	<b>634,883</b>	<b>464,531</b>	<b>33,518</b>	<b>1,132,932</b>

\*Production units shut down in April 2007

\*\*Askam hasn't produced any vehicles in months.

Source: Automotive Manufacturers' Association (OSD)

Foreign carmakers have been more successful in marketing their vehicles in Turkey than domestic producers because they offer a wider variety of automobiles than produced in the country. The continued strength of the New Turkish Lira (YTL) combined with low cost bank loans often makes imported passenger cars affordable. Many middle and upper class Turks also prefer imported cars to locally manufactured vehicles as a status symbol.

**Renault, Fiat, Ford, Toyota, Opel, Volkswagen (VW), Hyundai and Honda** were the top automobile sellers in Turkey in 2007. Some 43 manufacturers sold cars in Turkey in 2007. Ford, Opel and VW sell only imported cars

## COMMERCIAL VEHICLES

Some 10 major companies, led by **Ford Otosan**, produce commercial vehicles in Turkey, including light trucks, mid-sized trucks, pickup trucks, buses, minibuses, midi buses.

Other manufacturers are **Tofaş, Hyundai Assan, BMC**, (owned by the **Çukurova Group**), **Karsan, Mercedes Benz, MAN Turkey, Otokar, Tamsa, Anadolu Isuzu**.

### FORD OTOSAN, TURKEY'S NUMBER ONE AUTOMOTIVE COMPANY

**Ford Otomotiv Sanayi (Ford Otosan)** is one of the most successful U.S.-Turkish manufacturing partnerships. Turkey's number one automotive company in terms of vehicles produced and sales since 2001, Ford Otosan is a joint venture between the Ford Motor Co. and Koç Holding with each having a 41.04 percent stake. About 17.92 percent of the company is publicly owned.

In 2007, the company produced a record 286,356 commercial vehicles -- trucks, minibuses, and pick-ups -- and sold a record 325,117 motor vehicles, including imported automobiles, and had net sales of \$6.2 billion. It exported 222,397 vehicles in 2007, earning \$3.4 billion from international sales.

It has a 25.1 percent market share in Turkey for light commercial vehicles. Ford Otosan also turns out engines and spare parts. It also imports Ford automobiles. The company employs 7,991 persons, including more than 800 engineers and 6,600 blue collar workers.

The company invested \$650 million in its new Gölcük plant, which opened in summer 2001, aiming to bolster its vehicle production capacity to 300,000 vehicles a year in 2007 from 240,000 in 2005, and focus on exports. The Gölcük plant has become a production hub for Ford's light commercial vehicle sales to the European market.

The investment is the biggest in the Turkish automotive industry to date. Ford Otosan began production of its new light commercial vehicle, the Transit Connect, at the plant starting in September 2002, and has been exporting it worldwide through Ford Motor Company's distribution channels. Export markets include the European Union, Eastern Europe, Central Asia and North and Central Africa.

Ford Otosan's history dates back to 1928, when businessman Vehbi Koç, founder and first chairman of Koç Holding, became Ankara regional distributor of the Ford Motor Company. In 1938, Koç tried to persuade the American car manufacturer to produce automobiles in Turkey. In 1946, the Koç Group became the representative of the Ford Motor Company in Turkey.

Otosan was founded in 1959 and it produced Turkey's first automobile in 1966, the Anadol. In 1976, Otosan signed a license agreement with Ford to produce its trucks and transit series in the country, and opened its engine factory in İnönü, Eskişehir in 1979.

In 1983, Ford acquired a 30 percent stake in Otosan. Ford's and Koç's shares in the company were equalized in 1997, and the company took the name Ford Otosan. In 2001, Ford Otosan's Kocaeli factory was established, and its first Transit Connect was manufactured in 2002.

Some 45 percent of all light commercial vehicles sold in Turkey are imports.

## **FARM TRACTORS**

Turkey has three producers of large agricultural tractors: Türk Traktor, a joint venture between Koç Holding and New Holland; Uzel, a producer of Massey Ferguson tractors; Hattat Tarım Makineleri turns out American Universal farm tractors under license. The company Erkunt produces small Turkish-designed tractors.

## **PARTS AND COMPONENTS**

The country has 800 components and parts and tire manufacturers. Eighty percent of the components used are locally manufactured.

The companies turn out a wide range of products including air brakes, agricultural equipment, air compressors, air filters, radiators, chassis frames and parts, springs, alternators, piston rings, tires, stabilizers, seats, shafts, hydraulic and pneumatic systems. They also produce suspension systems, body panels, fuel tanks, body parts, batteries, bolts and nuts, ball bearings, mirrors, engines, transmissions, windshield wipers, wheels, various aluminum and plastic parts, tires, and head lamps and electrical systems.

Some of the foreign companies with investments in the auto components industry include Magnetti Marelli (Italy), Mando Corp. (South Korea), Mecaplast (Monaco), Autoliv (Sweden), Bamesa Group (Spain), Robert Bosch (Germany), Hanil E Hwa (South Korea), Arcelor Auto (France), and Bosal Holding (Belgium). Federal Mogul (U.S.), Teksid (Italy), Heyes Lemmerz (U.S.), Arvin Meritor (U.S.), H.P. Chemie Pelzer (Germany), Exide Corp (U.S.), Faurecia (France), Sango Co. (Japan), Yazaki (Japan), Michelin Kronprinz (France), Goodyear (U.S.), Bridgestone (Japan), Toyoda Iron Works (Japan), ZF Lemförder (Germany), ZF Friedrichshafen (Germany) also have investments in Turkey.

*"The components' industry," according to the Export Promotion Center of Turkey (IGEME), "possesses a high technology and vertically integrated industrial infrastructure installed through investment incentives and foreign investments, know-how and licensing agreements with the most reputable companies of the world."*

## **TIRES**

The Goodyear Tire Company; Brisa, a joint venture between Japan's Bridgestone and Sabanci Holding of Turkey; and Türk Pirelli, the Turkish subsidiary of the Italian Pirelli Tire Co., produce vehicle tires and tire tubes. The three control about 70 percent of the domestic market. A fourth company, Petlas, turns out aircraft tires as well as tires for commercial vehicles, cars and farm tractors and has a 5 percent market share.

Imported tires controlled one-fourth of the market. Some 100 brands, led by Michelin, are imported.

## **3.2 IRON AND STEEL**

### **A MAJOR PARTNER OF THE U.S.**

Ranking behind only Canada, the EU, China and South Korea, the Turkish steel industry is one of the largest exporters of steel to the United States. It delivered \$925 million worth of steel in 2006 a 32% jump from the \$699 million of exports to the U.S. market in 2005. Total exports to the U.S. market between Januarys-October 2007 period reached \$276 million. However, with its rapidly growing economy at home and its impending entrance into the European Union, Turkey does not anticipate any further increase in steel exports to the United States in the next few years. It already exports 54% of its products to the EU, a number unlikely to contract as the country's economy rapidly expands with the process of accession to the EU.

However, Turkey has two points to raise in its agenda with the U.S, as the Turkish steel executives reported to the Metal Center News:

Like some other major exporters to the United States, Turkish steelmakers have been accused of dumping their products in the U.S. at below market prices by domestic steelmakers. At the end of 2005, five domestic producers filed antidumping petitions against Turkey, China and Germany after imports from those three countries nearly doubled over a two-year period. The U.S. International Trade Commission voted against the domestic industry. The Turkish steelmakers would like to see a system where filing cases against foreign companies requires more care, saying that "Most of our companies have come out with zero antidumping margins".

With its status as the bridge between Europe and the Middle East, Turkish officials believe the country is in prime position to take advantage of any growth going on in the Middle East and Northern Africa. Chief among the opportunities is the eventual rebuilding in Iraq. Dubai, Kuwait, Qatar in the Middle East and Egypt, Algiers and Morocco in North Africa are also markets targeted by the Turks.

## MARKET TRENDS

Turkey is one of the major players in the international steel market. It was Europe's fifth largest and the world's 11th biggest steel producer with an estimated total production of 26 million tons in 2007, commanding 2 percent of global output. Only Russia, Germany, Ukraine, Italy are bigger manufacturers of steel in Europe than Turkey. Some 55 countries in the world produce steel. Turkish steel production is expected to increase to 35 million tons in 2009 and 42 million tons by 2010, according to the Steel Manufacturers' Association.

The industry is well positioned, combining high potential for growth with proximity to the EU, but also has a structural problem: Production is biased 83% to 17% in favor of long products while in consumption the ratio is 50-50%.

*"There is an excess domestic demand for flat steel and an excess domestic supply of long steel, leading to long steel exports and flat steel imports," Ata Invest Research said in a report on the steel industry.*

Although the industry produces most types of steel, the product mix is skewed towards lower-value long products that are used mainly in the construction industry. It meets domestic demand for flat products, used in industry, mainly through imports. Responding to this situation, Erdemir is converting its Işdemir plant into flat production through modernization and conversion investments worth \$1.9 billion. Production capacity was expected to increase to 7 million tons a year in 2007 and 10 million tons a year in 2009, eroding the excess capacity in long products and, at the same time, absorbing the supply deficit in flat products. In addition, the Arcelor-Borçelik partnership is envisaging new investments in flat products.

Currently, three integrated plants (Erdemir, Kardemir, Işdemir) and 16 electrical arc furnaces operate in the sector. Processors import scrap iron, semi-finished products or purchase them from integrated steel producers and mini-mills. With the exception of one cold rolling company that produces flat products and a few companies producing specialized products such as spring steel, most of these players are sub-scale rolling mills supplying low-value-added, often very substandard, long products to the construction industry. Erdemir is the only flat producer with 3 million tons of crude steel capacity.

Turkey is also a major producer of welded steel pipes. In pipe production, there are 24 firms and only the Machinery and Chemical Industries Foundation (MKEK), better known as a light arms and munitions manufacturer, produces seamless steel pipes.

Additionally there are about 1,693 foundries -- the vast majority small ateliers -- producing gray, malleable, spheroid iron and steel castings. Turkish foundries are able to produce every kind of alloyed and unalloyed castings, specializing in the production of cast parts for the automotive industry, earth moving machines, and the cement industry. They also can turn out pumps and valves, steel industry, tractors and agricultural machinery and other manufacturing industries as well as pipe fittings and central heating radiators. Turkish foundries turn out 1.5 percent of world's castings production.

High finance and energy costs have been the main stumbling blocks of the Turkish iron and steel sector.

In 2007, long products accounted for 83% of production, flat products 15% and special quality steel products 2% in volume terms.

Consumption was an estimated 22.7 million tons in 2007, with an increase of 9% over the previous year.

#### CONSUMPTION OF IRON & STEEL, 2000-06

000 tons

	2001	2002	2003	2004	2005	2006	2007	Change, % (07/06)
<b>Long</b>	3.993	4.930	6.205	6.676	8.598	9.872	11,641	17.92
<b>Flat</b>	4.327	5.865	6.848	7.772	8.859	9.777	9,566	-2.16
<b>Specialty</b>	387	491	602	773	908	1.109	1,479	33.36
<b>Total</b>	<b>8.707</b>	<b>11.286</b>	<b>13.655</b>	<b>15.221</b>	<b>18.365</b>	<b>20.758</b>	<b>22,686</b>	<b>9.29</b>

Note: 2007 data are provisional

Source: Turkish Iron and Steel Producers' Association

## FOREIGN TRADE

The Turkish steel industry is largely dependent on foreign trade. In 2007, exports totaled \$8.4 billion and imports \$16.2 billion.

### PRODUCTION OF IRON & STEEL, 2000-06

000 tons

	2001	2002	2003	2004	2005	2006	2007	Change, % (07/06)
<b>Long</b>	9.643	10.324	11.895	13.232	15.498	18.690	21,650	15.84
<b>Flat</b>	2.957	3.144	3.535	3.616	3.760	3.903	3,906	No change
<b>Specialty</b>	273	299	320	330	343	424	476	12.26
<b>Total</b>	<b>2.873</b>	<b>13.767</b>	<b>15.750</b>	<b>17.178</b>	<b>19.601</b>	<b>23.017</b>	<b>26,032</b>	<b>13.10</b>

*Note:* 2007 data are provisional

*Source:* Turkish Iron and Steel Producers' Association

The import dependency rate has increased over the last six years, with the value of imports exceeding exports in 2005, 2006 and 2007. Although the production capacity for crude steel is able to meet current demand, nearly 55% of domestic demand is met by imports due to the high share of long products. Imports increased 19% in 2006 in volume, and some 70% of imports were accounted by flat products.

In recent years, Turkey has also been a big importer of scrap iron. Turkey also imports large amounts of anthracite (hard coal) and other raw materials that go into the production of steel.

## IRON & STEEL FOREIGN TRADE, 1998-2006

	Exports		Imports	
	\$ million	000 tons	\$ million	000 tons
1998	1,525	6,045	1,821	5,150
1999	1,463	7,020	1,280	4,595
2000	1,559	6,975	1,931	6,223
2001	2,029	9,676	1,203	4,227
2002	2,219	10,105	1,692	5,493
2003	2,899	10,450	2,660	6,819
2004	5,251	12,195	4,554	7,994
2005	4,869	11,074	5,835	9,594
2006	6,065	12,658	6,946	11,430
2007	8,351	na	16,171	na

*Source:* Turkish Iron and Steel Producers' Association, Turkstat

## PROSPETS

- The iron and steel industry will continue to grow, fuelled by both domestic and exports markets:
  - Turkey's steel consumption at per capita (330kg a year) is about half of that in the EU and developed countries.
  - A lot of infrastructure and housing investments and, hence, potential demand have been postponed because of the recent economic crises.
  - Recovery registered in the macro economic indicators since 2002 will result in a boost in the investments in the near future, which increasing domestic steel consumption.
- Erdemir's privatization in 2005 is set to change the balances in the market and offer good opportunities for new investors. Local players have already started acting according to the expected changes in the market balance.
- Meanwhile, with Erdemir's converting İşdemir into flat production through modernization and conversion investments worth \$1.9 billion, the production capacity will increase to 10 million tons/year in 2009, eroding the excess capacity in long products and, at the same time, absorbing the supply deficit in flat products. Turkish imports of flat products are expected to fall sharply in the coming years.

- Automotive and home appliances sectors, with their big domestic markets and significant potential in export markets, will continue to trigger the steel consumption in the long term. The State Planning Organization expects that annual average increase in steel consumption will be between 6-7% parallel with the forecast of 5% GDP growth in the coming years.
- In recent years, steel producers concentrated on the export markets and around 70% of the crude steel production has been exported. Although a higher share of the production is expected to target the domestic market in the following years as a result of the economic recovery, competitiveness in the foreign markets will be also be maintained. Currently, Turkish steel producers are one of the best suppliers for the restructuring investments in Iraq and Middle East.
- To increase value-added, the industry has also been switching to finished products like reinforcing bars from raw billet steel.
- Foreign investment is entering the industry. ArcelorMittal, the world's largest steel producer, in October 2007 acquired a 51 percent of Turkish construction steel producer Rozak for an undisclosed sum. The firm aims to double its sales and expand to countries near the Mediterranean and Caspian Sea. The deal follows the announcement of ArcelorMittal that it will build a \$500 million new hot strip mill in Gemlik, northwestern Turkey with Borusan Holding, Turkey's leading steel producer. Gonzalo Urquijo, a member of the ArcelorMittal management board, said ArcelorMittal aims is to improve its position in the Turkish construction market, which is one of the most important worldwide, and is also eyeing future expansion to nearby countries. "We have been investing in Turkey for 15 years and will continue to do so. We want to expand our activities in Turkey and are looking at further opportunities. We see Turkey as a growth platform to other markets," he said. "We want to develop the Turkish market and expand to Caspian and Mediterranean regions in partnership with Rozak," Darmayan added.

### **3.3 TEXTILE AND APPAREL**

The textile industry, combining cotton and synthetic yarns, fibers and fabrics, home textiles, ready-wear and apparel, continues to be the largest economic sector of Turkey, employing an estimated 2.5 million people and providing indirect jobs for 6.5 million others. The industry contributes to around 10 percent of the GNP.

The clothing industry until recent times was characterized by small, low-capital family-run operations, many of which were simple cut and paste operations with no original designs and products. The country has around 180,000 clothing producers. The country has around 2,000 textile manufacturers, which are large-scale, heavily mechanized operations, employing more than 150 persons each and having more than \$15 million in annual sales each.

The industry accounted for 23.45 percent of all Turkish goods sold abroad in 2007, down from about 36.1 percent in 2000. About 60 percent of the nation's textile and clothing are exported.

Turkey is the world's sixth biggest ready wear and apparel manufacturer and the European Union's second largest supplier after China. Its textile industry is the world's tenth biggest and the European Union's number one supplier.

The nation controls a 4.3 percent share in the global export trade in clothing, a 6.4 percent share in foreign sales of apparel in the European Union, and a 1.7 percent of exports of apparel to the U.S, according to the Turkish Clothing Manufacturers' Association and the Center for the Promotion of Exports (İGEM).

**TURKEY'S TEXTILE, CLOTHING, LEATHER AND CARPET EXPORTS  
IN 2006 AND 2007 (IN 1000 U.S. DOLLARS)**

PRODUCTS	2006	2007	CHANGE IN % OVER 2006
<b>Ready wear and apparel</b>	13,987,651	16,049,100	16.30
<b>Textile and Raw Materials*</b>	5,576,097	6,551,800	17.48
<b>Leather and leather products</b>	1,141,436	1,239,500	5.17
<b>Carpets</b>	744,967	1,003.800	35.20
<b>Total</b>	<b>21,450,151</b>	<b>24,845,200</b>	<b>17.31</b>

\*Textile and raw materials: cotton yarn, gray cloth, fabrics, home textiles, synthetic fibers and yarns and fabrics, accessories, and technical textiles.

Source: Istanbul Textile and Apparel Exporters' Associations (ITKIB)

In 2007, Turkey exported a record \$22.600 billion in clothing and textiles, up 15.53 percent from 2006, when it sold \$19.562 billion abroad, the Turkish Exporters' Assembly (TIM) reported. Textile industry officials said that export sales were increasing because of lower taxes, despite a contracting domestic market and the strength of the Turkish Lira against the dollar and the euro.

Along with leather products and carpets, total sector exports in 2007 stood at \$24.845 billion, p 17.31 percent from \$21.485 billion in 2006.

Ready wear and apparel exports climbed 14.75 percent to \$16.049 billion from \$13.968 billion in 2006. Exports of textile and raw materials (cotton yarn, gray cloth, fabrics, home textiles, synthetic fibers and yarns and fabrics, accessories, and non-woven and technical textiles) increased 17.48 percent to \$6.551 billion from \$5.576 billion in 2006.

Leather and leather products (footwear, leatherwear and accessories) exports rose 5.17 percent to \$1.239 billion from \$1.178 billion in January-December 2006, while carpet sales abroad increased 34.77 percent to \$1.003 billion from \$744 million.

## RESTRUCTURING

The industry is undergoing a major restructuring because of increased competition from low cost products from China in the European Union and the U.S., Turkey's principal markets for textiles. Particularly hard hit have been Turkish ready-wear manufacturers, who are seeing their profits decline and markets shrink. The strong Turkish Lira against the U.S. dollar and the euro and rising domestic labor and energy costs are also making many ready-wear producers uncompetitive.

Nevertheless, Turkey's vast clothing and apparel industry is changing its image from a mass producer of ready wear for manufacturers, fashion houses and department stores in western Europe and the United States to a creator and retailer of new designs, fashions and quality labels, turning out higher end and higher priced products for upper income families. This is reflected in Turkey's trade figures. Although the industry contracted by a total 18 percent in 2006 and 2007, according to the Istanbul Chamber of Commerce, textile exports increased 17.31 percent in the same period over 2006.

Scores of leading Turkish clothing manufacturers are beginning to open their own fashion stores, building sales networks abroad, forming joint ventures with foreign distributors and acquiring retail chains to sell their own brands, and even buying popular Western labels.

Turkish clothing manufacturers say that they must create and market their own brands, produce higher value-added apparel abroad and focus more on technical textiles, based on synthetic fibers and non wovens rather than on cotton, to survive the Chinese and Indian onslaughts.

The industry is expected to lose 30 percent of its market share in the European Union (EU) as low cost products from China flood the market in wake of the lifting of EU quotas on all textiles from the Asian country, according to one study. "The expected decline in the market share of Turkey in the EU's net textile and clothing imports will result in a net damage of \$2.5 billion. Such a loss accounts for 3.5 percent of Turkey's projected export figures," Özgür Altuğ, chief economist of Raymond James Securities, wrote in a report on the Turkish textile industry.

Altuğ also warned that Turkey could lose as much as 10 percent market share in its textiles (cotton yarn, fabrics, home textiles, synthetic fibers, yarns and fabrics) in the United States, a major market for textile products, as China and India raise their market share.

## THE TURKISH TEXTILE INDUSTRY

### Strengths

- The nation's strong cotton production -- it is the world's seventh largest producer -- and proximity to European markets are the main strengths of the clothing and textile industries. Delivery times are two to three weeks, compared to two to three months in the Far East.
- The country is also close to rapidly developing markets as Russia and other former Soviet republics, the Middle East and North Africa.
- A further advantage for Turkey's manufacturers is that their production complies with internationally accepted ecological standards. The country's laws ban the use of carcinogenic azo dyes in clothing and fabric manufacturing, unlike some Far East and Asian manufacturers who still use these materials liberally.
- Other strong points of the industry are its skilled workforce -- combined with the adaptability and entrepreneurship of the Turkish people, the nation's telecommunications infrastructure and a liberal foreign exchange regime.
- Turkey is among the limited number of nations that have integrated and high capacity operations. These countries include Turkey, China, India and Egypt and are set to benefit most from the expanding global exports of textiles and apparel.
- Modern production equipment (albeit with overcapacity in some sectors).
- In 2006, 228 out of Turkey's 1,000 largest manufacturing companies were in the textile, apparel, and leather and carpet business. This is probably the single most important source of sustainable competitive advantage.

### Weaknesses

- The main weakness of the textile and clothing industry has been that it has been losing its cheap labor cost advantage in recent years. The average hourly wage more than doubled between 1980 and 1996. Turkish wages are four or five times more than in China, India, Thailand and Indonesia.
- The industry also uses more expensive energy and financing than in Europe and the Americas.

To preserve their foreign markets and find new ones, some 50 Turkish ready-wear manufacturers have invested in factories in the low labor cost countries of Tunisia, Bulgaria, Egypt, Uzbekistan, Jordan, Moldova, China, Russia, Pakistan, Sudan and the Czech Republic and the Gaza Strip. Another 100 Turkish firms -- mainly ready-wear companies -- are planning to invest a total \$4 billion in a special industrial zone in Egypt. Turkey's ready-wear manufacturer Söktaş and the International Finance Corporation are planning to invest \$80 million together in a shirt fabrics manufacturing plant in India.

The tumble in production is expected to increase in 2008 because the EU completely lifted all quotas on textile imports as of January 1, ending a 2.5-year limitation on 10 categories of Chinese textile exports to the world's biggest emporium, after the World Trade Organization lifted all global quotas on textiles in 2005.

The categories include T-shirts, pullovers, blouses, all types of hosiery, men's trousers, women's overcoats, bras, flax, synthetic yarns and woven flax fabrics. All other categories were exempt from the limitations.

Turkish manufacturers also have to reduce costs, pool the resources of small family-owned companies by merging them into larger export conglomerates, invest more in research and technology, open more stores in the EU for direct and aggressive marketing, spend greater amounts of money to promote their products with more fashion shows and advertising in major international dailies, magazines and trade publications to remain competitive, and establish a presence in the Japanese clothing market, the world's second biggest read-to-wear market

## **FOREIGN INVESTMENT AND OUTSOURCING**

The conditions are ripe for foreign investment and partnerships in aspects of quality design and production, management, marketing and distribution. Co-production of European and Turkish firms is now a general fact.

Some 294 foreign-owned firms operate in the sector. Many western manufacturers, such as L.C. Waikiki, Hugo Boss and Levi Strauss have manufacturing operations in Turkey. Foreign department stores and hypermarkets, such as Marks and Spencer, JC Penny, and Sears have purchasing offices in Turkey or have agents that make purchase orders on behalf of them. Companies such as GAP, Next, and Nike also buy direct from Turkish producers for their (world-wide networks). The existence of these companies has to some extent protected Turkey from the progressive loss of competitiveness due to the over-valued Turkish Lira.

Turkey has been producing garments and ready wear for a wide range of European and American fashion houses and clothing manufacturers and retailers from Versace to Benetton to Wal-Mart and Carrefour for the past two decades.

The country's demographics - 50 percent of Turkey's 70.5 million people are under the age 28 - and its closeness to heavily populated markets in Eastern Europe and the Middle East, make it an excellent base for foreign investment.

## **CLOTHING EXPORTERS**

Clothing manufacturers such jeans producer Mavi, women's wear manufacturer Öztekin and ready wear producer Şahinler are carving out markets in the United States and Western Europe for their products.

So popular have some Turkish brands become that U.S. pop recording star and actress Cher and former first daughter Chelsea Clinton dress from Mavi Jeans, former South African President Nelson Mandela wears Damat&Tween suits, and President George Bush always has a collection of Bisse silk shirts in his wardrobe. The White House also keeps a steady supply of Turkish-produced bathrobes and towels.

The top five foreign markets for Turkish exports are Germany, the USA, the Russian Federation, the UK and France.

## **BRANDING AND PROTECTION OF DESIGNS**

Turkey's Brands Association, whose 124 members include top western European and Turkish garment and ready wear manufacturers, are cracking down hard on violators of original designs and working with similar associations abroad to protect Turkish labels in Europe, the U.S and the Far East. Infringement of designs and colors continues to be a major headache for the industry. Cheap, fake copies of La Coste shirts, Pierre Cardin ties and hosiery abound in the market.

### **TURKEY'S MAIN TEXTILE EXPORTS ARE**

- Cotton weaves including, cotton apparel and weaves.
- Woolen yarns and weaves.
- Silk and synthetic yarns, weaves and chord fabrics.
- Linen, hemp and jute, including sisal yarn and sisal weaves.
- Floor coverings, hand made and machine made carpets, tufting, felt and kilims.
- Knit wear
- Ready wear garments.
- Leatherwear and footwear.

## **IMPORTS**

Turkey also imports clothing and textiles -- mainly gray cloth, cotton yarn, fabrics, synthetic fibers and yarns. Most of its imported clothing comes from Italy, Spain, China, England, Germany, France, Bulgaria, India, Greece and the Netherlands. Most of its textile imports originate from the U.S., Italy, Germany, China, India, South Korea, Pakistan, Indonesia and Greece.

Turkey also imports chemical dyes. Turkey's clothing manufacturers are also hoping to be admitted to planned special industrial zones that will be able to sell products to the U.S. without any quotas and tariffs.

Textile imports were around \$9.8 billion in 2007, including cotton and synthetic fibers. Clothing imports increased rapidly between 1999 and 2005, with a CAGR of 25.4%, reaching \$1.689 billion in 2007. Over 80% of the total textile and apparel imports are textile materials like cotton, fibers, yarns and fabrics, and the rest are ready-made garments and articles.

### 3.4 JEWELLERY

#### DESPITE PROBLEMS, TURKEY EYES GOLD THRONE

Turkey has the world's third biggest jewelry market after India and the U.S., and is bent on dethroning Italy as global leader in gold jewelry fabrication. While Italy's output is shrinking, Turkey's production has been growing steadily over the last 16 years, after the government privatized gold importing, established a modern gold exchange and a gold refinery, and permitted gold banking and set up a derivatives market.

But Turkey's jewellery sector is facing increased labor costs and high taxation that could result in the shifting of production to lower cost countries in the east, warned Atasay Kamer, president of the Istanbul Precious Metals and Jewelry Exporters' Association (IMMIB) in an interview with the newspaper *Dünya* on January 9, 2008.

*"Labor costs are rising and this will lead to an important loss in the export market," said Kamer. "The special consumer tax (ÖTV) on diamonds, precious stones and semi-precious stones has been increased and this represents a major stumbling block for the jewelry sector."*

Nevertheless, industrialization of gold jewelry fabrication, development of original computer-aided designs, brands and trade marks have bolstered the sector, dominated by 10,000 goldsmiths, of which about 4,000 are located in and around Istanbul's 15<sup>th</sup> century Covered Bazaar, the traditional hub of Turkey's thriving jewelry trade. Some 750,000 people are employed in the sector, including 400,000 working at an estimated 100,000 jewelry shops around the country. Four of Turkey's 500 largest manufacturing companies are gold jewelry fabricators, while two are gold mining companies, according to an Istanbul Chamber of Industry survey.

*"Following the liberalization of the gold market, the production quality increased in the first instance and later the imitation products were replaced by the works of our designers. In recent years, the act of following the jewelry trends abroad has begun to be replaced by activities to create and lead the fashion in the jewelry world."* said Murat Akman, the World Gold Council's general director in Turkey.

Added Kürşad Tüzmen, state minister responsible for foreign trade: "Turkish gold will definitely sit on the throne of world leadership in the next decade. Turkey will have won its struggle at the top only when it manages to have Turkish gold identified with its own name from the first purchaser down to its final consumer."

Seventy-three percent of Turkey's gold is used in jewelry production. The remaining goes for the making of coins, medallions, or is used in dentistry and in the electronics industry, or is reserved as gold bullion by the Central Bank of Turkey.

Turkey is the fifth biggest importer of gold, following Italy, India, Japan and Saudi Arabia. Russia, China and the U.S. are also big importers. It imported 230.796 tons of gold in 2007 spending \$5.8 billion.

About 22.8 of Turkey's gold production are sold to tourists visiting the country. Turkish exports of precious metals and jewelry exports rose from a mere \$2.8 million in 1992 to \$3.7 billion in 2007 (direct exports totaled \$2.623 billion in 2007). The country exported some 135 tons of gold jewelry in 2007, including direct sales to foreign tourists and suitcase traders from the former Soviet Union, and according to the World Gold Council.

Gold jewellery is Turkey's biggest export item after motor vehicles and components, textiles, iron and steel and home electronics.

## **PRODUCTION AND DOMESTIC DEMAND**

The production was worth 313 tons of gold equivalent in 2007. This includes gold, workmanship and precious metals (in particular diamond), but excludes other materials and precious stones including pearl, textile etc. Approximately 38.6% of jewelry demand is accounted for by domestic consumers, 17.8% is exported directly and 22.2% is exported indirectly. Some 20.2 percent is used for new coin minting or is hoarded as an investment or as a precaution for bad times. Billion exports accounted for about 2 percent of demand.

## **FUTURE PROSPECTS**

Gold has been a traditional savings instrument in the republic. Gold brooches, bracelets and other jewellery are given to women during weddings as dowries, and Anatolian families hoard the precious metal as a hedge against inflation and as a precaution for bad times.

*"Gold has an indispensable place in the lives of Anatolian people,"* wrote State Minister Tüzmen in an introduction to a directory on Turkish jewellery. *"Babies in Anatolia recognize gold as soon as they open their eyes to the world; they come across it all turning points in their lives; in gold, they find their last security and comfort. Gold, for Anatolian people, is the symbol of sharing on good days; on bad days, the power to hold on."*

But as domestic demand grows with income levels increasing and inflation falling, Turks are regarding gold and jewellery more as fashion goods than as instruments for investment. With the number of tourists expected to increase from a record smashing 23.3 million in 2007 (17.8 percent growth) to 32 million by 2010, an aggregate national income of around \$1 trillion by 2015, the Turkish jewellery sector offers major opportunities.

With exports including luggage trade and sales to tourists totaling some \$3.7 billion, local industry leaders now believe Turkey will soon become the world's biggest gold jewelry production center. Sedat Yalınkaya, general manager of Goldaş Kuyumculuk, Turkey's biggest jewelry fabricator and exporter, has high aspirations: *"I believe the exports will reach \$10 billion by 2010. Between 50 and*

60 people are employed in our product development department only, while the largest Italian firms employ some 25-30 in these departments. We will reap the benefits of this in the mid term. Previously we used to go to different countries for promoting our products, now they are coming to us." Goldaş aims to grow 20 - 25% every year.

### FINE GOLD BALANCE, 2003-06

Fine gold tons

	2004	2005	2006	2007
Bullion Imports	251	269	193	23
Temporary Bullion Imports	13	12	10	12
Jewellery Imports	7	12	13	14
Scrap	60	62	86	81
Total Supply	331	355	302	337
Jewellery Exports	60	68	53	60
Luggage Trade & Tourists	73	77	69	75
Jewellery Sales to Locals	130	138	113	130
New Coin Minting & Hoarding	49	54	61	62
Bullion Exports	20	20	6	11
Total Demand	332	355	302	337
<b>Jewellery Fabrication</b>	<b>256</b>	<b>271</b>	<b>222</b>	<b>251</b>
Total Fabrication	304	324	283	313
Jewellery off take	191	200	167	193
New coin/bar off take	48	53	61	61
<b>TOTAL OFF TAKE</b>	<b>239</b>	<b>253</b>	<b>228</b>	<b>254</b>

Source: World Gold Council

## **3.5 MARBLE, CERAMICS & SANITARY PRODUCTS AND GLASSWARE**

### **MARBLE**

Turkey is one of the world's oldest and biggest producers of marble.

The natural stone has been produced in Anatolia for 4,000 years with mining having started on Marmara Island, from which it is believed marble (*mermer* in Turkish) got its name. Most of the cities of the ancient land were constructed from marble, including Ephesus, Pergamum, Miletus, Perge, Side and Aphrodisias. Important buildings in western Anatolia constructed using marble included the Temple of Artemis, and the Mausoleum of Halicarnassus, two of the Seven Wonders of the Ancient World. Byzantine emperors and Ottoman sultans made wide use the natural stone in the building of Istanbul. The 6<sup>th</sup> century Hagia Sophia, one of the greatest achievements in Christian religious architecture, and the 17<sup>th</sup> Century Blue Mosque, a masterpiece of Islamic art, were constructed from marble and are still standing with all of their splendor and magnificence, having survived many devastating earthquakes, destructive fires and violent upheavals.

The nation has the world's largest marble reserves with 13.9 billion tons (5.2 billion cubic meters), controlling one-third of global reserves, according to the Undersecretariat of Foreign Trade. In 2006, some 2.895 million cubic meters of marble and 6.103 million tons of other natural stones were mined in Turkey, the seventh biggest producer and eighth largest exporter of the natural stone in the world.

Turkey's exports of marble and other natural stones (travertine, granite, limestone, dolomite, andesite, and onyx) stood at \$1.242 billion in 2007, accounting for 46 percent of the country's mineral and ore exports, the Ministry of Energy and Natural Resources reported.

The U.S. continues to be the biggest importer of processed Turkish marble. In 2007, it imported 629,658 tons of processed marble worth \$379.085 million, or 30.5 percent of all of Turkey's marble and natural stone imports.

More than 1,000 marble foundries, 1,500 marble processing plants and 7,500 workshops exist in the country.

### **CERAMICS & SANITARY PRODUCTS**

The ceramics industry is one of Turkey's most competitive sectors.

The industry expanded its output three-fold during the 1990s and the early 2000s, as a result of investments in technology, research and development and gigantic increases in capacity. Turkey

today is the world's fourth biggest producer of ceramic tiles and the third in terms of exports. The nation is also Europe's fifth biggest producer of sanitary ware.

Turkey produces floor and wall tiles, porcelain, and ceramic bathroom sinks, water closets, bathtubs, bidets and accessories. One-third of Turkish production is exported.

Ceramic exports totalled \$869 million in 2007, including \$486.453 million in tiles and \$203.729 in sanitary ware, according to the Turkish Exporters' Assembly (TIM). Turkish ceramic exports went to 122 countries in 2007. Ceramic products, including porcelain and kitchen and bathroom accessories made up the balance in exports.

Discovery of pottery shards in Alacahöyük, a Hittite settlement east of Ankara, attests that the craft of ceramic-making existed in Anatolia as early as the ninth millennium BC. Decorative arts in the life of the Turks date back to the 1st century BC. Inheriting a rich tradition, Turkish ceramic producers have combined the multicultural and multi-colored historical riches of Anatolia with modern designs.

Four producers - Kale Group, Toprak, Eczacıbaşı and Graniser -- control about 40 of percent production capacity in ceramic tiles. There are 25 large and midsize firms producing ceramic tiles and 31 firms manufacturing sanitary ware in Turkey. .

#### PROFILE OF CERAMIC TILE INDUSTRY, 2005-2006

	2005	2006
No of companies	24	24
Capacity (000 sqm)	310,114	307,531
Production (000 sqm)	230,000	325,000
Consumption (\$ Mn)	120	135
Exports (000 sqm)	172	197
Exports (\$ Mn)	406	406

Source: Ceramics Federation

In sanitary ware, Eczacıbaşı has the largest production capacity in the world with 6.2 million units and, at the same time, the largest capacity available under one roof. In 2005, the nation's productive capacity of sanitary ware was around 20.720 million items, according to the Turkish Ceramics Federation, a trade group.

The top seven companies control 67 percent of productive capacity in the ceramics sanitary ware sub-sector.

The industry's only weakness appears to be energy costs, which are roughly 60 percent more in Turkey than in Europe, although many companies have now installed low-cost natural gas-fired power plants (auto producers) to turn out electricity and steam for their manufacturing operations.

By the end of 2007, Turkey had a 360.1 million-square meter ceramic tile production capacity, as a result of new investments and capacity increases, the Turkish Ceramics Federation reported.

A thriving housing and real estate market in Turkey has driven enormous increases in production in 2007, particularly for wall and floor coverings and sanitary ware.

The country's biggest ceramics manufacturer is the Kaleseramik, which has a 66 million-square meter ceramic tile production capacity. Turkish production in ceramic tiles in 2006 was around 278 million square meters, according to the Ceramic Covering Producers' Association (SERSA).

## GLASSWARE

The glass industry is one of the most important and highly developed sectors in Turkey. Historically, glass production dates back to the Seljuk Period. Turkish handmade glassware has a good reputation abroad and best reflects Turkish art. The number of glass products reaches thousands of items including handmade and machine made products.

Production in 2006 totaled 1.417 million tons, including 734,250 tons of flat (plain), colored, lined and corrugated glass, 397,106 tons of industrial glassware and 285,895 tons of home glassware), the Turkish Statistical Institute (TurkStat) reported. Turkey's glassware exports in 2007, totaled \$828.323 million, TurkStat reported.

The Şişecam Group, a conglomerate with a wide range of product groups, accounts for over 85 percent of the total glass production and exports and over 75 percent of total demand in Turkey. A number of smaller glassware producers operate in the sector. These include Gural Cam and Koncam. It is the world's eighth biggest and Europe's fifth largest producer of flat glass used for window panes.

### GLASSWARE MARKET SIZE, 2003-05

000 \$

	Tons	\$ Mn	Tons	\$ Mn	Tons	\$ Mn
Demand	120,760	196	146,176	230	168,000	258
Production	350,568	460	376,243	495	400,000	525
Exports	247,867	297	246,653	296	250,000	300
Imports	18,059	33	16,586	30	18,000	33

Source: DPT, Turkstat

The production technology used by Şişecam is at a par with its competitors in Europe and USA. The company transferred technology from well-known companies including Japanese glassware producer Ishisuka and German glassware producer Schott during the establishment of its Kırklareli and Eskişehir factories. Currently it is developing its own proprietary technologies used only in its factories. In recent years, Şişecam has started to establish factories abroad with its own technology, including a glassware factory in Russia and two bottle factories in Georgia, Ukraine and some other countries.

Şişecam announced in February 2008 that it was investing \$250 million in a plant in Russia's Krasnodor region to produce flat glass, and said it also acquired a packaging plant in Leningradskaya, in a move to expand in the former Soviet republic.

With its current performance, Şişecam ranks the fifth largest glassware producer in the world. The company accounts for 69% of domestic demand, 18% of European demand and 6.8% of the world demand for glassware.

Glassware is the most important item in glass exports with a 48% share. Exports have been on the increase over the years; with number of destination countries expanding continuously. The glass industry overall is exporting to 180 countries as of 2006. As of 2005, the U.S. was the third largest market for the Turkish glassware. Germany and the U.K came immediately before the U.S. Glassware imports were mainly from China (28%), followed by France (15%) and then from India and Italia.

## IV. INVESTMENT OPPORTUNITIES IN TURKEY

### 4.1 FINANCIAL SERVICES

#### BANKING

As of February 2008, some 46 banks operated in Turkey, down from 81 at the end of 1999, as a result of a consolidation in the banking sector. Four small Islamic-style participation banks that are subject to the same cash and reserve requirements as other banks also exist in the system.

The country has 33 commercial banks of which three -- T.C. Ziraat Bankası, Halkbank and Vakıfbank -- are state-owned, 11 are privately owned deposit banks, 18 are foreign banks, and one is controlled by the Savings Deposits Insurance Fund (TMSF), a state banking receivership fund. Turkey also has 13 development and investment banks of which three are state-owned, six are privately owned and four are foreign-owned.

Number of banks in the system *	Banks				
	1999 4Q	2000 4Q	2001 4Q	2002 4Q	2007
<b>Commercial Banks</b>	62	61	46	40	33
State-owned	4	4	3	3	3
Privately-owned	31	28	22	20	11
<b>Banks in Receivership Fund</b>	8	11	6	2	1
Foreign banks	19	18	15	15	18
<b>Development and Investment Banks</b>	19	18	15	14	13
State-owned	3	3	3	3	3
Privately-owned	13	12	9	8	6
Foreign banks	3	3	3	3	4
<b>Sector</b>	81	79	61	54	46

\*Excludes Participation banks.

Source: Banks' Association of Turkey

The total assets of the Turkish financial system as of the end of September 2007 stood at \$517.4 billion U.S. dollars, or 116.3 percent of the Gross Domestic Product (GDP), of which \$449.2 billion was controlled by the country's banks, the Banking Regulation and Supervision Agency (BDDK) reported.

Yet the Turkish financial system remains tiny compared to those of the U.S. and member countries of the European Union. The total assets of the Turkish financial system at the end of September 2007 were equivalent to around 40 percent of that of the Bank of America, the biggest U.S. bank.

The country's banking system has grown 3.5-fold since the end of 2002, when its total bank assets stood at a mere \$126.7 billion. Growth has run parallel with the robust performance of the Turkish economy, strength of the New Turkish Lira, record foreign investment into the banking system, and abundance of global liquidity, as the nation rebounded from the 2001 crisis -- the worst recession the country experienced since World War Two.

Bank deposits stood at \$305.389 billion and loans totaled \$244.653 billion at the end of 2007, the BDDK reported.

#### GROWTH IN BANKING, 2006-14

	2006 October	2014	CAGR
	\$ Bn	\$ Bn	%
Assets	331	960	14
Credits	148	520	17
Deposits	197 (1)	528	13
# of banks	47	20-25	-
# of branches	6,575	11,000	-

(1) As of September 2006

Source: Ergun Özen, general manager of Garanti Bank

Since 1997, the Savings Deposits Insurance Fund TMSF intervened in the affairs of 23 financially tottering banks, which have since been shut down, merged with stronger banks, or privatized. A dozen other private banks have also merged with affiliate banks.

Shored up with an influx of foreign investment, the Turkish banking system has strengthened its capital base, become more stream-lined and resilient, and its asset quality has improved. Turkey's banking system is less likely to be hurt from turbulence in international financial markets, such as the U.S. mortgage crisis, than before, bankers said.

**ASSETS OF THE TURKISH FINANCIAL SYSTEM  
AS OF SEPTEMBER 30, 2007**

Group	Total Assets in Billion		2007
	2006	2007*	U.S. Dollars Assets/GDP in %
Banks	354.3	449.2**	87.0
Leasing companies	7.1	8.6	2.0
Factoring companies	4.5	5.6	1.1
Consumer finance companies	2.4	3.0	0.6
Insurance Companies	12.3	16.2	3.1
Private Retirement Insurance Companies	5.1	7.6	1.5
Brokerage Houses	1.9	2.9	0.6
Investment Trust Companies	0.4	0.5	0.1
Investment Funds	15.6	20.6	4.0
Real Investment Trust Companies	1.8	3.2	0.6
<b>Total:</b>	<b>405.4</b>	<b>517.4</b>	<b>116.3</b>

\*\* Includes assets of the Central Bank of Turkey and Participation banks.

Source: Banking Regulation and Supervision Agency (BDDK)

"We have no mortgage crisis or any other financial crisis in Turkey. The slowdown in the U.S. economy may be of such a dimension that it could unfavorably influence the global economy. For this reason, the Turkish economy could be adversely affected. But the Turkish banking industry is one of the nation's strongest sectors," Ersin Özince, president of the Banks' Association of Turkey and chief executive officer of Türkiye İş Bankası (İşbank), told reporters in Ankara on February 8, 2008. "The quality of our banking system is among the highest in terms of world standards. It has been renewed and rectified. We need not worry about the situation."

In terms of assets, the largest Turkish banks are state-owned T.C Ziraat Bankası and Türkiye İş Bankası (İşbank), the country's biggest private bank. Other big top tier banks include the privately-owned Akbank, Garanti Bankası, Yapı ve Kredi Bankası, and state-owned Vakıfbank and Halkbank.

Akbank is owned by Turkey's Sabancı Holding, the nation's third biggest conglomerate, and Citibank. Turkey's Doğu Holding and General Electric GE Finance of the U.S. own Garanti Bankası. Yapı ve Kredi Bankası is 57.4 percent owned by a Koç Financial Services, a joint venture of Turkey's Koç Holding and Italy's UniCredito Group.

In 2007, the number of bank branches in 2007 increased to 7,618 from 6,849 in 2006 and the number of employees in the banking system rose to 158,559 from 143,168, the Banks Association of Turkey reported. But the numbers are still far short from the pre-crisis period of 2000, when the country's banks had 7,837 branches and 170,401 employees.

**TOTAL BRANCHES AND EMPLOYEES  
IN THE TURKISH BANKING SYSTEM 1995-2007**

Year	Total Branches	Total Employees
1995	6,244	144,793
1996	6,422	148,153
1997	6,819	154,864
1998	7,370	166,492
1999	7,691	173,988
2000	7,837	170,401
2001	6,900	137,495
2002	6,106	123,271
2003	5,966	123,249
2004	6,106	127,163
2005	6,164	131,012
2006	6,849	143,168
2007	7,618	158,559

*Source: Banks' Association of Turkey*

## FOREIGN BANKS

Foreign banks are playing a pivotal role in Turkey's financial system in bringing in an infusion of much-needed capital, introducing new products and efficiency and healthy competition into the market. The total assets of foreign banks in the Turkish banking system jumped to about 40 percent at the end of 2007 from five percent in 2000, as more foreign banks rushed to snap up shares in Turkish bank assets after Turkey began membership talks with the European Union on October 3, 2005.

Foreign banks began entering the Turkish commercial banking sector in the early 1980s. Operating out of one or two branches, they came to dominate Turkey's foreign trade and exchange markets with their expertise and lower overhead costs, capturing market share from overmanned, undercapitalized, big Turkish commercial banks.

Turkish banks responded by introducing automated systems and offering almost every foreign trade or exchange product and banking service available.

#### TOP 20 BANKS OF TURKEY IN TERMS OF ASSETS AS OF SEPTEMBER 30, 2007

Name of Bank	Total assets (In million dollars)	Number of branches	Number of employees	Year when founded
1 TC Ziraat Bankası A.Ş.	63,985	1,248	20,011	1863
2 Türkiye İş Bankası A.Ş.	63,464	929	19,159	1924
3 Akbank T.A.Ş.	53,423	698	13,205	1947
4 Türkiye Garanti Bankası A.Ş.	49,390	545	13,813	1946
5 Yapı ve Kredi Bankası A.Ş.	39,772	660	13,712	1944
6 Türkiye Vakıflar Bankası T.A.O.	33,268	331	8,557	1954
7 Türkiye Halk Bankası A.Ş.	31,544	586	11,572	1938
8 Finans Bank A.Ş.	15,636	378	8,875	1987
9 Denizbank A.Ş.	10,671	299	6,419	1997
10 Oyak Bank A.Ş.	10,055	365	5,924	1984
11 HSBC Bank A.Ş.	9,779	226	5,384	1990
12 Türkiye Ekonomi Bankası	8,985	253	4,978	1927
13 Fortis Bank A.Ş.	7,601	248	4,975	1964
14 Şekerbank T.A.Ş.	4,575	230	3,740	1953
15 İller Bankası	4,441	19	2,578	1933
16 Citibank A.Ş.	3,958	54	2,312	1980
17 T. Sınai Kalkınma Bankası	3,778	4	311	1950
18 Türk Eximbank	3,479	2	396	1987
19 Anadolubank A.Ş.	2,478	73	1,611	1996
20 Tekstil Bankası A.Ş.	2,303	56	1,471	1986

Source: Banks' Association of Turkey, Banking Regulation and Supervision Agency (BDDK)

Foreign banks in Turkey began expansion in retail banking in the 2000s by acquiring shares in existing Turkish banks with extensive branch networks:

- HSBC Banking Corp. in 2001 acquired Demirbank, Turkey's 10th largest bank, from a state banking receivership fund for \$350 million and named it HSBC Bank.
- Portugal's Millennium Bank acquired the small Sitebank from the Central Bank's Savings Deposits Insurance Fund for \$35 million in fall 2001 and renamed it Millennium Bank.

- Italy's UniCredito Group acquired a 50 percent stake in Koçbank and in other six other Koç Holding financial companies in May 2002.
- In February 2005, France's BNP Paribas bought 50 percent of TEB Financial Investments A.S. from Turkey's Çolakoğlu Group for \$216.8 million, gaining control of a 42.165 percent stake in Turk Ekonomi Bankası (TEB), a midsize Turkish bank, and shares in seven other financial subsidiaries.
- In May 2005, Koç Financial Services, a 50-50 joint venture between Koç Holding of Turkey and UniCredito of Italy, acquired a 57.4 percent of Yapı ve Kredi Bankası for \$1.495 billion. Koç Financial Services merged Yapı ve Kredi Bankası, Turkey's fifth biggest bank, with its Koçbank under Yapı ve Kredi Bankası's name in 2006. Koç Financial Services also gained control over a dozen financial companies owned by Yapı ve Kredi Bankası.
- Belgium's Fortis Bank in July 2005 acquired an 89.3 percent share in Türkiye Dış Ticaret Bankası (Dışbank) from Doğan Holding of Istanbul for \$1.051 billion. Fortisbank also gained control over several non-banking financial subsidiaries of Dışbank, which specializes in foreign trade financing. It renamed Dışbank as Fortis Bank A.Ş.
- In August 2005, U.S. General Electric Consumer Finance bought a 25.5 percent share of Türkiye Garanti Bankası, Turkey's fourth biggest commercial bank, for \$1.556 billion from Turkey's Doğu Holding. With the acquisition, GE Consumer Finance also gained shares in 27 financial subsidiaries of the bank. These included Garanti Securities, one of the leading brokerage firms of Turkey, Garanti Leasing, a leading Turkish leasing company with assets of \$151 million, and Garanti Sigorta, a leading insurance company, and several foreign banks.
- Israel's biggest financial institution Bank Hapoalim (BH) in September 2005 acquired 57.5 percent share in Turkey's C Kredi ve Kalkınma Bankası (C Bank), a small investment bank, from business woman Damla Cingilloğlu for \$113 million, with the aim of breaking into the lucrative Turkish mortgage and project finance markets. The bank was renamed Bank Pozitif A.S. and was the first major Israeli investment in Turkey.
- The National Bank of Greece in April 2006 acquired a 46 percent stake in Finansbank from Fiba Holding for \$2.8 billion.
- In the biggest banking transaction in Turkey to date was Belgium's Dexia Group's acquisition of 96.6 percent stake in DenizBank from Zorlu Holding and other shareholders for \$3.161 billion in 2006.
- Citibank in January 2007 acquired a 20 percent stake in Akbank from Sabancı Holding for \$3.1 billion.
- Greece's EFG Eurobank Ergasias acquired a 70 percent stake in Tekfenbank from Tekfen Holding in March 2007 for \$182 million.
- Kazakhstan's Turan Alem Bank acquired a 34 percent stake in Sekerbank for \$260 million.

- Lebanese Bank Med and the Jordanian Arab Bank, both owned by the family of former Lebanese Prime Minister Rafiq Hariri, purchased a 91 percent stake in MNG Bank and changed its name to Turklandbank.
- ING Bank of the Netherlands acquired Oyakbank from the Oyak Group in December 2007 for \$2.67 billion.

All of the foreign banks are headquartered in Istanbul, Turkey's financial capital. US banks with local branches include Citibank, and JP Morgan Chase Bank. European banks include ABN Amro Bank, Credit Lyonnais, Banco di Roma, Fortis Bank, BankEuropa, Deutsche Bank, HSBC Bank, Société Generale, and Westdeutsche Landesbank Girozentrale. Other foreign banks include the Arab Turkish Bank (a joint venture among the Libyan Arab Foreign Bank, the Kuwait Investment Co, Türkiye İş Bankası, Ziraat Bankası and Tekfen Holding), Habib Bank (Pakistan), Bank Mellat (Iran), and Taib Yatırım Bank.

Some 35 foreign banks have representative offices in Turkey, and are developing their correspondent relationships.

## **CONSUMER BANKING**

Consumer banking has become a major area of focus of Turkey's banks in recent years and the competition in this field is stiff with all major banks jumping into the market.

In 2007, consumer loans stood at around \$61 billion, or 25 percent of \$244 billion in total loans. Consumer loans are bank credits for the purchases of consumer needs, such as household appliances, automobiles, educational and travel loans for family members and housing credits. Nearly half of all consumer loans in 2007 were housing/mortgage loans.

In 2005, consumer loans stood at only \$16.5 billion, accounting for only 16 percent of all bank loans. Bankers predict that consumer loans will eventually increase to 50 percent of all bank loans in the next five to ten years.

In addition to direct consumer loans, credit and debit card usage is on the rise. Turkey has been one of the fastest growing markets for credit card and debit card usage. Credit cards were first introduced into the Turkish market in the 1960s. But credit card usage didn't catch fire until the 1990s.

By the end of 2007, Turkey's banks had issued a total 37,335,179 credit cards and 55,518,092 debit cards. This made Turkey the third biggest credit card market in Europe, after Germany and England, and ranked it tenth in the world, according to the Interbank Card Center (BKM).

## STATISTICS ABOUT ON PLASTICS CARDS IN TURKEY

	As of December 31, 2007
Number of credit cards issued	37,335,179
Number of debit cards issued	55,518,092
Number of POS machines	1,453,877
Number of ATMs	18,000

Source: Interbank Card Center

Fully 80 percent of these cards can be used internationally, and many are denominated in foreign exchange.

The Interbank Card Center (BKM) in Istanbul processes Visa, MasterCard and debit card transactions for member banks.

The number of Automated Teller Machines (ATMs) has ballooned to 18,000 at the end of 2007 from 4,656 ATMs in 1995. Banks operate proprietary networks, but have yet to develop network sharing because of rivalries and different interest rates applied.

Major American and European networks have reciprocal arrangements with Turkey's banks. ATM cards are an accepted part of the Turkish consumer economy. Some banks have developed their ATM programs so that cardholders can use them to give, sell or buy orders on the Istanbul Stock Exchange, to obtain gold prices, stock exchange indices and foreign exchange rates, and to buy and sell travelers checks and mutual fund certificates.

The growth of Points-of-Sale (POS) terminals has been heady in the past 12 years. The number of POS terminals grew to 1,453,877 on December 31, 2007 from 299,950 in 2000 and only 25,000 in 1995, the Interbank Card Center reported. The advanced nature of cash management common in the Turkish economy makes debit and credit cards attractive to Turkish consumers. Consumers use POS terminals at retail stores to debit purchases from their current accounts. An estimated 100,000 new POS terminals are added to Turkey each year, growing at an 8 percent rate, bankers said.

## OUTSOURCING

The growth of the credit card market and wider use of ATMs in the Turkish banking system, the boom in consumer loans and the entry of foreign investment into the Turkish banking sector is likely to fuel demand for outsourcing, bankers say.

The market size for outsourcing of information technology and telecommunications services in Turkey was \$283.952 million in 2006, and is growing at a fast rate, according to Interpromedya, Turkey's number one research organization on information and communication technology (ICT).

*"Outsourcing service revenues are progressing with secure steps,"* Interpromedya said in a study of Turkey's top ICT companies. *"Companies are showing more and more interest in outsourcing services to reduce costs and increase productivity."*

Interpromedya said that 58 companies were providing a wide range of outsourcing services, including the operating of call centers for customers, providing billing services, printing of plastic payment cards and running of credit card and ATM operations. Only five of these companies do significant business in banking and financial services. Outsourcing for the banking and financial sector is believed to be only a small fraction of the total market.

Only midsize and small Turkish banks are using outsourcing services in credit card and ATM operations to cut down costs. Major Turkish banks, state banks included, have set up their own separate companies and centers to run credit card and automated teller machine (ATM) operations, and have established their own call centers. These banks jealously guard their own credit card and customer information and, it appears, they don't want to share this information with one another or with third parties, except for reporting cases of non-performing consumer loans and bad debts.

Yapı ve Kredi Bankası established a large banking operations center outside Istanbul as early as in 1998 to run its credit card and ATM operations. Denizbank and Garanti Bank have established separate technology companies to operate their credit card and ATM services. State-owned T.C Ziraat Bankası, Ziraat Bank Bosnia and Halkbank share card operations through a joint venture operation set up in Istanbul.

Only one foreign company is active in banking outsourcing - Siemens - and it provides call center services for HSBC and Fortis Bank and Garanti Ödeme Sistemleri, the credit card operations of Türkiye Garanti Bankası, and some credit card and ATM services for Citibank and Fortis.

But as consumer banking becomes the main business line of the country's biggest banks, many will have to review their costly credit card and ATM operations, and may opt for outsourcing of these services to cut down overhead costs, bankers said.

*"If new large, trustworthy, financially strong companies with proven track records of carrying out large-scale outsourcing emerge even the bigger banks will begin outsourcing their services,"* Pınar İşmen, director of the credit card and alternative payments channels of Fortis Bank, said in an interview.

First Data Corp, the world's largest provider of merchant processing services, opened offices in Istanbul in October 2007.

David Yates, chairman of Greenwood Village, Colorado-based corporation, in a news conference in Istanbul in October said: *"The banks in Turkey that issue credit cards and debit cards are among the world's leading institutions advocating change. We want to work with these institutions and to expand the market for card usage."*

## INSURANCE

Turkey's insurance business, where foreign companies now control 46.33 of all insurance premiums and 51 percent of the market, is also rapidly growing. Insurance premiums in the first nine months of 2007 stood at \$6.620 billion, a nearly 10fold increase from 1990, when the sector generated only \$710 million. Still Turkey remains the low man on the totem pole among most European nations when it comes to insurance premiums.

### INSURANCE PREMIUMS IN TURKEY BY SELECTED YEARS 1990-2007 (IN MILLION U.S. DOLLARS)

Year	Amount
1990	710
2000	2,846
2003	3,585
2004	4,736
2005	5,815
2006	6,829
2007*	8,827

*\*Figures for 2007 are an estimate*

*Sources: Sigortaci Newspaper, Turkish Insurance and Reinsurance Companies Union*

As foreign banks have acquired Turkish banking assets, they have also come to own large slices of affiliate financial companies, including brokerage houses, factoring and leasing companies, and insurance firms.

Some 46 companies operate in insurance sector. Of these 16 are fully foreign-owned and 14 are majority foreign-owned.

Major foreign companies that operate in Turkey's insurance sector or own Turkish insurance assets are: AXA, Coface and Groupama of France, Aviva of Britain, American Life and Liberty Mutual of the U.S., Ergo International, Allianz and HDI Gerling International Holding A.G. of Germany, Global Equities Management (GEM) of the Bahama Islands, TBIH and Eureka of the Netherlands, Mapfre of Spain, Fortis and Dexia of Belgium, Zurich Financial of Switzerland, Abraaj Capital of the United Arab Emirates, and Unicredito Group of Italy,

## CAPITAL MARKETS

In the first nine months of 2007, investment in Turkish financial and capital markets stood at around \$460.7 billion, including \$101 billion in investment carried out by foreign individual and institutional investors, the Association for Turkish Capital Market Intermediaries reported.

### DOMESTIC AND FOREIGN INVESTMENT IN TURKISH FINANCIAL AND CAPITAL MARKETS IN BILLION DOLARS JANUARY TO SEPTEMBER 2007

Financial and Capital Markets Instruments	Domestic(Turkish) Investors	Foreign Individual and Institutional Investors
Turkish Lira Deposits	158.8	4.9*
Foreign Exchange Deposits	90.3	
Precious Metals' Deposits	.1	
Funds in Participation Banks	10.9	
Government Bonds and Treasury Bills	44.7	31.0
Eurobonds	3.8	0.4
Mutual Funds	20.6	
Repurchasing Agreements	1.8	
Retirement Funds	3.4	
Equities	25.7	64.7
Totals	359.7	101.0

*\*Includes both Turkish Lira and foreign exchange deposits*

Source: TSPAKB

## ISTANBUL STOCK EXCHANGE

The Istanbul Stock Exchange (IMKB) has been one of the world's most volatile bourses with share prices yo-yoing.

On December 31, 2007, the benchmark IMKB-100 Index stood at 55,538 points, up 42 percent from 2006, as the Istanbul Stock Exchange was the fifth best performing bourse in the world after the Shanghai (China), Indonesia, Pakistan and Indian bourses last year. But the index plunged 20.2 percent to 44,452 points by February 1, 2008, as jittery investors fearing a global liquidity crunch and an economic slowdown due to the U.S. mortgage crisis and wanting to stay liquid

sold their shares in Turkish stocks in a frenzy of profit-taking, as the IMKB took the worst beating among stock markets worldwide.

**MARKET CAPITALIZATION OF THE ISTANBUL STOCK EXCHANGE  
IN SELECTED YEARS 1994-2008 (IN BILLION U.S. DOLLARS)**

DATE*	Market Capitalization
1994	21.755
1995	20.782
1996	30.787
1997	61.897
1998	33.975
1999	114.271
2000	68.635
2001	47.189
July 22, 2002	35.000
2004	100.000
2005	161.537
February 27 2006	201.017
2007	288.761
February 1 2008	236.999

*\*Unless specified, the closing date used is December 31.*

*Sources: Istanbul Stock Exchange, Association of Capital Market Intermediaries of Turkey*

Market capitalization of the Istanbul Exchange on February 1, 2008, stood at \$236.999 billion, down from \$288.761 at the end of 2007.

Market capitalization on the IMKB grew 13.27 fold from the end of 1994 to 2007, as a result of increased numbers of companies going public and share prices soaring. The annual trading volume for 2007 stood at \$324 billion.

Although more than 60 Turkish firms have applied to the Capital Market Board, the stock market regulatory agency, to go public, only nine companies, including two real estate investment trusts (REITs) and two general investment firms, went public in 2007. These were:

- Airports operator TAV Havalimanları Holding A.S.
- Sağlık REIT

- General investment company Oyak Yatırım Ortaklığı A.Ş.
- Securities investment company Merkez B Tipi Menkul Kıymetler Yatırım Ortaklığı
- Turkey's second biggest state bank, Halkbank.
- Brokerage house İş Yatırım Menkul Değerler A.Ş.
- Sinpaş REIT
- Participation bank and Islamic finance house Albaraka Türk Katılım Bankası A.Ş.
- Tekfen Holding A.Ş. one of Turkey's leading conglomerates.

Seventy-two percent of the shares traded on the exchange and 24 percent of all transactions in 2007 were controlled by foreign institutional investors, according to the Association of Turkish Capital Market Intermediaries (TSPAKB). Both are records for Turkey. Foreign investors controlled 55 percent of the shares listed and 13 percent of all transactions on the stock market in 2004.

*"We are seeing increased foreign investor interest in our capital market,"* wrote Gökben Altaş, a research analyst with TSPAKB, in a report on foreign investment in the Turkish capital market published in February 2008.

In the biggest initial public offering in 2007, foreign institutional investors acquired \$1.3 billion of the \$1.8 billion in shares offered by state-owned Halk Bank

Numerous foreign institutional investors and banks trade actively on the exchange through subsidiaries and brokerage houses they own. These include Raymond James Securities, Morgan Stanley, Citibank and Merrill Lynch of the U.S., Bank Hapoalem of Israel, Credit Suisse International, Dexia, Deutsche Bank, EFG Eurobank Ergasias, the National Bank of Greece, Fortis Bank, Unicorn Investment Bank, Sbic Investment, Compagnie Financiere de Camondo, BNP Paribas, MCT International BV, UBS AG., Unicredito Group

Some 319 companies were listed on the IMKB as of December 31, 2007

## **PRIVATIZATION**

Turkey's ambitious privatization program is switching gears, shifting from the sale of sprawling state industries to the energy sector, ports, highways and other infrastructure.

Since the program was initiated in 1985 to the end of 2007, the Privatization Administration (ÖİB), the main agency assigned to carry out the country's huge privatization program, has sold the state's shares in 186 companies, generating a total \$30.016 billion in revenues.

## TURKEY'S PRIVATIZATION REVENUES 1985-2007

METHODS OF SALE	REVENUES (IN MILLION DOLLARS)
Block Sales	18,159
Asset Sales	4,823
Public Offerings	5,180
Sales through the Istanbul Stock Exchange	1,261
Sales of half completed factories	4
Transfer of operating rights	585
Total	30,016

Source: Privatization Administration Board (ÖİB)

The state has exited from forestry products, dairy, pulp and paper, oil refining and oil products retailing, aluminum, animal feed, cement industries, and shipping. Although several industries still remain in ÖİB's portfolio, such as the former tobacco monopoly Tekel, the sugar concern Seker Fabrikaları A.Ş., and majority shares in petrochemicals manufacturer Petkim, privatization in Turkey has shifted away from industry to the energy sector, airports and ports, highways, banking and finance, real estate and services.

The sales revenues of the Privatization Administration (ÖİB), the main government agency responsible for Turkey's ambitious privatization program, fell in 2007 to \$4.665 billion, after two consecutive years of generating over \$8 billion. The biggest privatization implementation in 2007 was the public offering of a 24.98 percent stake in Halkbank, the country's second biggest state bank for \$1.846 billion. The other major sale was the transfer of 96,505 square meters of prime property in central Istanbul owned by the State Highways Department to Turkey's Zorlu Holding for \$800 million.

The ÖİB also leased out for 36 years the Port of Mersin, on the Mediterranean Coast, for \$755 million, to a joint venture between Turkey's Afken Holding and the Singaporean PSA International, which operates 26 ports in 15 countries in Asia, Europe and the Americas. The ÖİB also sold the government's Motor Vehicle Inspection Centers to a consortium that included the Doguş Group, Afken Holding and TUV of Germany for \$615.5 million.

The biggest privatization to date was the Saudi Group Oger Telecom's acquisition of 55% of Türk Telekom in 2005 for \$6.5 billion.

**MAJOR SALES OF STATE ASSETS CARRIED OUT BY THE  
PRIVATIZATION ADMINISTRATION IN 2007**

Company Privatized	Acquiring Company	Purchase Amount in Million U.S. Dollars
Halkbank (24.98 percent share sale)	Public Offering	1,846.000
96,505 square meters of property owned by the State Highways department in Istanbul	Zorlu Holding	800.000
TCDD's Port of Mersin (36-year lease)	Akfen Holding-PSA	755.000
Motor Vehicle Inspection Centers	TuvTurk Kuzey Taşıt Muayene İstasyonlarr Yapım ve İşletim A.Ş.	615.500
Tekel	Istanbul property	51,000
Emekli Sandığı's Çelik Palas Hotel in Bursa	MSN Yapı-Cenor Group	38.900
TDCI's Deveci Iron Mines	Kolin İnşaat Turizm	21.500
	Total Sales	4,665,900**

\*\*Includes minor land sales.

Source: Privatization Administration (ÖİB)

In 2008, the ÖİB is expected to complete the privatization of Sigara Sanayi İşletmeleri, the cigarette manufacturing arm of the former state tobacco and salt monopoly Tekel; and the Ports of Izmir, on the Aegean, and Bandırma and Derince, along the Sea of Marmara, and Samsun, on the Black Sea Coast, and petrochemical concern Petkim.

**The Privatization Higher Council (OYK)** in 2007 approved the sale of the **State Railway's (TCDD's) Port of Derince**, in the Gulf of Izmit, along the northeastern shores of the Sea of Marmara, to Turkey's **Turkerler Investment Enterprise Group** for \$195.250 million. The port is located close to key industrial regions of Istanbul, Izmit and Adapazari and is operated by the **TCDD**. Under the tender specifications, the winner will operate the port for 36 years, and will have to carry out \$250 million in new investments. A contract will be signed pending approval from competition authorities.

The **OYK** also endorsed the transfer of the operating rights of the **Port of Izmir to Global Holding, Hutchison, Deutsche Bank and Aegean Exporters' Association Port Services Joint Venture** for \$1.275 billion. The **State Railways Administration (TCDD)** owns the port, which had an annual turnover of \$103 million and a 11-ton annual capacity in 2005. The port employs 403 persons. Under the tender conditions, the winners of the auction will operate the port, Turkey's third biggest maritime gateway after Haydarpaşa Port in Istanbul and the **Port of Mersin** on the Mediterranean, for 49 years.

On February 22, 2008, **British American Tobacco (BAT)** was the highest bidder for the six cigarette plants of **Sigara Sanayi** with a \$1.720 billion offer. Other bidders included CVCI-Doğan-TÜTSAB joint venture; and a partnership that included British-based institutional investors CINVEN and Turkish investment group Strand Investment S.A.R.L. Should the sale proceed, BAT would increase its share in the Turkish tobacco market to 36 percent from its current 7 percent share.

The Privatization Administration is expected to tender several major projects in 2008:

- Some 29 major power plants in the next phase of the privatization of state economic enterprises.
- The remaining 75.02 percent stake in state-owned **Turkiye Halk Bankasi (Halkbank)**, Turkey's sixth biggest commercial bank, in block sales.
- Privatization of Turkey's 20 power distribution companies, postponed due to last year's general elections, will resume. The power distribution companies control 800,000 km of power lines, and 2,500 transformers and have a total 29 million subscribers. Investment analysts predicted that the country could attract more than \$10 billion in funds through the tendering process because of the intense competition, although the power distribution companies had a market value of \$3.2 billion. The Privatization Administration (OIB) last year indefinitely postponed tenders for the block sale of 100 percent share in three electricity distribution companies because of general elections. The three companies were: **AYEDAŞ (Istanbul Anatolian Side Electricity Distribution Company)**, which operates on the Asian side of Istanbul province; **Capital City (Başkent) Electricity Distribution Company**, which covers the provinces of Ankara, Kirikkale, Zonguldak, Bartın, Karabük, Cankırın and Kastamonu, in northwest Anatolia; **Sakarya Electricity Distribution Company**, covering the provinces of Sakarya, Bolu, Düzce and Kocaeli also in northwest Anatolia. Nearly 30 domestic and international companies had prequalified with more than 80 separate bids for the three companies. Among the companies or groups that had submitted prequalification bids, included Koç Holding, Enerjisa (Sabancı Holding), Zorlu Enerji, Çalık Enerji, Boydak Holding, Park Holding, Ak Enerji (Akkök Group), and Doğu-Anadolu-Doğan Holdings Consortium, and Turcas Petrolcülük. The foreign partners were Germany's E.On, RWE, and Siemens, Spain's Iberdrola and Endesa, Italy's Enel, Belgium-based Unit, AES of the U.S. and Citygroup of Malaysia.

## ELECTRICITY DISTRIBUTION REGIONS TO BE PRIVATIZED

1 Dicle (Diyarbakir, Mardin, Siirt, Sanliurfa, Batman and Sirtnak provinces)	12 Uludağ (Balikesir, Bursa, Yalova ) and Canakkale
2 Van Gölü (Van, Hakkari, Muş, Bitlis )	13 Trakya (Edirne, Kırklareli and Tekirdağ)
3 Aras (Erzurum, Agri, Kars, Ardahan, Erzincan, Bayburt, and Iğdır)	14 AYEDAS (Asian side of Istanbul)
4 Çoruh (Trabzon, Rize, Artvin, Gümüşhane and Giresun)	15 Sakarya Electric ( Sakarya, Bolu, Düzce and Kocaeli)
5 Fırat (Bingöl, Elazığ, Malatya, Tunceli)	16 Osmangazi (Eskişehir, Bilecik, Afyon, Kütahya, and Uşak)
6 Çamlıbel (Sivas, Tokat, Yozgat)	17 Boğaziçi (Istanbul - European Side)
7 Toroslar (Adana, Mersin, Osmaniye, Hatay, Gaziantep and Kilis)	18 Kayseri (Kayseri province)**
8 Meram (8th Region covering Kırşehir, Nevşehir, Nigde, Aksaray, Konya and Karaman)	19 Menderes (Aydın, Denizli and Mugla)
9 Başkent Elektrik Dağıtım (9th Region, covering Ankara, Kirikkale, Zonguldak, Bartın, Karabük, Çankırı and Kastamonu)	20 Göksu (Adıyaman and Kahramanmaraş)
10 Akdeniz (Antalya, Burdur and Isparta)	21 Yeşilirmak (Amasya, Çorum, Ordu, Samsun and Sivas)
11 Gediz (Izmir and Manisa)	

*\*Each region with the exception of Istanbul province represents a single or several provinces. Power distribution in Istanbul province is separated in two regions the European side and the Asian side.*

*\*\*Power distribution in Kayseri province has already been privatized.*

Source: TEDAS

- The government plans to transfer the operating license of Milli Piyango, the national lottery, possibly in 2008. In 2006, it had sales of \$922 million.
- The remaining 45 percent state shares in the partially privatized telecommunications company Turk Telekom will be sold in a public offering.
- The OIB plans to privatize the Bosphorus Bridge and the Faith Sultan Mehmet Bridge and nine toll express roads. The express roads are: the Edirne-Istanbul-Ankara Express Road; Pozantı-Tarsus-Mersin Express Road; Tarsus-Adana-Gaziantep Express Road; Toprakkale-Iskenderun Express Road; Izmir-Aydın Express Road; Gaziantep-Sanlı Urfa Express Road; Izmir and Ankara Ring Roads.
- The OIB launched tenders in February for the privatization of the State Railways Ports of Bandırma and Samsun.

Privatization is also being carried out by the Savings Deposits Insurance Fund (TMSF), a state banking receivership fund that is selling companies and assets of more than 20 banks that collapsed since 1997. Other state agencies and banks are also involved in privatization.

Major sales carried out by the TMSF in the past two years were the mobile phone services operator Telsim to Britain's Vodafone for \$4.550 billion and a series of television channels and cement companies that were previously owned by the controversial Uzan Group but taken over by the receivership fund against its debts to the state over the collapse of its İmarbank.

The State Airports' Authority gave a 17-year management contract for the terminal of the Antalya International Airport to the joint venture of Turkey's Ibrahim Çeçen Holding and Germany's Fraport AG, the operator of Frankfurt International Airport, for \$3.197 billion. It also leased Istanbul Atatürk Airport Terminals to Tepe-Akfen Ventures in 2006 for 15 years for \$2.950 billion.

Turkey's Maritime Organization plans to transfer the operational rights of Galataport, the project for the renewal and operations of Istanbul's old passenger liner gateway, for 49 years, possibly in 2008. The first tender in February 2006 was cancelled after the State Planning Organization refused to approve the transfer of shares of Galataport to a consortium led by Israeli businessman Sammy Ofer's Royal Caribbean Cruises and Turkey's Global Investment Holding, because of irregularities in the tender. The consortium had offered \$4.3 billion for Galataport. The new port will help transform Karaköy, a former 15<sup>th</sup> Century Venetian neighborhood with rundown, crowded, old apartment buildings, shabby business offices, port facilities, mosques, churches and synagogues, into the "new Barcelona" of Istanbul, in a major urban renewal. Some 5,000 historic buildings in the district will be renovated, and Istanbul's public brothels, located in Karaköy, will be moved outside the city. The Galataport Project, located between TDI Headquarters in Karaköy, next to the ferryboat landings, and Chamber of Maritime Commerce in Fındıklı, would include three hotels, restaurants, cinemas, convention centers, new customs facilities, cultural centers, playgrounds, a shopping center, a museum and a large automobile park, and a new quay.

The State Railways Administration (TCDD) is planning to lease out its 904 train stations and terminals in 57 provinces to the private sector possibly in 2008, in the greatest reform in the 80-year history of Turkey's biggest money-losing state economic enterprise. The TCDD intends to raise \$500 million annually through the leases that would allow the private sector to build hotels, cafes, restaurants and shopping centers at the stations and terminals. The biggest prize of all would be the Haydarpaşa Terminal Project, in Istanbul, where the government wants the private sector to invest \$7 billion dollar plan to transform it and the surrounding areas into a major shopping, cultural and tourist hub with five-star hotels with a bed capacity of 9,000, public parks, a convention center, yachting marinas, theaters, shopping malls, deluxe restaurants, marinas, and seven tulip-shaped skyscrapers to symbolize the city (originally built on seven hills).

The Undersecretariat of Defense in 2008 was expected to conclude a 20-year management contract for the international terminal of Istanbul's **Sabiha Gökçen Airport**, Istanbul's second biggest

international airport. The new airport management company is expected to raise the capacity of the terminal to 10 million passengers a year from the current 3 million and build a new international flights terminal and other facilities. A Turkish-Indian-Malaysian consortium, led by the **Limak İnşaat**, was the highest bidder for operational rights to the international terminal of Istanbul's **Sabiha Gökçen Airport** with a \$3.5 billion bid on July 8, 2007. The winning consortium was **Limak İnşaat A.S. (Turkey), GMR Infrastructure Ltd (India) and Malaysia Airports Holding Joint Venture**. The **Sabiha Gökçen Airport** is located on Istanbul's Asian side and is the city's second biggest international airport. It is used mainly for local and international charter flights.

### STATE COMPANIES UNDER THE CONTROL OF THE PRIVATIZATION ADMINISTRATION BOARD (ÖİB)

NAME OF THE COMPANY	INDUSTRY	Share of ÖİB (%)
1 Sümer Holding A.Ş. *	Textile, leather, ceramics, carpet, sugar	100.00
2 Sümer Halı A.Ş.	Carpet	100.00
3 T. Denizcilik İşletmeleri *	Maritime	100.00
4 Tobacco, Tobacco Products, Salt and Alcohol Enterprises Inc. (TEKEL) *	Tobacco Products, Salt	100.00
5 Turkish Electricity Distribution Inc (TEDAS)	Electricity Distribution	100.00
6 Ankara Doğal Elektrik Üretim ve Ticaret A.Ş.	Electricity Production	100.00
7 Türkiye Şeker Fabrikaları A.Ş. *	Sugar processing	100.00
8 KBI-Karadeniz Bakır İşlet. *	Copper	99.99
9 T.Halk Bankası A.Ş. *	Banking	75.00
10 Petkim Petrokimya Hold. A.Ş. *	Petrochemicals	61.32
11 Doğusan Boru Sanayi ve Ticaret A.Ş.	Pipe Production	56.09
12 Turkish Airlines (THY)*	Airline	49.00
13 Türk Arap Pazarlama A.Ş.	Marketing	12.50
14 Kayseri Şeker Fabrikası A.Ş.	Sugar processing	10.00
15 T.İş Bankası	Banking	0.000001

*\*Some of the assets/ or shares of these companies have been privatized*

*Source: Privatization Administration*

## ENTITIES IN THE PRIVATIZATION PORTFOLIO MOTORWAYS AND BRIDGES

Toll Motorways	Bosphorus Bridges
1. Pozantı-Tarsus-Mersin	1. Boğaziçi (Bosphorus)
2. Edirne-Istanbul-Ankara	2. Fatih Sultan Mehmet
3. Tarsus-Adana-Gaziantep	
4. Toprakkale-Iskenderun	
5. İzmir-Çeşme	
6. İzmir-Aydın	
7. Gaziantep-Şanlıurfa	
8. İzmir ve Ankara Çevre	

## ELECTRICITY ASSETS

1 Çatalağzı Lignite Generation Plant	16 Suatugurlu Hydroelectric Generation Plant
2 Orhaneli Lignite Generation Plant	17 Kılıçkaya Hydroelectric Generation Plant
3 Seyitömer Lignite Generation Plant	18 Çamlığöze Hydroelectric Generation Plant
4 Ambarlı Doğalgaz Lignite Generation Plant	19 Ataköy Hydroelectric Generation Plant
5 Ambarlı Fueloil Lignite Generation Plant	20 Köklüce Hydroelectric Generation Plant
6 Hopa Lignite Generation Plant	21 Almus Hydroelectric Generation Plant
7 Aliğa K.Ç.G.T. Lignite Generation Plant	22 Sarıyar Hydroelectric Generation Plant
8 Bursa Gas Lignite Generation Plant	23 Oymapınar Dam Hydroelectric Gen. Plant
9 Lignite Generation Plant	24 Gökçekaya Hydroelectric Generation Plant
10 Altinkaya Hydroelectric Generation Plant	25 Yenice Hydroelectric Generation Plant
11 Hirfanlı Hydroelectric Generation Plant	26 Beyköy Hydroelectric Generation Plant
12 Kesikköprü Hydroelectric Generation Plant	27 River Plants*
13 Derbent Hydroelectric Generation Plant	28 Electricity Distribution Inc. (TEDAŞ)
14 Kapulukaya Hydroelectric Generation Plant	
15 Hasanugurlu Hydroelectric Generation Plant	

\*54 small river plants

Source: Privatization Administration Board (OIB)

## OTHER ENTITIES IN THE PRIVATIZATION PROGRAM

PORTS	OTHERS
1. State Railway's Bandırma Port	1. Foça Holiday Resort
2. State Railway's İzmir Port	
3. State Railway's Samsun Port	
4. State Railway's Derince Port	
5. İzmir-Çeşme	

Source: Privatization Administration

## FOREIGN INVESTMENT

In 2007, Turkey pulled in a record \$21.873 billion in foreign direct investment, the Central Bank of Turkey reported. In 2006, the nation attracted a record \$20.1 billion in foreign direct investment (FDI), twice the amount of foreign investment that entered the nation in 2005 and 79 times more than the amount of investment that the country absorbed from 1954 to 1980. Turkey in 2006 ranked 16<sup>th</sup> in the world in attracting FDI and fifth among emerging markets.

About 70 percent of the FDI has been in mergers and acquisitions and the remaining has been in greenfield investments.

*"Turkey has the potential to attract five percent of its GNP -- around \$25 billion -- in foreign investment every year,"* Mustafa Alper, secretary general of the Foreign Investors' Association (YASED), declared in an interview.

Turkish authorities are approaching FDI without discriminating about the sector or origin, but give special attention to investments that will bring new jobs, know-how and generate value-added to the economy. Investments in information and communications technology, machine tools, machinery, metal processing, logistics and automotive industry, food processing, pharmaceuticals, energy, services and infrastructure are being particularly encouraged.

Consumer-oriented service companies are pouring into the country, mesmerized by the country's young population and rapidly changing shopping habits.

From an interview with Emir Sarpyener, chief executive officer of Raymond James Securities Turkey:

**Emir Sarpyener:** *The main advantage of investing in Turkey is the immense growth potential of the country. Although there has been substantial increases in the prices of assets and public companies during the last few years, investment in Turkey and/or Turkish companies still offer attractive returns. The main challenge seems to be the lack of financial reporting standards for small and medium sized companies. This is usually quite challenging in mergers and acquisitions of foreign companies with Turkish medium sized companies. Most promising sectors for foreign investors are real estate, real estate related sectors and some services sectors such as private healthcare and education. Healthcare is a rising star industry as the purchasing power of the people increase they are eager to spend more on important health services at private institutions rather than inefficient public hospitals. Education is important and attractive due to the still increasing number of the young population. Real estate is continuing its boom and spreading to other cities than major cities and this is also helping the related sectors such as construction materials.*

The two largest foreign investments in Turkey in the first two months of 2008 were:

- Britain's BC Partners' acquisition in February of Koç Holding's 50.83 percent share in Migros, Turkey's biggest retailer, for \$1.645 billion.
- France financial giant AXA purchase of the Armed Forces Pension Fund's 50 percent stake in AXA Oyak Holding for \$525 million. The acquisition gives AXA complete control over insurance companies AXA Oyak Sigorta and AXA Oyak Hayat Sigorta, two of the biggest in their fields of general and life insurance.

## MERGERS AND ACQUISITIONS

In 2007, Turkey had 182 cases of mergers and acquisitions (M&A), totaling an estimated \$26.7 billion in investment, the U.S. consultancy company Ernest & Young said in a report published in January 2008.

It said that \$6.651 billion in M&A activity involved airport management, \$6.631 billion financial services, \$3.043 billion transportation and logistics, \$2.040 billion petrochemicals, \$1.472 billion media and entertainment, \$1.223 billion real estate development, \$765 million food and beverages companies, \$682 billion energy projects, \$650 million manufacturing, \$612 pharmaceuticals, \$422 million information and communications technology, \$352 million tourism, and \$1.215 billion other fields

Some 31 of the M&A transactions were in financial services, 20 were in energy, 16 were in food and beverages, 16 were in real estate development, 15 were in media and entertainment, 14 were in manufacturing, nine were in retailing, eight were in cement production, eight were in information and communications technology, seven were in health, seven were in transportation and logistics. Thirty-one transactions were in other fields.

In 2007, the report said \$16.9 billion of the M&A activity were carried out by foreign investors, while \$8.6 billion were handled by Turkish firms, compared to \$16.6 billion by foreigners and \$1.7 billion by domestic companies in 2007. Some 92 of the cases were carried out by foreign investors, while 90 were carried out by domestic companies.

## 4.2 TOURISM

Construction is continuing on hundreds of new luxury hotels and holiday villages along the Turquoise Coast, the highly indented southwest corner of Anatolia, which will cement Turkey's place in the big leagues of world tourism in the next five years.

In addition to the hotel and resort construction boom, drinking water and sewage systems are being overhauled, and new marinas and golf courses are being built to attract rich foreign tourists to coastal areas, characterized by miles of long, unpolluted beaches, ruins of magnificent cities of antiquity, and long warm summers and mild winters. New hotels are also springing up in Istanbul and other big cities to encourage convention and business tourism.

Turkey has been the world's third fastest growth travel destination, behind China and Russia, throughout the past two decades, according to the World Tourism Organization (WTO).

The number of tourists visiting Turkey swelled 15-fold in the past two decades, from 1,523,000 in 1979 to a record 23.3 million in 2007, according to the Turkish Statistics Institute. In 2006, the country had a 2.2 percent share in the global tourism market with 19.8 million foreign visitors, down from 2.7 percent and 18.9 million in 2005. The drop was a result of the Bird's Flu Scare and caricature scandal that inflamed anti-western sentiment in the Islamic states, the (WTO) reported. But in 2007, Turkey's market share was expected to return to the level of 2005, and perhaps even surpass it.

By 2013, Turkey aims to attract 38 million tourists annually and earn \$34.4 billion a year from tourism, according the State Planning Organization's Ninth Five Year Economic Development Plan.

Yet Turkey has barely even scratched the surface in terms of potential from its travel and leisure industry, the World Travel and Tourism Council says. As the nation is so vast and diverse it has the opportunity to develop alternatives including eco tourism, incentive and convention tourism, adventure travels, ski holidays and culture tours, and there is almost immeasurable potential for growth and profit in the travel and tourism industry in Turkey.

Turkey is also looking to expand upon its traditional summer tourism appeal with the development of new out-of-season incentives to visitors, including thermal and health tourism and archaeological tours. Turkey has one of the world's richest cultural heritages, and sites of historic interest are becoming of increasing value as tourist destinations in their own right. Opening up new tourism sites in the country's interior will have a significant effect on the economic development of these areas.

In 2006, Turkey ranked 11<sup>th</sup> in the world in the number of tourist arrivals and ninth in terms of tourism receipts with \$16.9 billion, the WTO reported.

### TOURIST ARRIVALS IN TURKEY (2003-2007)

Year	Tourists (million)	Revenues (billion dollars)
2003	14.0	13.2
2004	17.6	15.9
2005	21.1	18.2
2006	19.8	16.9
2007	23.3	18.5

### VISITORS TO TURKEY FROM TOP TEN COUNTRIES (2007)

Country	Number of Tourists
Germany	4.148.252
Russia	2.465.481
Britain	1.916.015
Bulgaria	1.239.666
Iran	1.058.270
Holland	1.053.669
France	768.168
USA	646.376
Georgia	630.923
Ukraine	593.302

Source: Culture and Tourism Ministry

The high value of the euro against the U.S. dollar, low-cost, all-inclusive travel packages, and direct charter flights from major European cities to the country's main resorts contributed to Turkey's success in tourism, particularly in attracting travelers from the European Union nations and the former Soviet Union.

In 2007, Germany led with the most visitors to Turkey with 4,148,252 tourists, followed by the Russia with 2,465,481. The U.S. ranked 8th with 646,376, the Tourism Ministry reported.

*"American tourists visiting Turkey are generally seasoned, upper middle class and middle-aged travelers. They have gotten Spain, France and England out of their systems. For a vast majority, it is their first trip to Turkey,"* said one travel agent.

Turkey's tourism earnings also grew from a modest \$280 million in 1979 to a record \$18.5 billion in 2007, according to the Ministry of Culture and Tourism.

To catch up with the tourism boom, the government began a crash hotel, motel, and holiday village building program that aims to increase hotel bed capacity to about 1.2 million, a whopping 113 percent increase from its 1998 capacity.

### INTERNATIONAL TOURISM RECEIPTS, 2005-2006

\$ billion

Rank	2005	2006	Change, %	
			2005	2006
United States	81.7	85.7	9.6	4.8
Spain	47.9	51.1	5.8	5.6
France	42.3	46.3	3.5	5.3
Italy	35.4	38.1	0.7	6.7
United Kingdom	30.7	33.5	8.7	7.8
China	29.3	33.9	13.8	15.7
Germany	29.2	32.8	5.6	11.3
Australia	15.0	17.8	9.6	12.4
Turkey	18.2	16.9	14.2	-7.2
Austria	15.5	16.7	0.9	3.1

Source: World Tourism Organisation

## HOTELS

At the end of 2006, Turkey had 3,344 hotels and holiday villages with a total bed capacity of 783,319, according to the Association of Turkish Travel Agencies. This is an enormous expansion since 1966, when the country had only 456 hotels with a bed capacity of just under 40,000. In 1979, the country had fewer than 90,000 beds - about the same as the Greek island of Rhodes.

The chairman of the Tourism Investors Foundation said that \$8 billion investments were expected by 2010 for hotels, marinas, golf courses and shopping centers only, excluding infrastructure work requirements. He noted that Istanbul, in particular, needed to increase its current 5-star bed capacity considerably.

The April 2006 report of GYODER (the Association of Real Estate Investment Companies) also stated that Istanbul needed an additional 91,325 beds by 2015. Assuming that this requirement is met through five and three to four star hotels, some 60 five-star and 276 three-star hotels are

needed just in Istanbul. Istanbul topped the list of hotel occupancy rate list in 2005, a study by Deloitte Moscow stated. In income per room, Istanbul ranked second after Moscow. Further, more new bed capacity is needed in Central Anatolia and Black Sea, while Antalya region desperately needs investments to lengthen the tourism season, such as golf, health, shopping and entertainment facilities. The government extends generous incentives for tourism investments, including allocation of land

## GOVERNMENT INCENTIVES AND INITIATIVES IN TOURISM

### Investment Incentives

Tax exemption on imported items.

VAT exemption on local machinery and equipment.

Tax duties and charges exemption on local purchases.

Land allocation on 49 year lease base (75 years in tourism cities)

Electricity and water consumption at the lowest available price (during investment and operation periods)

### Land Allocation

The Ministry of Tourism provides public land to investors under 49 year lease contracts on BOT basis for building accommodation facilities. Until now more than 100 thousand beds were built on public lands allocated to tourism investors, consisting 20% of the total bed capacity of Turkey. According to lease contracts, tourism establishments pay 0.5 -1 % of their annual revenues to the Ministry of Finance.

### Public-Private Sector Partnership Practices

There are several laws concerning PPP, and currently there are many facilities operational under BO, BOT, TOOR and similar models. Consequently, the private sector has gained considerable experience in infrastructure projects.

### Tourism Cities Project

Recently the government has started a plan for setting up new tourism cities consisting of accommodation establishments, marinas, shopping centers, golf courses, congress centers, etc. Since large capital (about 3-5 billion US\$ for each) is needed for building such tourism complexes (cities), land allocation will be made to consortia rather than individual firms and priority will be given to consortia with foreign partners. For tourism cities land will be allocated to investors for 75 years.

The project is to be promoted in Europe, USA and Gulf countries and call for proposals were announced in 2007.

### Development, Protection and Restoration of Historical Assets

The government allocated a budget to 150 restoration projects across Turkey in 2007, giving momentum to the reconstruction and preservation work of cultural heritage sites in 50 provinces. (The works anticipate the realization of 39 projects in 28 provinces including Konya, Kars, Tokat, Malatya, Adiyaman and Bursa)

### Thermal Tourism Cities Project

Started in 2006 with the aim of increasing tourism receipts and increasing diversity, this project selected the following as the priority regions: Southern Aegean (Izmir, Manisa, Aydin, Denizli), Phrygia (Afyonkarahisar, Kütahya, Usak, Eskişehir, Ankara), southern Marmara (Çanakkale, Balıkesir, Yalova) and central Anatolia (Yozgat, Kırşehir, Nevşehir, Aksaray, Niğde) are the priority regions.

An emerging trend in the past few years is the boutique hotels. Their number has reached 500, of which 150 being in Istanbul. The chairman of the Turkish Hotel Owners Association said that tourists coming for Istanbul and other historical places would increase to a great extent if their number increases.

Some 255 foreign hotel operators have direct investments in Turkey, including America's Hilton, the Ritz Carleton Hotels and Resorts and the Sheraton, and Canada's Four Seasons Hotels and Resorts, Germany's Kempinski and Iberotel and France's Novotel Hotels and Club Mediterranean

## MAJOR TOURISM PROJECTS

Development of marinas, protection of the environment, incentives for winter sports, mountaineering, adventure and religious tours and golf tourism are among the major projects of the Tourism Ministry. These projects aim to expand the tourism season in Turkey into a year-round affair and attract wealthy tourists to the country.

One big project is the **Çeşme Tourism City Project**, an ambitious tourism, real estate development and golf and yachting sports undertaking on 2,058 hectares of land along the Alaçatı Bay, near the town of Çeşme, on the Aegean coast. The land is located adjacent to one of the world's best windsurfing sites, and one of Turkey's biggest wind farms. The project will include hotels and holiday villages with a total 70,000 bed capacity, 14 golf courses, and several marinas. The Tourism Ministry is seeking foreign investors for the project.

Another big initiative is the Ağaoglu Group-Net Holding revenue-sharing joint venture, known as the **Bodrum-Milas Real Estate and Tourism Development Project (or the Halicarnassus Project)**. The undertaking is to be located on 2,625 acres of land near the small Aegean port community of Güllük, 200 km south of Izmir and only 12 km from Bodrum International Airport. The Halicarnassus Project will include a new resort town to service a population of 30,000 inhabitants year-round. It will have four five-star hotels, several apart hotels, 5,000 luxury villas, hundreds of time-share housing units, a Turkish bazaar, an 18-hole golf course and country club, an aquapark, an equestrian club and other sports and recreational facilities. Within the property is the necropolis of the ancient Carian town of Bargylia, which will be maintained as an archaeological site. Construction will cost at least \$500 million. The project will create a pleasant alternative to Bodrum, an overdeveloped resort town favored by low-budget Britons, only 22 km to the south, and attract wealthy foreign travelers to Turkey. Only the Costa Smeralde on the Italian Mediterranean island of Sardinia, the Alverde on the southern tip of Portugal, and El Conquistador Resort and Country Club in Las Croabas in Puerto Rico are of the same size and scope of the Halicarnassus Project, says Haluk Elver, a senior executive and urban planner with Net Holding who prepared the project. Net Holding acquired the property in 1989 and prepared a detailed project in the 1990s, but could not get sufficient financial backing to start construction. At one point, Hungarian-born billionaire financier George Soros and Mark Mobius' Templeton Emerging Markets Fund

were said to be interested in the Halicarnassus Project, but eventually bowed out due to the then severe fluctuations in Turkey's economy and the financial difficulties faced by Net Holding. Ağaoglu will carry out the construction and share the revenues from project with Net Holding.

## **YACHTING**

The ministry also wants to have 12 marinas constructed on the Mediterranean Coast with berths for 6,000 yachts. The new marinas would run from Antalya to the Syrian border and make Turkey the biggest yachting center in the Mediterranean. Major new marinas are also planned as part of the Haydarpaşa Project in Istanbul that will transform the city's main railway terminal into a tourism hub.

Many of the marinas would be constructed on a Build-Operate-Transfer, (BOT) or Build-Operate-Own (BOO) basis. Under these schemes, private contractors would line up financing for each project, construct the sites, own and operate them for a specified period of time, say 25 years. At a mutually agreed date, they would sell the marinas back to the state. Or they would own the marinas permanently.

The only hitch to the BOT or BOO systems is that the government does not provide any sovereign guarantees should the contractors run into financial difficulties and fail to meet debt payments to banks.

Turkey has several marinas that were built on a BOT basis and are privately operated, including the Kalamış Marina in Istanbul and the Marmaris Marina, in southwest Turkey, and the Turgut Reis Marina, near Bodrum, on the Aegean Coast. Turkey has 22 marinas. The country earns over \$1 billion a year from yachting.

In the mid 1990s, several marinas on the Aegean and Mediterranean coast were privatized.

Sailing along Turkey's southwest corner, known as the Blue Voyage, is extremely popular among American tourists who want to experience the Turkish coast, visit untouched beaches and bays, fringed by pine forests, swim and dive and go spear fishing among sunken ancient cities.

The government is also turning over state-owned marinas to the private sector.

The administration is also now beginning to encourage yachting along the rugged Black Sea Coast of Turkey by holding regattas from Istanbul to the Georgian border.

Officials predict there will be a boom in yacht tourism in the Black Sea region after many European waterways are connected to the Danube, Europe's second longest river.

The Danube, which has many tributaries and extends 1,800 km from its source, rises in the southern German Black Forest Mountains and flows in a southeasterly direction through Austria, Slovak Republic, Hungary, Serbia, Bulgaria and Romania before emptying into the Black Sea.

Newly built canals now actually link the North Sea and the English Channel to the Danube, allowing sailboats and yachts to go directly to the Black Sea from Northern Europe instead of circumventing the Atlantic and the Mediterranean.

Tourism officials say that other countries with shores on the Black Sea, including Bulgaria, Romania, Ukraine, Russia and Georgia stand to benefit from the coming yachting boom.

Officials said the Turkish government improved hundreds of fisherman jetties and ports on the Black Sea Coast and would allow foreign yachts to anchor in them.

The Turkish Black Sea coast is one of the country's least developed tourism regions, despite its miles of spectacular coastline and empty beaches, Alpine-like mountain ranges and historic churches and monasteries. It has very few hotels where tourists can stay.

## **GOLF INVESTMENTS**

Turkey currently has 10 operating golf courses, three in Istanbul and seven in Belek, near the Mediterranean resort city of Antalya. Five of the golf courses are linked up with resort hotels. The nation also has several driving ranges.

The country earned a mere \$20 million in 2005 from golf tourism, compared to \$6.5 billion earned by Spain, which attracted 2.8 million golf tourists. Even small Portugal has 72 golf courses.

But a massive building of golf resorts are planned in the Aegean and Mediterranean regions is expected to transform Turkey into a key golf destination. New golf links are also planned for Istanbul and Ankara.

Work on 12 other 18-hole golf courses is at various stages of planning and construction. By 2010, Turkey may well have three dozen operating golf courses, and several major international tournaments are likely to take place in the country.

Within the "100 golf courts in 4 years" project developed by the Turkish Golf Federation, an additional income of \$1 billion is expected to be generated, and some 100 golf courses are expected to be built in the mid-to-long term. Currently 12 golf courses (of which three are driving range) are operating and there are projects of setting up new golf courses in various regions. Many foreign real estate and insurance companies have been looking for places in the Mediterranean and Aegean regions suitable to combine golf facilities with the residential units on one site.

## **WINTER TOURISM**

Many officials and leading sports figures believe that the economic underdevelopment of snow-swept

Eastern Turkey can be overcome by developing winter sports facilities, and encouraging tourism, rather than building industrial factories. Describing snow as "white petroleum," they say that the harsh winter conditions and terrain in the area could be turned into an economic advantage.

Ski lifts, ski, snowboard and toboggan trails, and ice rinks should be built at each town and city located on the slopes of mountains in the region, they say. Local youth would also be trained in all winter sports categories, as they will eventually earn their livelihood from sports.

Altitudes in the rugged region, which accounts for 20 percent of Turkish territory and is three times the size of the Alps, reach an average 2,000 meters (6,600 feet). The Palandöken and Sarıkamış ski resorts in Eastern Turkey have already become magnets for tourists from Russia and other countries of the former Soviet Union.

Turkey's sparsely populated eastern provinces are among the most neglected in the country, where per capita income is one-fifth of Turkey's average. Highways and airports are also insufficiently developed.

Snow blankets the region for at least seven months of the year, isolating and paralyzing entire towns and villages in the mountainous areas throughout the winter.

But the planned holding of the 2011 University World Winter Games (Winter Universiade) in Erzurum, in eastern Turkey, when more than 3,000 athletes from around the globe will participate, is expected to spur growth in winter tourism in the country. New hotels and sports facilities have to be constructed in the city, including two Olympic ice rinks for figure and the other for speed skating. Five ski jump towers and a curling rink -- the first ever in Turkey -- will also be built. The nearby Palandöken Ski resort will be used for Alpine skiing and cross country and biathlon events.

Turkey already has 17 ski resorts, but only three where international skiing events can be held - Sarıkamış, in Kars province, and Palandöken, both in eastern Turkey, and Uludağ, in the western province of Bursa, 250 km (150 miles) southeast of Istanbul. Many of the resorts either lack lodgings or ski lifts.

Uludağ, due to its closeness to Istanbul, is the most developed of the country's ski resorts with 14 hotels and total bed capacity of 7,000. Construction work and planning of 11 new hotels in the resort is at various stages of development, and several new facilities have opened.

The Istanbul-based Üstündağ Group took over the unfinished Kartepe Resort, near the lake town of Sapanca, 150 km east of Istanbul, and developed it into a modern facility with a hotel with 250 rooms, 52 apartment flats, and a dozen ski runs. The resort opened in 2004. Other hotels are planned in Kartepe.

Extensive investments ski resorts have also been made in Kartalkaya, Bolu province, as well as at Mount Erciyes, in central Turkey near Kayseri, and at the Ilgaz Ski Resort, northwest of Ankara, and in a number of other sites across the country.

## HEALTH TOURISM

In the recent years, Russian, British, German and Dutch tourists have been flocking Turkey's spas and thermal baths for treatment of rheumatism and arthritis. The country is also becoming a popular destination for health care tourism.

Turkey has Europe's third biggest number of spas and thermal springs after Italy and Germany with a total 270 facilities, the weekly financial magazine Para reported. Some 385 hotels provide spa/wellness facilities.

In 2006, 300,000 foreign tourists spent holidays in the country's spas, making up 60 percent of the visitors to the country's thermal baths. Forty percent of the visitors to the Spas were Turks, 30 percent were Russians, 15 percent were British, 10 percent were German and five percent were Dutch. Tourism officials believe that the centers could attract as many as 1 million tourists a year.

The **Ministry of Health** plans to privatize Turkey's best known spa, the historic **Yalova Thermal Baths**, located in northwest Turkey. Under the plan, private companies would rent out, or restore, operate and transfer (ROT) the old baths back to the state. The baths have been a popular spa since Roman times. Kemal Atatürk (1881-1938), founder and first president of the Turkish Republic, built a summer home at the spa and had the leading landscape artist of the country build public parks there.

### THE THERMAL TOURISM CITIES PROJECT

A new initiative by the Turkish government could soon be bringing an estimated £8 billion-worth of potential revenue into the country. The TTCP, launched in January 2007 by the Ministry of Tourism, aims to establish the country as one of the world's leading thermal tourism destinations.

According to the Turkish Geothermal Association (TGA), Turkey has the world's seventh-largest (and Europe's largest) thermal resources with over 1,300 sites of thermal interest across the country. Despite this abundance of thermal riches, however, the Turkish thermal tourism market is near-virgin territory: only 10,000 foreign tourists visited Turkish thermal sites in 2005, compared with the nearly 12 million visitors who made the trip to the Japanese spa city of Beppu last year alone. The TGA estimates that the country's thermal resources could cater for over 30 million visitors annually.

*"The thermal waters of Turkey are better than those of Europe because of the flow and heat of the Turkish waters, as well as their various physical and chemical features,"* said TGA president Orhan Mertoglu. These areas will receive extra government funding both to develop thermal sites and to promote new and existing facilities at home and abroad.

Commercial interest in the thermal potential has already made itself known in the form of a £25.6-million investment by French and Turkish firms and governmental bodies into the city of Denizli, some 200 kilometres north of Dalaman. The Pamukkale Thermal Cure Centre, due to be completed in approximately seven years, will eventually be able to handle some 1,500 visitors per day.

## **TURKEY AS A GROWING HEALTH TOURISM TOURISM DESTINATION**

Going in hand with the thermal facilities is also the wider possibility of establishing retirement or residential health complexes which have proved profitable elsewhere in Europe. *"This could be the beginning of a very interesting and lucrative shift in an already dynamic market."* said regional property expert Pik Greune.

An important new development is towards receiving incoming patients from European and Middle Eastern countries for treatment in Turkey. The country has raised its profile as a destination for health tourism. The health and medical tourism has the potential of making important contributions to the economy. Some arrangements have been made for patient exchange on a private basis from various European countries including the Netherlands and UK.

The most promising areas include ophthalmic, cosmetic surgery and dentistry. For example, the new hospital of Dünya Eye Hospital, which was opened in June 2004 as the world's biggest eye hospital, attracts patients from more than 40 countries. Progress towards the EU accession will further help this potential to materialize.

Dr Hakan Yilmaztürk from Hayat Hospitals said on the issue: "Treatment expenditures are three-to-four fold in Europe compared with Turkey, while Turkey ranks in top positions regarding the level of health technology and skill. Equipped with millions of dollars worth of equipments, many hospitals have significant expectations regarding the tourist flow, in particular from Europe. This potential is a fact which is recognized at global platforms as well." Regretting about the losses Turkey has been incurring in this area, Gracy Kohen, GM of Richmond Wellness-Nua in Sapanca, commented: " Resources Turkey has for health tourism are far above the world standards and we will not be surprised when a mass of people flow into Turkey for health tourism very soon."

## **CULTURAL TOURISM**

Cultural tourism and faith tourism is increasingly gaining recognition as an area of strong tourism potential and, presents further scope for development. But this requires improving access and infrastructure and hence considerable future investments. Meanwhile, historical sites will now be opened to investors through a build-operate-transfer (BOT) model - bringing private capital into the preservation, renovation and marketing of these attractions.

Some 38 civilizations made Anatolia its home in the past. Turkey has an estimated 20,000 monuments and sites of archaeological significance, registered with the Ministry of Culture and Tourism.

Although Turkey is a country where more than 99 percent of the population is Muslim, it contains many holy sites of early Christianity and Judaism, making the country interesting for religious tours.

Since the global 2000th anniversary celebrations of the birth of Jesus, Turkish travel agencies have begun offering "tours of faith" to a combination of Jewish, Christian and Islamic shrines and sites in Turkey.

"The philosophy on which our tours of faith are based is to convey to the world that we are keeping the traditions of our ancestors alive who enabled all the communities to live together in tolerance," a senior tourism official said.

Christianity spread west from the Holy Lands in the Eastern Mediterranean through Anatolia, the Turkish mainland, to Europe. Christianity came to Anatolia seven centuries before the Islamic faith.

Many sites of Christian pilgrimage are located in Turkey, such as the last House of the Virgin Mary, near the ruins of Ephesus, a Roman city in western Turkey. The Seven Churches or early Christian communities, mentioned in the New Testament's "Book of Revelations," are located in Turkey: Laodicia (near Pamukkale), Sardis (east of Izmir), Philadelphia (Alaşehir -- not to be confused with the great American city), Thyatira (Akhisar), Ephesus, Smyrna (Izmir), and Pergamum (Bergama).

St. Paul the Apostle was born in Tarsus, along the Mediterranean coast and journeyed the length of the southern and western coast of Anatolia from Antioch-on-the Orient (Antakya) to Alexandria Troas (Odun Iskelesi) during the middle of the first century as part of his missionary travels to spread the Gospel.

Many of the first consuls of Christianity gathered in Turkey, including Iznik, the ancient Nicaea, where the first Ecumenical Council met in AD 325 to promulgate the Nicene Creed, one of the major statements of Christian belief.

Saint Nicholas, the bearer of gifts, was born in Myra (Demre), and a festival is held every year in the Turkish Mediterranean town in his honor every year.

The country also has many old Jewish sites, including the remains of the third century Synagogue at Sardis -- the world's largest known Jewish shrine, as well as the Ahrida Synagogue in Istanbul, which existed long before the Turkish conquest of the city and is still in operation.

## **4.3 CONSTRUCTION AND REAL ESTATE**

### **EXPANSION CONTINUES OVER GNP GROWTH**

Turkey's construction industry grew 11.5 percent in the first nine months of 2007, for the third consecutive year of rapid growth, spurred by a robust housing market and major government spending on infrastructure, ranging from urban transport and intercity motorways to hydroelectric dams and sewerage systems, the Turkish Statistical Institute reported. But the market was slowing down as a result of rising concerns that the housing finance crisis in the U.S. could lead to a recession in the global economy

Partly financed by the national government, local administrations and foreign financial institutions, public sector projects and the housing boom have helped revive the construction industry, severely hurt from the devastating earthquakes that battered Turkey in 1999 and the recession that jolted its economy in 2001.

The sector grew 21.5 percent in 2005 and 19.4 percent in 2006, after a flat average annual 2.4 percent growth from 1990 to 2004.

The construction industry had a market size of \$63.7 billion in 2006, including activities in both Turkey and abroad, and accounted for 5.3 percent of the Gross National Product (GNP) according to the Association of Building Materials' Manufacturers (IMSAD).

## TWO MAJOR ONGOING INFRASTRUCTURE PROJECTS

- **Marmaray Project:** Construction began in 2005 on the \$4.1 billion **Marmaray Project**, one of the world's most ambitious urban rail commuter projects. Described by the Ministry of Transportation and Telecommunications as the "project of the century," **Marmaray** aims to upgrade the commuter rail system of Istanbul. The 76.3-km long rail line will connect Halkali on the European side of the city to with suburban Gebze on the Asian side and vastly reduce travel time between the two and help relieve the city of its growing traffic congestion, officials at the **Ministry of Transport** said. The rail system will carry 75,000 passengers every hour, and link up with the municipal light-rapid rail system and metro. Some 63 km of the system will be above ground, while 13.6 km will be underground, including a 1.4 km immersed tunnel crossing under the Bosphorus. Thirty-seven existing stations will be upgraded while three new underground stations will be constructed. Construction work, scheduled for completion on April 27, 2009, is being carried out by a Japanese-Turkish consortium, led by **Taisei Corp.** of Japan. Other members include **Kumagai Gumi Co. of Japan**, **Gama Endustri Tesisleri İmalat ve Montaj A.S.** and **Nurol Construction and Trade** of Turkey. The **Japan Bank for International Cooperation (JBIC)** has provided a long-term low-cost \$950 million loan, while the **European Investment Bank** has provided a \$650 million soft loan. The State **Railroads, Ports and Airports Administration** is overseeing the project.

- **Ilisu Dam:** Work is continuing on the controversial Ilisu Dam, despite a massive Internet campaign by pro-Kurdish environmentalists against the project. Turkey on August 15, 2007, signed a \$1.277 billion credit package with a group of 14 western banks, government agencies and contractors and suppliers for construction of the dam. A consortium of banks and government export guarantee agencies under the leadership of Va Tech Finance, including Germany's **Deka Bank**, the **Austrian Bank** and **France's Societe Generale** provided the commercial \$752 million in commercial loans. **German Hermes**, **Austrian OEKB** and **Swiss SERV** provided export coverage worth \$525 million. Some \$25 million was provided for the restoration of artifacts of Hasankeyf, a 2,000-year old city that will be flooded when the dam begins to operate. Construction of the barrage began in fall 2006 after a five-year delay. **Sulzer Hydro** of Switzerland and **V.A. Technology** of Vienna will build the 1,200 MW dam. But Britain's **Balfour Beatty**, Sweden's **Skanska** and Italy's **Impreglio** withdrew from the project in November 2001 because of strong pressure from the protestors who argued that up to 78,000 persons would be left homeless and that 80 percent of Hasankeyf would be come under waters. Proponents of the dam say the benefits outweigh the sacrifices of displaced people and the environmental impacts downstream. Turkey is using only one-fourth of its hydroelectric resources and plans to build 450 dams in the next 25 to 50 years.

"The construction and the building materials industries combined are the sectors that contribute the most to Turkey's economic growth," Can Fuat Gürlesel, an economist and consultant to İMSAD, told a news conference in Istanbul in January 2008.

## HOUSING MARKET

Demand for public housing is continuing in Turkey's urban centers, particularly Istanbul, its largest city, because of an influx of rural migrants displaced from the countryside, rising income levels among metropolitan residents, and a booming young population.

The country's population is rising 1.4 percent a year, but in the cities of western and southern Turkey, the population is growing 4 percent annually because of the migration from the rural areas, according to State Statistics Institute (TURKSTAT).

The State Planning Organization (DPT) estimated that Turkey entered this decade with a deficit of 2.5 million houses. Ata Investment's October 2006 report foresees this deficit to rise to 5.0 million by 2010. This requires a total investment of around \$200 billion until the year 2010 (approximately \$40 billion every year).

The need for urban renewal is also feeding demand for new housing, contractors said.

"Some 50 percent of housing in Turkish cities needs to be renewed, including 50-year buildings, to meet new construction standards," added Teoman Metehan, chief executive officer of Teknik Yapi Yapilar Sanayi ve Ticaret A.S., a contractor and land developer, told FDI Magazine.

### STATE HOUSING ADMINISTRATION LEADS CONSTRUCTION DRIVE

The state Housing Development Administration (TOKI) is spearheading the drive for creation of social housing for middle and low income families in Turkey. In summer 2007, it began a massive campaign to build 275,000 social housing units at 745 sites in 81 provinces. Work is to be completed in 4.5 years. This is a major initiative in a country where 2 million to 2.5 million low-income people need immediate housing. The lands are owned by TOKI and its participations, Emlak Konut, Emlak GYO (Real Estate Investment Company) and Emlak Pazarlama, while the private companies build them on a revenue-sharing basis.

TOKI's subsidiary Emlak Konut has completed many residential and commercial construction projects in Turkey, including the 8,752 housing units in the Ataşehir project on Istanbul's Asian side, and the first two phases of the Mavişehir Project in Izmir with 5,321 housing units.

All of its projects are developed and constructed by private contractors on lands TOKI and Emlak Konut own on a unique revenue-sharing basis. Emlak Konut has tendered construction of 25,000 housing units to private companies on lands it owns in various cities and building has begun. It plans to tender out an additional 40,000 housing units. Emlak Konut's housing projects under construction are for mid and upper mid income families. Revenues generated from the sale of the housing developments are used to finance construction of TOKI's social housing.

More than 60 percent of the homes in the cities are slum dwellings, known as *gecekondu*, or night landings, ramshackle structures literally built overnight on private or state property. These sprawling, dilapidated habitat communities, which encircle urban areas like Ankara, Izmir and Istanbul, need to be reconstructed because they have been shoddily built and would likely be leveled in a powerful earthquake, experts said. Ninety-five percent of the country lies along the Anatolian fault, one of the world's most active earthquake belts. Powerful tremors killed 20,000 people in northwest Turkey in August and November 1999 and left 500,000 persons homeless.

Istanbul is getting the lion's share of real estate development with more than 100 large housing projects (anywhere from 60 housing units to 7,000 apartment flats) under construction. The bulk of these projects will be finished in the next two years.

Under Istanbul's master plan, the city alone has 50 urban renewal projects that aim to create a new urban center, new green areas, and social infrastructure. The projects also aim to promote the city as a cultural center and as a hub for high technology industries.

*"It is estimated that if the economic and spatial tendencies and policies do not change, the population of Istanbul will reach 23 million by the year 2023. However, according to the criteria related with environmental thresholds, infrastructure possibilities and quality of life, Istanbul can only bear 4 million more inhabitants. Therefore the population assumption of the plan is 16 million. This target can only be attained if the national and regional policies work in unison with the master plan of Istanbul,"* the Istanbul Metropolitan Municipality said in a report published about the city's master plan

One controversial urban renewal project in Istanbul involves the dilapidated, 1,000-year-old neighborhood Sulukule, inhabited by the city's fun and entertainment-loving and music-making gypsy community, whose members have raised objections. Sulkukule's gypsies assert they weren't consulted about the project and say they will be forced to live in a new isolated housing complex 30 miles outside the city and will lose their jobs in the city as musicians because they can't afford to buy cars to commute or homes in the city. Demolition of the old neighborhood, located along the Byzantine walls of the city, is expected in early 2008, and new buildings are slated to go up starting next year.

Foreign developers, such as Coldwell Banker of Parsippany, New Jersey, and Emaar of Dubai, have also entered the market. Coldwell Banker, the biggest U.S. real estate company, announced plans in February 2008 that it would invest \$5 billion in Turkish real estate, including construction of studio apartment flats in Istanbul's Beylikdüzü district. Emaar, which has developed the \$700 million "Toskana Valley" villas in Istanbul's Büyükçekmece district, said it was looking at investing in housing projects in other fast growing Turkish cities.

## **MORTGAGE LAW**

On February 22, 2007, Turkey's Grand National Assembly passed legislation establishing a legal mortgage system that will give middle and lower income families the opportunity to become home owners.

The law allows lenders to offer variable-rate mortgages that can then be turned into securities and be taken off bank's balance sheets.

Under the law, deposit banks, participation banks and leasing companies will be able to lease homes to customers. Lenders are allowed to borrow funds or create resources from institutions that operate on a wholesale basis, known as mortgage funding institutions.

The law also speeds up collection procedures in case the borrower goes bankrupt.

But with interest rates on housing loans hovering around 1.30 percent in February 2008, demand for mortgages is now limited to upper income families.

*"We were foreseeing that interest rates would fall under 1 percent in the second half of 2008. But under these conditions this won't be possible this year,"* Fuat Erbil, deputy general manager of Türkiye Garanti Bankası responsible for consumer banking, said.

Nevertheless, housing loans reached an estimated record \$30 billion in 2007, or 12.3 percent of all bank loans, nearly 3 times more than in 2006, the Banks Association of Turkey reported.

The Association of Real Estate development Companies (GYODER), which is expecting 6 million new homes to be built in Turkey by 2016, predicts that the Turkey's annual housing loan market could double to \$60 billion annually when the mortgage system is operating in full swing.

#### CONSTRUCTION PERMITS ISSUED FOR RESIDENTIAL BUILDINGS, 1995-06

	Dwelling units, 000	Area, Million m <sup>2</sup>
1995	508	65
1996	454	58
1997	464	61
1998	433	56
1999	339	46
2000	315	45
2001	280	40
2002	161	24
2003	202	30
2004	330	70
2005	511	99
2005 September	361	70
2006 September	416	85

Source: Turkstat, Turkish Union of Contractors

Long-term housing loans are new to the Turkish banking system, introduced for the first time in 2003, and coincide with falling inflation. Plagued by high inflation for three decades, Turkey couldn't previously handle long-term, low-interest consumer credits.

## SHOPPING CENTERS AND COMMERCIAL BUILDINGS

A surge is taking place in the building of new office offices and shopping centers in cities throughout Turkey, where new American-style suburbs are mushrooming.

Turkey had 179 modern shopping centers as of December 31, 2007, and 77 others were under construction, and another 90 were in planning stages, according to the Turkish Council of Shopping Centers, a trade group. Even once-sleepy eastern Anatolian cities, like Elazığ, Diyarbakır and Sivas now have thriving shopping malls.

### SHOPPING CENTERS IN TURKEY AS OF DECEMBER 31, 2007

	Istanbul	Anatolia	Total
Existing Centers	58	121	179
Under Construction	47	30	77
In Project Stage	37	53	90
<b>Total</b>	<b>142</b>	<b>204</b>	<b>346</b>

*Source: Turkish Council of Shopping Centers*

Some 3.5 million square meters of rentable space was available at the Turkish shopping centers as of the end of last year.

All this is strange in a country that introduced the concept of shopping centers to the world. The 15<sup>th</sup> century Covered Bazaar is still the world's biggest emporium with more than 4,000 shops on 58 streets in a labyrinthine structure of connecting markets in central Istanbul, selling mainly jewellery, furniture, garments, leatherwear, ceramics, carpets and other home textiles, and serving tourists and native customers who arrive on foot.

As a result of a building spree that began 22 years ago, Istanbul with its population of 12 million now has more modern shopping centers than most European cities -- 58 in all -- and 47 more are being built. New York City, a metropolis of far greater wealth, had only 57 shopping malls. Many of Istanbul's complexes are mixed use sites (a combination of shopping center, office buildings, residences and hotels.)

Foreign manufacturers are flocking to the shopping centers to open franchises. The newspaper Hurriyet in December reported that 40 percent of the stores in Turkey's shopping malls were either foreign-owned or were franchises of foreign companies.

Some of the well known international brands that are represented in the shopping centers with stores include Swatch, Samsung, DKNY, Quicksilver, Benetton, Stefanel, Karl Lagerfield, Vodafone, Pierre Cardin, Zara, Mango, Samsonite, Tommy Hilfiger, U.S. Polo, Divarese, Harvey Nichols, Versace, Starbuck's Café, and Gloria Jeans Café, Burger King, McDonald's, Kentucky Fried Chicken, and Pizza Hut.

Foreigners spent \$1.34 billion on property in Turkey in 2005 and \$ 2.9 billion in 2006. Both corporate and individual foreign investors are plunging into the housing market, developing large housing projects in Istanbul or buying summer homes on the Aegean and Mediterranean coasts, while many foreign companies are the big investors in the commercial market.

Shopping malls became centers of attraction for institutional investors and pension funds. CGI, the real estate investment fund of Commerzbank, invested \_80 million in a shopping mall project in Izmir. Major multinationals, such as Carrefour, IKEA, Bauhaus, Real and Metro Group, are constructing new shopping malls and hypermarkets, acquiring business offices and warehouses, and opening chain stores to sell their products in Turkey and neighboring countries.

Other foreign companies involved in shopping center investments include ECE Turkey (German) and MDC Turk Mall (Netherlands), General Growth of USA, Multi Turkmall and DIFA (Germany). Corio NV ((Netherlands), Merrill Lynch and Germany's MFI Management fuer Immobilien AG have recently announced that they plan to spend \$2.4 billion to build malls in Turkey. Additionally there are many on the way. Turk Mall has earmarked a \_1.3 billion project finance facility. European and Arab investors are developing skyscraper office blocks or acquiring properties to build large business centers and some of the world's leading hotel operators are building new hotels and holiday villages. Dubai Properties International, for example, plans to invest \$5bn in real estate in Turkey, including Europe's two highest office buildings in Istanbul, the spiral Dubai Towers, for \$500m in partnership with the Istanbul Municipality. Other developers from Gulf include Tamniyat Group, Eta Star of Dubai and Emaar Group.

There is a wide scope for the development of real estate market. *"The real estate market is still premature and the presence of financial institutions is still limited,"* says Hakan Kodal, chief executive officer of the Krea Group, a real estate development company.

Only German Aareal Bank and Eurohypo, specializing in real estate finance, have opened offices in Turkey and are providing long-term loans for the development of commercial properties. Senay Azak-Matt, general manager of Aareal Bank Turkey, says that any turbulence in Turkish real estate market won't affect business. *"We make certain that borrowers earn foreign currency to be able to repay their loans in hard cash. Thus our bank carries no foreign exchange risk."* she says. As of end-2006, the bank had a total portfolio volume of €650 million in Turkey.

## DEVELOPMENTS ON THE TURKISH COAST

Massive real estate development is taking place on the coastal regions of the Aegean and Mediterranean, attracting both corporate and individual foreign investors, particularly from the northern European countries.

Allison Thornton, who's in charge of Turkish sales at real estate agency Headlands International, based in Irthlingborough, central England, said: *"There's been a huge increase in interest over the past few months. You get an awful lot more value for money in Turkey than other Mediterranean countries. A detached villa with sea views around Bodrum, where the Aegean and Mediterranean seas meet, costs about \$129,000, similar to the cost of a small flat in coastal Spain,"* Thornton said.

As of January 13, 2008, some 70,336 foreign nationals, individually or in groups, had acquired 59,429 plots of land and homes in Turkey, equivalent to 37,125,330 square meters, the General Directorate of Title Deeds and Cadastral Affairs announced on its web site. Properties in the coastal provinces of Muğla, Antalya, Izmir, Aydın, as well as Istanbul, were preferred by foreign nationals, it said.

Some 15,911 Germans had bought property, followed by 13,402 Britons, 10,059 Greeks, 3,340 Irish, 3,205 Danish, and 3,089 Dutch and 2,096 Austrian citizens.

*"Spain and Portugal were the first choices for European homeowners, but these countries are now saturated. Its Turkey's turn to attract western homeowners,"* said Erdinç Varlıbaş, chief executive officer of Varyap Varlıbaşlar Yapı, a Turkish contractor developing housing projects in Istanbul and a hotel in Bodrum, said in an interview.

In a magazine interview, Ali Ağaoğlu, chairman of the Ağaoğlu Group of Companies, Turkey's leading real estate developer and hotel operator, had this to say: *"We can sell 1 million homes to foreign nationals. France and Spain can serve as models for us, because Spain sold 1.8 million homes and the French sold 500,000 homes to foreigners. Turkey's target for the sales of 1 million homes would be equivalent of drawing \$100 billion in foreign investment into the country. Our research shows that foreigners with homes in Turkey spend six months of the year here. In Spain these foreign homeowners spend €3,000 a month. In Turkey, this figure would be €2,000. Foreigners stay 10 to 15 days in the hotels we have built. But by owning homes, we can extend their stay to 180 days."*

In Didim, a resort town south of Izmir with 20,797 inhabitants, some 5,000 British citizens have bought homes, and the British population now outnumbers the town's Turkish inhabitants, a Didim municipal official told the real estate summit in Istanbul in May 2006. British citizens, he said, operate restaurants, have businesses, and produce an English language newspaper in Didim; the town's leading tax payer is a British woman realtor.

*"Even London cab drivers own homes along the Turkish Coast,"* said Haluk Kodal, chief executive officer of the Krea Group, a real estate development company affiliated with Merrill Lynch.

British and German citizens have also invaded the resort towns of Bodrum and Fethiye, Kaş and Kalkan, where they have acquired properties.

Some 10,000 Germans, Scandinavians and Dutch make the Mediterranean resort town of Alanya their year round home. Danish real estate investment company Keops operates a development and sales office in Alanya.

Britain's international property sales agent Parador Properties of Redhill, Surrey, in May 2006 opened a "real estate supermarket" in the up and coming coastal resort town of Güllük, south of Didim, to market freehold residential properties to purchasers in mainly in the United Kingdom, Germany and Ireland. .

France's La Foret Real Estate marketing network was also planning to open an office in Istanbul, the Turkish real estate trade magazines reported.

## **TURKISH CONTRACTORS ABROAD**

Since 1972, Turkish contractors companies have undertaken over 3,500 construction projects in 65 countries abroad, worth an ultimate \$84 billion, becoming the top third contender in overseas contracting, according to the Undersecretariat of Foreign Trade. These contractors aim to complete projects totaling \$100 billion by 2010.

Some 22 Turkish companies were ranked among the world's top 225 contractors in 2006 by the industry magazine Engineering News Record (ENR).

The Turkish construction sector has accumulated the technological capacity and know-how over the years to meet domestic demand. Starting in the 1980s, it has also built up a significant presence abroad.

### **OVERSEAS CONTRACTING**

Turkish firms are carrying out projects in dozens of countries in a wide geography extending from Ireland to Sakhalin Islands in the Pacific Ocean and from the African countries of Ghana, Mali, Sierra Leone and Cameroon to India. Turkish contractors currently concentrate the bulk of their worldwide presence in Russia, with contracts worth about \$2.7 billion. Iraq ranks second in this respect with \$1.5 billion. Turkey's EU membership is expected to create a significant market for the overseas contracting sector.

## **4.4 ENERGY**

Turkey's production of primary energy supplies increased 10.14 percent in 2006 from 2004 to 26.8 million tons, due to a crash program in production of hard and lignite coal, natural gas, crude oil, wind and geothermal electricity and solar energy.

But the country faces a rapid depletion of its oil and natural gas reserves, due to insufficient investments and repairs on existing power facilities and lack of new offshore oil fields. Additionally, low rainfall has resulted in a sharp drop in hydroelectricity output. These developments have forced the country to become more dependent on imported crude oil and natural gas for its energy requirements.

**PRIMARY ENERGY PRODUCTION OF TURKEY 1990-2004 (TABLE 1)  
BY SELECTED PRODUCTS (IN ORIGINAL UNITS)**

Years	Hard Coal (1000 Tons)	Lignite (1000 Tons)	Asphaltite (1000 Tons)	Natural Gas (In Million Cubic Meters)	Crude Oil (1000 Tons)
1990	2,745	44,407	276	212	3,717
1995	2,248	52,758	67	182	3,516
2000	2,392	60,854	22	639	2,749
2001	2,494	59,572	31	312	2,551
2002	2,319	51,660	5	378	2,420
2003	2,059	46,168	336	561	2,375
2004	1,946	43,709	722	708	2,276
2005	2,170	57,708	888	897	2,281
2006	2,319	61,484	452	907	2,284

Source: Ministry of Energy and Natural Resources, Turkish Petroleum Corporation, TURKSTAT

**TABLE 2**

Years	Hydro-Electric Power (GWh)	Geothermal Electricity (1,000 TOE*)	Wood (1000 Tons)	Biomass (1000 Tons)	Solar Energy (1000 TOE)	Total (Table 1+2)** (1000 TOE)
1990	23,146	364	17,870	8,030	28	25,478
1995	35,541	437	18,374	6,765	143	26,719
2000	30,879	648	13,938	5,981	262	26,047
2001	24,010	687	16,263	5,790	287	24,676
2002	33,684	730	15,614	5,609	318	24,259
2003	35,330	784	14,991	5,439	350	23,783
2004	46,084	811	14,393	5,278	375	24,332
2005	39,714	926	13,819	ua***	385	ua
2006	44,465	1,081	13,268	ua	403	26,800

\*Tons Oil Equivalent (TOE)

\*\*Includes GWH from Wind Energy and Geothermal Heating in TOE

Source: Ministry of Energy and Natural Resources

While its energy consumption rose 4 percent annually in the past decade, the percentage of the country's primary energy imports is expected increase to 75 percent by 2020, alarming economic planners, the country's traditional bureaucracy and nationalists in the government and the military.

Energy imports constitute one-fifth of the nation's import bill. In 2007, Turkey spent \$33.9 billion on the import of energy supplies, including fossil fuels, lubricants and related materials, according to the Turkish Statistics Institute.

Turkey is attempting to diversify its sources of primary energy and supplies and expanding oil and natural gas exploration and hydroelectric production and output in other renewable energy sources as well as intending to build new coal-fired power plants to achieve sustainable growth in energy. Privatization is viewed as the key for Turkey's future energy development.

The government is also encouraging private companies to build power plants (auto producers) to meet their own needs, and construct larger power plants sell electricity to other neighboring companies and to the state and to take over existing government-run facilities to help maintain growth in energy. Turkey was expected to hold tenders for the first three of 20 regional electricity distribution companies under its ambitious privatization program in early 2008.

In addition to its power distribution companies, the government is planning to sell 26 large hydroelectric dams and coal-fired power plants and 56 small river dams that have completed their economic life span. It is encouraging private companies to build and operate new hydroelectric dams and natural gas-fired power plants, operate state coal mines and geothermal facilities. It privatized natural gas distribution rights in more than 154 cities, and began to transfer the multi-billion dollar natural gas import contracts of the state petroleum pipeline corporation BOTAŞ to private operators. It would also like the private sector to build and operate the country's first three nuclear power plants. The Ministry of Energy and Natural Resources launched a tender for Turkey's first nuclear power plant on February 21, 2008.

Turkey also wants private companies to build new oil refineries, in addition to the existing private oil refineries concern, Tüpraş, which operates the country's four oil refineries.

Turkey needs to spend \$128 billion on energy investments by the end of 2020, including \$91.276 billion on new power generation facilities, to keep pace with its rapid-growth economy, but the government can only set aside \$500 million a year from its tight budgets, according to the Energy and Natural Resources Ministry. The total budget for the ministry in 2008 was a mere \$2.652 billion.

## INVESTMENT NEEDS OF THE TURKISH ENERGY SECTOR, 2005-20

Sector	Investment, \$ Mn
Coal exploration & extraction	5,109
Oil	16,000
Natural resources	2,700
Water (DSI)	6,093
Generation (EUAS)	458
New generation facilities	91,276
Transmission	938
Distribution	6,000
Total	128,574

Source: Ministry of Energy (MENR)

"The state does not have the funds to sustain such a massive energy investment program," Energy and Natural Resources Minister Hilmi Güler told a meeting of the Economic Journalists' Association in Istanbul in September 2006. "The investments will have to be carried out by the Turkish private sector and foreign investors."

The companies acquiring the 20 distribution companies, which have a total 29 million subscribers, will be required to carry out a total \$1.909 billion in investments in new lines and in upgrading of existing power facilities by 2010.

In 2006, Turkey met 33 percent of its general energy consumption from oil, 28 percent from coal, 29 percent from natural gas and 10 percent from hydroelectric power and other renewable energy resources.

Turkey's general energy demand is expected to increase to 154 million Tons Oil Equivalent (TOE) by 2010 and to 282 million TOE from 78 million TOE in 2001.

## OIL AND NATURAL GAS

Turkey, which isn't self-sufficient in oil, at the end of 2006 had only 41.5 million tons of recoverable oil reserves, an amount that could meet only 1.5 years the nation's demand for crude oil, forcing the state-owned Turkish Petroleum Corporation (TPAO) to carry out deep sea and tough mountainous terrain drilling, energy officials said.

It is believed that the Black Sea Coast of Turkey contains 10 billion barrels (1.370 billion tons) of oil reserves, and could meet 40 years of the country's requirement, TPAO officials said. But the

oil is believed trapped 3,000 meters under the ocean floor and that drilling would have to take place where the sea is 2,000 meters deep.

The Turkish Petroleum Corporation plans to spend \$750 million on five wells along the Black Sea Coast in 2009 and 2010. British Petroleum withdrew from a consortium with TPAO when oil drilling along the eastern Black Sea Coast off the town of Arhavi yielded no results.

In 2006, TPAO signed an agreement with Brazil's state Petroleo Brasileiro S.A. (Petrobras) to explore for oil in the Black Sea on a 50-50 basis.

TPAO in 2008 also began drilling for oil and natural gas in Saros Bay, in the Aegean, north of the Dardanelles.

Turkey was also drilling for oil in areas along its borders with Syria, Iraq, and Iran.

Crude oil production in Turkey in 2007 stood at an estimated 16.425 million barrels (2.25 million tons), almost entirely by TPAO and Shell's Perenco. TPAO also produced 20.075 million barrels (2.75 million tons) abroad, mainly in the Azeri Caspian, in 2007.

Turkey imported about 23.786 million tons of oil in 2006.

It paid a total \$9.374 billion for 19.718,825 million tons of imported crude oil in the first ten months of 2007, according to the Turkish Statistics Institute (TURKSTAT).

Local production meets less than 1/10th of Turkey's oil demand. The rest is imported.

Yet oil officials believe that Turkey, which lies between the Romanian and Iraqi oil fields, has rich, but unproven, oil reserves, particularly in the Kurdish southeast. But oil in the region, broken up by rugged terrain, high mountain ranges, and tectonic faults, would require drilling many wells as deep as 6,000 meters.

State-owned Turkish Petroleum Corp. (TPAO) is Turkey's biggest producer of oil, accounting for the bulk of the country's production, followed by Shell (Perenco) with 24 and Mobil - Dorchester produced about 4 percent. A host of smaller companies also produce oil.

Between 1935, when oil exploration and extraction began and 2004, Turkish and foreign companies have opened 1,766 wells, totaling 3.800 million meters of drilling.

In 2006, Turkey met 33 percent of its general energy consumption from oil, 28 percent from coal, 29 percent from natural gas and 10 percent from hydroelectric power and other renewable energy resources.

The Petroleum Law of 2007 is expected to increase exploration and production activities considerably. Turkey and the U.S. have common interests in creating an East-West Energy Corridor, and Baku-Tbilisi-Ceyhan Crude Oil Pipeline is being followed by other projects.

TPAO is also drilling for offshore natural gas with Dallas, Texas-based Toreador Resources and its subsidiary Madison along the western Black Sea of Turkey. TPAO believes it can produce 10 billion cubic meters of natural gas at this site each year. It currently produces 435,000 cubic meters

of natural gas a day (158 million cubic meters a year) at three sites on the western Black Sea Coast near Akçakoca, but plans to increase production to 2 million cubic meters a day (730 million cubic meters a year).

TPAO is also drilling for oil in Isparta, western Turkey, Mt. Cudi in Şırnak, Pervari Siirt, along the Syrian and Iraqi borders, at Tuz Gölü (Niğde) in central Turkey and Thrace.

Zorlu Enerji's Amity Oil Company announced discoveries of natural gas in several locations in Thrace in 2007. Although the strikes are economically viable, the reserves are of modest amounts.

Natural Gas has grown rapidly as a percentage of total primary energy supply in the past decade, now reaching 23%, which however is still lower than in EU and OECD countries. Turkey's total natural gas demand is estimated at 31.4 billion cubic meters as of 2007, and has grown very rapidly at about 10% per annum over the last few years. This growth is expected to sustain in the medium term primarily due to increasing urbanization, increased dependence on natural gas for heating and increased use of natural gas in electricity generation.

#### TURKEY'S NATURAL GAS DEMAND IN MILLION CUBIC METERS

YEAR	AMOUNT
2006	29,500
2007	31,400
2008	33,400
2010	42,100
2015	52,200
2020	61,000

Source: BOTAS Petroleum Pipeline Corp.

Consumption of natural gas grew at 14.8% per year in the last decade, reaching 31.4 billion cubic m) in 2007. The state Petroleum Pipeline Corp. (BOTAŞ) estimates that gas demand will be 42.1 billion cubic meters in 2010, 53 billion cubic meters in 2015 and 61 billion cubic in 2020. Turkey does not have sufficient natural gas reserves, and is supplied primarily from Russia through two pipelines, one through Bulgaria and one under the Black Sea. It also receives natural gas by pipeline from Azerbaijan's (Şahdeniz) fields and from Iran. Other major suppliers are Algeria and Nigeria (in the form of LNG).

In 2007, BOTAŞ imported 34 billion cubic meters of natural gas and liquefied natural gas from six countries.

Turkey uses natural gas for both power generation and as an environmentally friendly, alternative energy source for heating purposes in the cities, where air pollution has reached levels endangering public health. The country has been using mainly lignite, a low-calorific, high-sulfur content coal which is abundant supply locally, for heating purposes but this has been the chief cause of air pollution.

The Energy Market Regulatory Agency (EPDK) concluded contracts for natural gas distribution rights in 154 cities and towns with private Turkish companies. Contract negotiations are continuing for four other cities.

## **TURKEY AS AN ENERGY CONDUIT**

Due to its unique geographical location, Turkey is becoming a major natural gas and oil conduit from the Caspian into mainland Europe. Turkey is currently proceeding towards construction of large pipelines reaching into countries in continental Europe. In addition to its growing domestic demand for natural gas, the role of Turkey as a transit country is likely to drive the economics of the natural gas market in the medium term. Turkey currently has long-term contracts for supplies significantly larger than its current domestic demand, and it is unlikely that in the foreseeable future, the demand will cross available supply.

Addressing a meeting of the Turkish-US commission on economic cooperation in Istanbul in February 2007, Daniel Sullivan, Adviser to US Secretary of State on Economic and Energy Issues, said that Turkey can play the same role in the carrying out of regional projects, as it did during the construction of the Baku-Tbilisi-Ceyhan main export oil pipeline. *"Ankara will play an important role in the Azerbaijan gas transportation to Greece and Italy. The country will possess key strategic positions in the sphere of Caspian oil transportation to the world markets, as well as gas transportation to Europe..... Washington will continue supporting the implementation of energy projects in the region. Turkey and the United States hold similar positions on energy policy,"* he said.

## **PRIVATIZATION**

The liberalization of the sector has led to the privatization of distribution in scores of cities, while BOTAS, the state pipeline company, is set to be unbundled by 2009.

In 2007, BOTAŞ privatized 16 lots (4 billion cubic meters) of its natural gas import contracts of 64 lots (16 billion cubic meters) to five companies: **Avrasya**, **Shell Energy**, **Bosphorus Gas** (a joint venture between Turkish businessman Ali Sen and **Gazprom of Russia**), **Enerco** and the **Aksa Group**. The five companies signed contracts with **Gazprom** of Russia and BOTAŞ to takeover the import contracts from the Turkish state company through the Tursugaz Pipeline running from Russia to Turkey through Bulgaria.

## TURKEY AS AN EAST-WEST ENERGY CORRIDOR

With the completion of numerous oil and natural gas pipelines running through Turkish territory, five percent of the world's energy resources will transit Turkey by the end of 2012, energy experts say..

- Projects are at various stages of completion for the transit of foreign natural gas and oil across Turkey from suppliers in the Caspian, Central Asia, and the Middle East to customers in Southern and Central Europe:
  - **Baku-Tbilisi-Ceyhan (BTC) crude oil pipeline** (\$4 billion). Hailed as the "New Silk Road for Oil," the 1,180 mile pipeline began operating in May 2006. It will transport 365 million barrels of Azeri crude annually to the Turkish Mediterranean terminal in Ceyhan for transshipment to Europe by tanker once in full operational strength. Turks say the terminal port of Ceyhan will become the "Rotterdam of the Mediterranean."
  - **Iraq-Turkey Natural Gas Pipeline** - 10 bcm/year to Turkey. The twin pipelines have been operational since 1976. Feasibility studies are being carried out for a parallel natural gas pipeline.
  - **Turkey-Greece Natural Gas Pipeline**. Completed in August 2007, the \$300 million pipeline transports natural gas produced in Azerbaijan's Shah Deniz fields to western market. The 171-mile pipeline runs from Karacabey, in northwest Anatolia, to Komitini, in the Greek province of Western Thrace. Greece will acquire 3 billion cubic meters (bcm) of natural gas annually. Spurs from Greece will take the gas further west. Italy will acquire 8 bcm of natural gas each year from the pipeline.
  - Enlarging 745-mile **Blue Stream Natural Gas Pipeline** from 16 bcm to 32 bcm a year is being considered. The Blue Stream, which runs from Beregovaya in Russia to Samsun on the Turkish Black Sea Coast has been in operation since 2003; The Samsun-Ceyhan crude oil pipeline. Ground-breaking ceremonies were held in 2007. The pipeline is expected to pump Kazakh crude oil, shipped to Samsun, to the Ceyhan, and relieve pressure on the Turkish Straits
  - **Caspian -Turkey -Europe Shah Deniz** natural gas pipeline: 6.6 bcm/year to Turkey.
  - **Nabucco Natural Gas Pipeline** project from Turkey to Austria:\$5.8 billion project. Construction of the 2,200-mile pipeline is slated to begin in 2009 and is due for completion in 2012. The pipeline, named after a Verdi opera, will transport natural gas from the Middle East and Caspian region, including [Iran](#), [Azerbaijan](#) and [Turkmenistan](#), to Western Europe and to the countries long its path. The western end of the pipeline will be [Baumgarten an der March](#), a major natural gas hub in Austria. The shareholders of the project are: [OMV](#) (Austria) [MOL](#) (Hungary), [Transgaz](#) (Romania), [Bulgargaz](#) (Bulgaria), [BOTAŞ](#) (Turkey) and Germany's RWE.
  - **Turkey - Egypt Natural Gas Pipeline**: The pipeline will pump 2-4 bcm/year of gas from Egypt to Turkey and 2-6 bcm/year of gas from Turkey to Europe. A pipeline from Aleppo, Syria, to southern Turkey will deliver the Egyptian natural gas that is being pumped to Syria by sea from Egypt's El Arish township, in the Sinai Peninsula Turkey and Egypt also signed the agreement for the pipeline in 2007 and set up a joint venture to market Egyptian natural gas in Europe.

## OIL REFINING

Demand for petroleum products is rapidly rising in Turkey. The country's sole oil refineries' operator is Tüpraş. With four refineries, Tüpraş has a total annual refining capacity of 27.6 million tons. But demand for petroleum products rose to 29.5 million tons in 2006 and is expected to increase to 34.1 million tons in 2015 and 39.3 million tons by 2020, according to Tüpraş.

A former state company, Tüpraş processed 24.6 million tons of crude oil in 2006, and exported 810,000 tons of gasoline and 1.740 million tons of fuel oil. Petkim, the state petrochemical concern, also produces small amounts of liquefied petroleum gas (LPG), diesel oil and normal gasoline, as by-products of its chemicals output. Tüpraş produces a wide range of products, including fuel oil, diesel oil, jet fuel, gasoline, naphtha and asphalt.

Turkey is a net importer of refined oil products. In 2006, Turkey imported 7.6 million tons of finished products, including 6.166 tons of gas oil (diesel), while exporting 2.550 million tons, including 1.740 million tons of fuel oil and 810,000 tons of gasoline.

To meet the soaring domestic demand, it will be necessary to expand existing capacities and to construct new refineries.

Four groups have applied to the Energy Market Regulation Authority (EPDK) to build and operate oil refineries in Ceyhan, in Adana, on the Mediterranean Coast, near the terminal of the Baku-Tbilisi-Ceyhan Oil Pipeline and Iraq-Turkey Crude Oil Pipelines. Three have gotten their licenses:

- **The Azeri-Turkish Socar-Turcas Joint Venture** received a license to build and operate a \$4 million, oil refinery, with a 10 million-ton a year production capacity.
- Oil products distributor **Petrol Ofisi Akdeniz Rafineri A.S.** in June 2007 received permission to build a \$3 billion oil refinery year in Ceyhan.
- The EPDK in May 2007 approved **Çalık Enerji-Indian Oil Company's** plan to build an oil refinery and petrochemical complex for \$4.9 billion in Ceyhan.
- **The Cevahir Group**, which owns 50 percent of the Cevahir Shopping Mall and the Grand Cevahir Hotel in Istanbul. Its application is still under review.

**TOP 20 TURKISH ENERGY COMPANIES IN 2006  
IN TERMS OF NET SALES (IN MILLION U.S. DOLLARS)\***

Name of Company	Total Sales	Sector Involved
1 Tüpraş Türkiye Petrol Rafinerileri	14,258	Oil refining
2 Petrol Ofisi	9,716	Oil products retailing
3 BOTAŞ	3,972*	Oil and natural gas pipelines operations
4 Opet Petrolcülük	3,965	Oil products retailing
5 Enka İnşaat	3,927	Electricity production
6 BP Turkey	3,700	Oil products retailing
7 EÜAŞ Elektrik Üretim A.S.	2,955	Electricity production
8 Shell & Turcas Petrol	2,583	Oil products retailing
9 Aygaz A.S.	1,839	LPG filling, distribution
10 İGDAŞ	1,351	Natural Gas distribution
11 Türkiye Kömür İşletmeleri	980	Coal Mining
12 Milangaz LPG Dağıtım	864	LPG distribution
13 İpragaz	838	LPG distribution
14 Turkish Petroleum Corp (TPAO)	682	Oil exploration, extraction
15 Turcas Petrol	639	Energy investment co.
16 Turkuaz Petrol	501	Oil Products distribution
17 Çalık Enerji	384	Natural Gas/Electricity distribution.
18 Akenerji	308	Electricity production
19 Enerji Petrol Ürünleri Pazarlama	291	Oil products distribution
20 Shell Gaz Ticaret	287	LPG distribution

\*BOTAŞ' results are for 2005

Sources: Istanbul Chamber of Industry, Capital Magazine, and Ministry of Energy and Natural Resources

## **OIL PRODUCTS RETAILING**

At end of 2006, Turkey had 46 oil products retailers with around 14,000 service stations. The country had only 17 retailers in 2002 with 9,800 service stations.

Turkey witnessed a boom in the opening of retailers and service stations after the government lifted restrictions on building in 1989 to help meet a growing demand for gasoline, caused by rising automobile ownership.

In the past, a distance of five km (3 miles) had to separate each station, a measure that was lifted in 1989 as part of the liberalization of distribution and importation of petroleum products.

"Now we have service stations at every step," said an analyst of petroleum markets with TABGIS, an Istanbul-based association of domestic petroleum products' sellers.

The former state-owned Petrol Ofisi with its subsidiary Erk is Turkey's biggest operator of service stations and has a 30 percent share in the sale of gasoline and other products. Major multinationals in the sector include Shell, BP, Total, Elf and Lukoil. The top 11 service station operators controlled 76 percent of all the nation's service stations.

#### TURKEY'S LEADING SERVICE STATIONS' OPERATORS AS OF AND 2006

Company	Number of Service Stations
1. Petrol Ofisi + Erk	3,682
2. Opet + Sunpet	1,407
3. Shell + Turcas	1,185
4. Akpet	863
5. BP	748
6. Total	621
7. Enerji	564
8. Altınbaş	483
9. Can Aslan	399
10. Starpet Garzan	373
11. Termopet	351
35 Others	3,344
<b>Total</b>	<b>14,000</b>

Source: Energy Market Regulation Agency

The market size for gasoline and other oil products in 2007 was \$53 billion, according to PET-DER.

The boom has led to increased franchising of popular local and foreign brand name retailers.

But the opening of service stations, particularly in western Anatolia and Thrace, outpaced demand. Scores of service stations, providing only gasoline and diesel oil, are facing financial difficulties and are unable to pay their debts to large Turkish and foreign-owned retailers.

Major oil products retailers, represented by the Petroleum Industry Association (PET-DER), called for a consolidation in the business.

*"There is an inflation of two things in Turkey," said Melih Türker, president of PET-DER. "One is the number of service stations and the other is the number of pharmacies."*

This has led many service stations owners to provide additional services, such as opening grocery stores, coffee houses, fast food restaurants and shopping malls to attract customers, particularly buses carrying large numbers of passengers. These station owners are also providing a wide range of other petroleum products for sale and giving repair work and other services.

In addition to the service stations, about 44 companies with 4,000 outlets distribute liquefied petroleum gas (LPG) for cooking and water heating throughout Turkey.

Turkey's **Petroleum Markets Law** aims at liberalizing the petroleum market by rescinding the state monopoly in the sector and banning of low-quality contraband gasoline into Turkey from Iraq and other neighboring countries..

The law brings the sector under the control of the nine-member Energy Market Regulatory Authority (EPDK). All players, distributors, dealers and storage holders are required to receive licenses from the EPDK to operate. It requires all fuel (service) stations to be part of a distribution network, and not buy products from all sources.

A national marker, or chemical dye, was introduced on January 1, 2007, to gasoline and other products at refineries or at customs controls for registered products to prevent smuggled oil and gasoline from entering the country. EPDK inspectors carry out periodic checks of oil products at service stations throughout the country. Service stations selling contraband products are heavily fined and owners face up to five years imprisonment, and their operations could be permanently shut down.

## **ELECTRICITY**

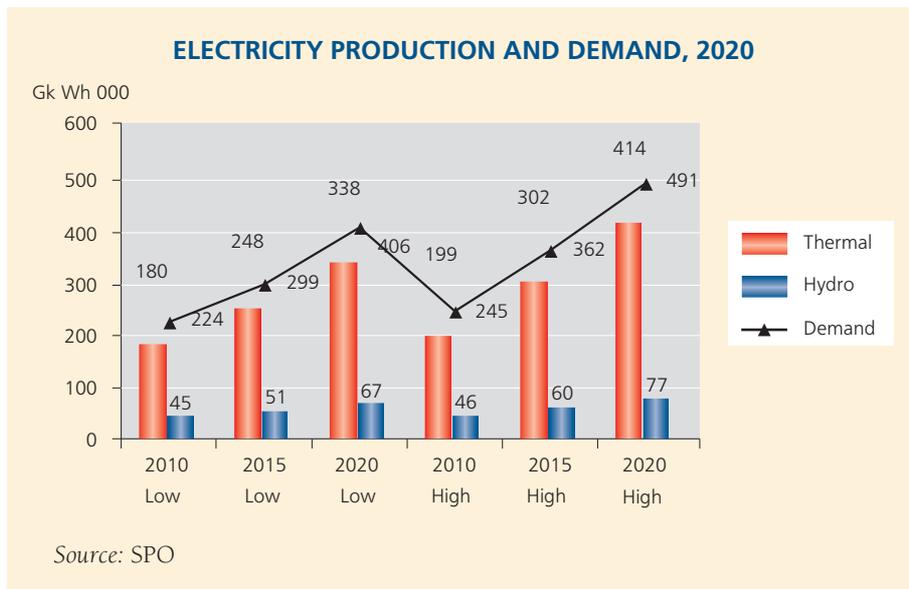
A crash program to develop power plants, with an increased role for private and foreign investors, is key to Turkey's continued economic growth, energy planners say.

Turkey will need a large infusion of foreign capital to increase its generating capacity 58 percent to 65,000 Megawatts (MW) by 2010 and raise 134 percent to 96,000 MW by the year 2020.

At the end 2007, Turkey's total installed power production capacity reached 40,777 MW, according to the Ministry of Energy and Natural Resources (MENR).

Turkey's electricity consumption was expected to rise 54.25 percent by 2010 to 290 billion Kilowatt hours (kWh), and 190 percent by 2020 to 546 billion kWh, according to state energy planners. Turkey produced around 188 billion kWh in 2007, up 6.64 percent from 2006.

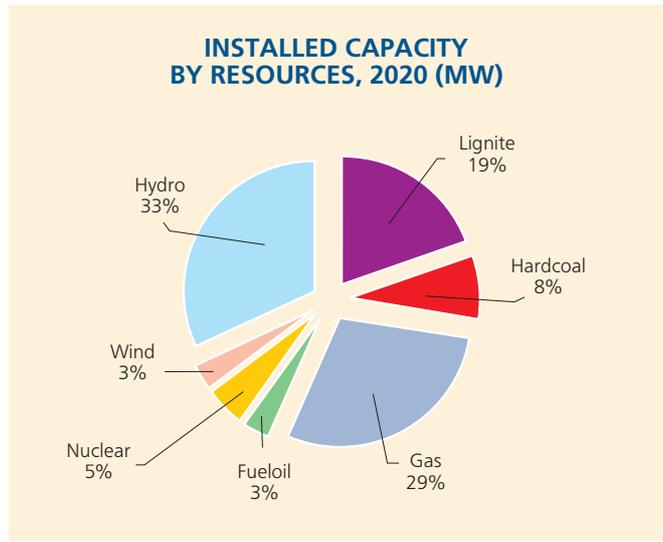
Additional generation capacity will be required beyond 2009-2010 under most demand and supply scenarios made by the Ministry of Energy. The Government is exploring alternatives for adding significant amounts of capacity in order to meet the probable shortage of supply in the medium term. Projections require installed capacity to increase about three fold - from about 38,820 MW in 2006 to 96,348 MW by 2020. Considering the projects under construction, this figure represents an additional capacity requirement of about 54,000 MW. SPO calculates that this will require a total investment amount of \$84 billion. Investment requirement would be \$13 billion during 2007-2010, \$20 billion during 2011-15 and \$51 billion during 2016-20. Deloitte breaks down the financing needed by 2015 for an additional capacity generation of 23,981 MW as \$31.9 billion.



Electricity demand in Turkey increased 8.4 percent in 2007, the world's second highest growth rate after China, confounding the nation's energy planners, who had projected lower rates, forcing them to make new long-term power consumption forecasts.

The government must spend about \$4.5 billion annually on new power projects and \$1 billion annually for power transmission to avoid an energy crisis. But it can only spare only \$500 million.

"This situation, together with expenses for transmission lines, results in an investment profile that can't be met by public resources," former Energy and Natural Resources Minister Cumhur Ersümer declared.



The government wants private and foreign investors to build the third and fourth thermal energy plants in Afşin Elbistan, in southern Turkey, with eight units of 300 MW and a total capacity of 2,400 MW

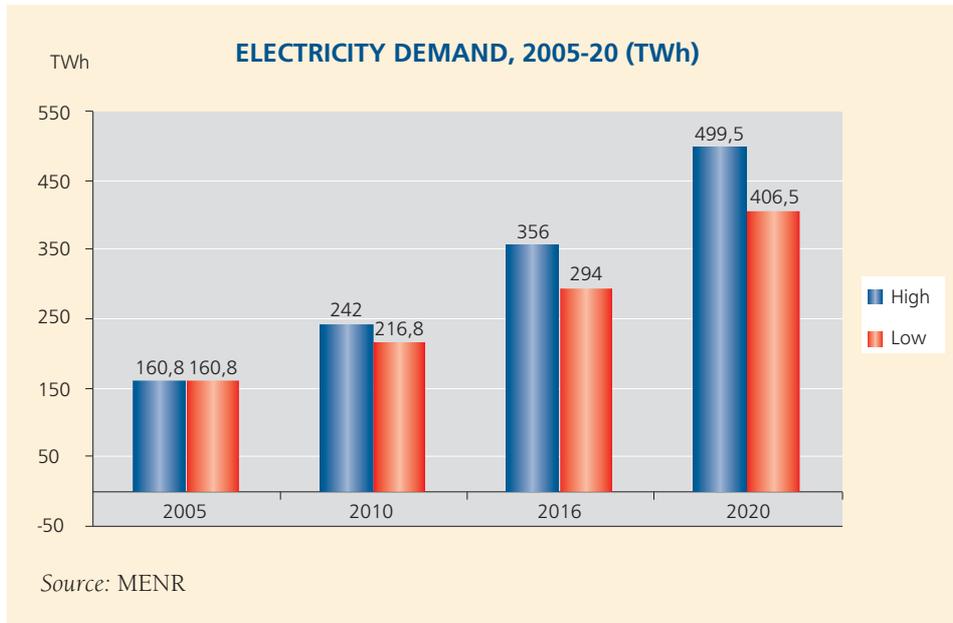
Blackouts are already becoming a way of life in Turkey's big cities, forcing industry and businesses to install expensive power generators.

Failure of Turkey to build enough power plants from 1990 to 2007 and insufficient rainfall to feed the major hydroelectric dam reservoirs are generally cited as the reason for the country's present energy bottleneck. Electricity output from hydroelectric dams plunged 20 percent in 2001 from 2000 to 24.8 billion kWh due to the lack of sufficient rainfall, according to the State Institute of Statistics (DIE).

To meet the shortfall, the government is seeking private investors to build and operate new hydroelectric dams, thermal energy power plants and rehabilitate existing ones.

The sale of 16,000 MW of state generating plants, including 12,200 MW thermal plants and 3,800 MW of hydroelectric dams are to be privatized (See list in privatization section page 60.)

The government also wants the the private sector to build 16 hydroelectric dams in mainly eastern Anatolia.



Additionally, 1,277 private sector hydroelectric dam projects that have received an endorsement from the **State Hydraulic Works Administration (DSI)** are awaiting licenses from the **Energy Market Regulation Agency (EPDK)** to begin construction work. Most of these are small to mid-sized river dams. So far only companies on 10 projects have to date received licenses and are at various stages of construction work.

Special emphasis has been placed on the quick construction of power plants using imported, low-cost natural gas or liquefied natural gas. Industrial companies are being encouraged to produce their own electricity and heating through the development of gas fired, co-generation power plants (autoproducers) that turn out both electricity and steam.

*"With Turkey facing an energy shortage, Turkey has opted for the quick-delivery natural gas power plants,"* stressed one executive with Entes Industrial Plants Construction and Erection Contracting Co., a Turkish contractor that built the Unimar power plant in Marmara Ereğlisi. "These are easier to build than costly, coal-fired power plants or hydroelectric dams."

The government is even giving the go-ahead to private companies to import natural gas for their own power plants, under the deregulation of the energy sector. Importation of natural gas has been a state monopoly for decades. The administration is also offering incentives, such as land grants and tax exemptions to companies investing in renewable energy sources, such as biomass, wind, solar and geothermal energy.

**HYDROELECTIC DAMS TO BE BUILT AND OPERATED  
BY PRIVATE TURKISH AND FOREIGN COMPANIES**

NAME OF HYDROELECTRIC DAM	CAPACITY IN MW	LOCATION
Bayram	81 MW	Şavşat, Artvin
Bağlık	67 MW	Artvin
Artvin	332 MW	Artvin
Gursogut	279 MW	Mihalçık, Eskisehir
Kargı	214 MW	Mihalçık, Eskisehir
Alpaslan 2	200 MW	Muş
Hakkari	208 MW	Hakkari
Konaktepe 1-2	138 MW	Tunceli
Beyhani	300 MW	Palu, Elazığ
Doganli	462 MW	Hakkari
Kalekoy	293 MW	Solhan, Bingöl
Çukurca	245 MW	Cukurca, Hakkari
Eric	170 MW	Kemah, Erzincan
Pervari	192 MW	Pervari, Siirt
Durak	120	Camlihemsin, Rize
Mut	91	Mut, Icel

*Source: Dünya Newspaper, State Hydraulics Works Administration (DSI)*

The government hopes to carry out many of the projects under Build-Operate-Transfer (BOT) or Build-Operate (BO) models, where contractors would line up financing for power plants, and build and operate them as a concession for certain period of time, such as 15 years, after which they would turn them over to the Turkish state. Some 22 BOT power projects with a total installed capacity of 2,288,000 MW are already in operation. Five BO projects have also begun to operate. The management of two existing state-owned power plants has been transferred to private companies.

#### INVESTMENT NEEDS OF THE POWER SECTOR, 2005-2015

Source	Capacity MW	Cost per unit \$ Mn/MW	Total cost \$ Bn
Hydro	6,811	1,500	10,217
Wind & other renewables	1,125	1,400	1,575
Nuclear	4,500	2,000	9,000
Lignite	4,520	1,300	5,876
Natural Gas	7,025	0,750	5,269
<b>Total</b>	<b>23,981</b>	<b>1,332</b>	<b>31,937</b>

Source: Türkiye Elektrik Enerjisi Piyasası 2007, Deloitte

Turkey does not provide sovereign guarantees under BOT projects, but offers to buy all the electricity produced. The late President Turgut Özal and his lieutenants first introduced the BOT concept in the early 1980s, but the country failed to liberalize its laws on concessions to allow foreign investment in energy projects. Many other developing countries in the Far East and Latin America adopted the Turkish model and attracted away large-scale foreign investment that could have come in Turkey's way.

**TURKEY'S TOP 20 ELECTRICITY PRODUCERS  
IN TERMS OF POWER GENERATION CAPACITY**

Ranking	Name of Company	Installed Capacity (in MW)
1	Elektrik Üretim A.Ş.*	23,355.9
2	Enka İnşaat	3,938.8
3	Sugözü	1,320.0
4	Baymina	798.0
5	Birecik	672.0
6	Ciner Holding	620.0
7	Çolakoğlu	571.8
8	Oymapınar	540
9	Unimar	504
10	Trakya Elektrik	498.7
11	Akenerji	443.7
12	Zorlu Enerji	410.5
13	Enerjisa	378.8
14	BİS Enerji	290.7
15	Habaş	255.5
16	Isdemir	220.4
17	Entek	197.6
18	Kartet	191.6
19	Cam İş	177.3
20	Petkim*	170
<b>Installed capacity of Top 20</b>		<b>35,599.7</b>
<b>Turkey total installed capacity</b>		<b>40,161.0</b>

\*EUAS and Petkim are state-owned

Source: Para Magazine

Seven major BO or BOT projects involving partial or full foreign ownership have been built and are running:

- A Turkish, Belgian, German, French and Austrian contractors' consortium is operating the 672 MW Birecik Hydroelectric Dam, one of the country's biggest foreign investment to date, on the Euphrates River. The dam is part of the giant Southeastern Anatolia Project (GAP), Turkey's most ambitious development undertaking. Construction of the \$1.4 billion Birecik was completed in 2001. A company formed by the contractors is operating the hydroelectric dam, and will eventually transfer it to the government after 15-year. The Turkish state-owned EÜAŞ has a 30 percent stake, Gama Endüstri A.Ş. of Turkey 19.4 percent and Germany's Philip Holzmann AG 16.4 percent, with smaller shares for other firms.
- Doğa Enerji A.Ş. operates a 180-MW natural gas power plant in Esenyurt, 30 km west of Istanbul, to provide electricity and hot water for new housing complexes under construction. Doğa Enerji, which built the plant, Turkish developers have a share in the joint venture company, 80 percent owned by Edison Mission Energy of Irvine, California. The power plant uses a combined cycle technology in a cogeneration mode. It cost \$45.6 million in equity contributions from shareholders and \$136.8 million in project financing and cover provided by the U.S. Overseas Private Investment Corp. (OPIC), a European government agency and bank loans.
- The consortium Enka and Intergen constructed a 700-MW natural gas-fired power plant at Adapazarı in northwestern Anatolia, a 700-MW natural gas power plant in Gebze, about 50 Km (30 miles) east of Istanbul, for \$2.2 billion, and a 700-MW gas-fired power plant in Izmir in November 2003. Enka now fully owns and operates the three power stations.
- An American-led consortium established a company that built and is now operating a \$600 million, 448-MW Liquefied Natural Gas combined cycle power plant at Marmara Ereğlisi, on the western shores of the Sea of Marmara, west of Istanbul. Trakya Elektrik, a joint venture involving Enron and Wing Corp., both of Houston, Texas; Midlands Generation of Britain; and Gama Endüstri of Turkey, operates the plant..
- A second 480 MW LNG power plant is also operating at Marmara Ereğlisi under a BOT contract. The company UNI-MAR, a joint venture between Belgium's Unit and Japan's Marubeni, developed the \$600 million project.
- Mimag-Tractabel built and is now operating the 770 MW natural gas power plant Baymina Power Plant in Ankara. Baymina is 95 percent held by Belgium's Tractabel and 5 percent by Turkish Mimag.
- German contractors Steag AG and Power AG constructed the \$1.5 billion Sugözü Thermal Energy Plant in Yumurtalık, near the Mediterranean port of İskenderun, under a Build-Operate (BO) contract. It is the largest German investment and one of the biggest foreign investments in Turkey to date. The company, Isken İskenderun Enerji Üretim A.Ş., which Steag has a 51 percent share and Armed Forces Pension Organization (Oyak) of Turkey with a 49 percent

share, own and operate the 1,200 MW plant, which produces 9 billion kWh of electricity every year - 5 percent of Turkey's national output. The plant uses high-calorific imported coal.

## **RENEWABLE ENERGY**

Turkey has been late in developing renewable energy projects.. It is one of the handful of countries that hasn't signed the Kyoto Protocol that will require signatories to reduce greenhouse gas emissions voluntarily. Other countries that have not signed the protocol include Iraq, Afghanistan and several poor African nations. The U.S. signed, but hasn't ratified the accord. Turkey does not appear ready to sacrifice its economic growth targets for environmental standards.

Nevertheless major steps are being taken in various renewable energy fields in Turkey, including wind, solar, geothermal, and nuclear and hydrogen energy for electricity and for space and water heating, as viable environmentally friendly alternatives to fossil fuels, that cause no pollution and produce no greenhouse gasses.

A major international hydrogen energy research center was established in Istanbul in 2004, under an agreement signed by the Energy and Natural Resources Minister Mehmet Hilmi Güler and the United Nations Industrial Development Organization (UNIDO) in Vienna, in November 2003.

The International Center for Hydrogen Energy Technologies (UNIDO-ICHET) is helping to convert the world to the hydrogen energy system by financing research projects and applications in Turkey and throughout the world.

All this gives opportunities for U.S. companies to cooperate and develop renewable energy technology with Turkey.

## **WIND ENERGY**

Turkey intends to increase its wind energy capacity seven fold to 1,048 MW by the first quarter of 2009, despite some concerns over the inconsistency of power generation intensity, Turkey's Wind Energy Association said.

As of December 22, 2007, Turkey had 10 operating wind farms with a total power generating capacity of 146.6 MW, and construction was continuing on six other wind farms for another 276 MW capacity. Eight other projects with a total capacity of 624.86 MW, including the 130 MW wind farm to be constructed by Zorlu Energy's Rotor A.Ş. in the southern province of Osmaniye, have received licenses to begin construction.

A half a dozen foreign companies are selling wind energy technology to Turkey, including General Electric, Venisys (Costa Rica), Furlander, Conergy, Nordex and Enercom of Germany and Vestas

of Denmark. Turkey's Demirer Group, which constructed the country's first two wind farms in Alaçatı, near the resort town of Çeşme in western Turkey, and in the Aegean island of Bozcaada, says it plans to invest in wind blades in Turkey, possibly with European partners.

The Ministry of Energy and Natural Resources in 2007 produced the country's first wind energy map, showing areas of Turkey that are suitable for wind energy development. The provinces of Balıkesir, Çanakkale, Izmir, and Manisa in northwest Turkey, and Hatay on the Mediterranean Coast have the strongest and most consistent winds needed for the development of wind farms.

In 2007, hundreds of private companies applied for licenses to build and operate wind farms with a total capacity of 78,000 MW, nearly double Turkey's present total power generating capacity. The government decided to hold tenders for projects in areas where there is more than one application.

The Izmir-based Aegean Technology Association said that Turkey could install 40,000 MW of renewable energy power generating capacity by 2023, including 30,000 MWs of wind farms. This would represent 40 percent of all generating capacity to be added to the Turkish power grid in the next 15 years, it said, urging the government to give greater backing for renewables than it presently does.

The Association on its web site said that 77,481 wind turbines could be installed in Turkey, bringing about a "theoretical capacity of 116,000 MW. This is equivalent to a capacity of over 60 nuclear plants of 1,000 MW each."

## **SOLAR ENERGY**

With an average 2,640 hours of sunny weather throughout the year, or 7.2 hours a day, "Turkey is luckier than many countries because of its location and its higher potential for solar energy," the state Electricity Affairs Research Administration (EİEA) reported.

Turkey has been increasing its solar energy output every year since 1998. In 2007, it produced 420 tons oil equivalent of solar energy, an increase of 12 percent from 2004 and 110 percent more than in 1998.

Solar energy panels (collectors) are widely used in the Aegean and Mediterranean regions of Turkey, which have the most sunshine in the country

### TURKISH SOLAR ENERGY OUTPUT IN TONS OIL EQUIVALENT (TOE)

Year	Amount
1998	200
1999	236
2000	262
2001	290
2004	375
2007	420

Source: EİEİ

## GEOTHERMAL ENERGY

Turkey has the richest geothermal resources in Europe and seventh biggest in the world, with the "theoretical potential" for 31,000 MW of electricity generation capacity a year, according to the state Mineral Technical Exploration Agency (MTA).

Turkey has 1,000 known geothermal wells and mineral springs. Of these 184 have temperatures of over 104 degrees Fahrenheit. Some 13 have temperatures averaging anywhere between 266 degrees Fahrenheit and 467.6 degrees Fahrenheit and are suitable for electricity production, the EİEİ reported.

Some 77.94 percent of the country's geothermal resources are located in the Aegean region, while 8.52 percent and 7.43 percent are situated in Central Anatolia and the Marmara regions of the country while 4.77 percent are in Eastern Anatolia. Other areas of the country have insignificant geothermal resources.

Central heating from geothermal energy currently heats some 103,000 homes and 215 SPAs in Turkey, the EİEİ said. It said 6 percent of the country's geothermal energy is used to produce electricity, 55 percent for heating homes and 39 percent for other usage, including heating of SPAs and electricity for industrial usage.

Currently, geothermal energy is harnessed in producing electricity in Kızildere, Denizli (20 MWe) and Salavathı, Aydın (7.9 MWe). The Energy Market regulatory Agency issued production licenses for another 5.5 MW geothermal plant in Kızildere and a 7.5 MW plant in Tuzla, Çanakkale. A 10 MW geothermal plant in a project phase in Simav, Afyon, in western Anatolia is also in the pipeline.

MTA wants to transfer the operating rights of 18 high temperature geothermal fields and three wells in ten provinces to the private sector.

## GEOHERMAL ELECTRICITY PRODUCTION PROJECTION

Name of Field	Temperature (0C)	2010 Estimated (MWe)	2013 Estimated (MWe)
Denizli-Kızıldere	200-242	75	80
Aydın-Germencik	200-232	100	130
Manisa-Alaşehir-Kavaklıdere	213	10	15
Manisa-Salihli-Göbekli	182	10	15
Çanakkale-Tuzla	174	75	80
Aydın-Salavatlı	171	60	65
Kütahya-Simav	162	30	35
İzmir-Seferihisar	153	30	35
Manisa-Salihli-Caferbey	150	10	20
Aydın-Sultanhisar	145	10	20
Aydın-Yılmazköy	142	10	20
İzmir-Balçova	136	5	5
İzmir-Dikili	130	30	30
<b>Total</b>		<b>455</b>	<b>550</b>

Source: EİEİ

## NUCLEAR ENERGY

Turkey in February 2008 was expected to launch tenders for the country's first nuclear power plant.

The government wants the private sector to construct and operate three nuclear power plants by 2020 with a total generating capacity of 5,000 MW, despite strong opposition from Greenpeace and Turkish environmental groups, who fear the sites would be endangered by earthquakes. The country is crisscrossed by tectonic faults, including the Anatolian fault, one of the most active in the world.

The three plants would be located in Sinop, on the Black Sea Coast, Taşucu, along the Mediterranean, and possibly in Konya province in south central Anatolia, the areas of the country least susceptible to land tremors.

The U.S., according to the Turkish Ministry of Energy and Natural Resources, wants to include Turkey in its Global Nuclear Energy Partnership program. Turkey could become a regional center for uranium enrichment and thorium development and a hub for the transfer of nuclear technology to the 20 members of the program

The only drawback in developing nuclear power plants in Turkey is how to handle wastes. The danger exists, energy experts said, that Turkey could become a disposal center for nuclear wastes, which would have to be stored in barrels deep inside caves of mountains. A spill could pollute underground aquifers and spring waters with nuclear wastes.

## MINING

The Turkish government is attempting to revive mining, long dominated by state-owned Eti Maden İşletmeleri Genel Müdürlüğü (Eti Maden), formerly known as Eti Holding, by encouraging private and foreign investment.

It has privatized or leased out most of the mines and mineral processing plants owned by Eti Maden, including chromate mines in Elazığ, in eastern Turkey, and Muğla, on the Aegean Coast and a modern ferrochromium complex in the Mediterranean resort city of Antalya. It also sold its interests in an aluminum complex in Seydişehir, central Turkey. Only the country's boron mines and processing plants and phosphate mines remain under Eti Maden. .

Established in 1935 as Etibank, a bank, to finance Turkey's mining industry and exploit Turkey's mineral resources, the sprawling conglomerate once carried out 60 percent of the country's mineral extraction and processing.

Although Turkey ranks 10<sup>th</sup> in the world in terms of mineral wealth, it stands in 28<sup>th</sup> place in the world mineral production. Turkey is richly endowed in mineral resources, but the importance of mining in the country's economic life has steadily declined since the 1940s, when it accounted for 40 percent of the Gross National Product (GNP). It now accounts for less than 1.5 percent of the GNP.

Turkey is the world's biggest producer of boron, borax and boric acid, and trona (natural soda), and second largest producer and processor of chromate and chromium. It is also a leading producer of sulfur and sulfuric acid and tincal concentrate, aluminum, phosphate, colemanite, lead and zinc and copper, which are used in various industries in Turkey and abroad.

Chromite and chromium are corrosion resistant metals used in the production of motor vehicles, aircraft and household appliances. Some 710 known chromate deposits exist in Turkey. Guleman-Elazığ is the major chromate mine of eastern Turkey. Main regions in western and southern Turkey for chromate mining are Fethiye-Köyceyiz, Denizli, Bursa, Eskişehir, Kayseri, Adana, Kopdağ and İskenderun.

Boron, a chemical element, is used in the metal industries. Boron compounds are also used in the manufacture of glass, detergents, ceramics, paper, plastics and leather.

Turkey is also one of the world's leading producers of marble, granite, travertine and other natural stones.

The country also has large reserves of iron ore, bauxite, meerschaum, wolfram, manganese, mercury, zinc, magnesite, perlite, cinnabar and emery.

Excluding oil and coal resources, the country had about 4,400 mineral deposits. Some 53 different kinds of minerals and rocks are commercially mined in Turkey.

The nation exports mainly boron minerals, natural stone (marble, travertine, granite), magnesite, chromium ores and concentrates, copper and concentrates, feldspar, zinc ores, pumice stone, kaolin, barite, and other clays and perlite.

In 2005, Turkey's total mineral and metal exports stood at \$2.715 billion, accounting for 2.6 percent of the nation's total foreign sales, according to the Turkish Exporters' Assembly (TIM.)

The biggest importers of Turkish mineral and metals are the United States, Italy, Japan, Austria, China, Germany, Belgium, England, Holland, Spain, Norway, France, Russia, South Korea and Ukraine.

As part of the privatization drive, the banking operations of Eti Maden (EtiBank) were split off into three separate banks during the early 1990s and completely privatized in 1997 and 1998.

Eti Maden also turned the various mining operations and mineral processing plants into separate corporations, and attempted to rehabilitate them. Many of these companies were either shut down or turned over to the Privatization Administration and sold off or leased.

In addition to Eti Maden, state-owned Türkiye Kömür İşletmeleri (Turkish Coal Enterprise- TKI) operates the country's big lignite and hard coal mines, increasing lignite coal production every year. The government turned over the Çöllolar lignite mine, the country's biggest lignite coal mine, to private Çiner Group in 2007.

Dedeman Holding is the largest private producer and exporter of chromate in Turkey. Other large private mining companies are the Turkish firms Birlik Madencilik and Bilfer Madencilik. Hundreds of small private companies are also involved in mining various metals and minerals including meerschaum, tungsten, manganese, iron ore, cinnabar, coal and emery.

Türk Maden Şirketi, a German-owned group, produces and exports chromium in western Turkey. Inmet of Canada owns the Çayeli Copper Mine in the northeastern Rize.

Koza Madencilik of Turkey operates a gold mine in Ovacik, near the ancient ruins of Pergamum in western Turkey, which it acquired from Australia's Normandy Group, and has begun producing gold, despite strong opposition from environmentalist groups because of its use of cyanide-leaching in the process.

Tüprag Metal of the Netherlands and Cominco Mining of Canada are other foreign minerals producers with direct investments in the nation. Some 23 foreign companies were involved in mining in Turkey in 2007.

## 4.5 HEALTHCARE

### HEALTH INDICATORS

Although per capita health care expenditure has increased 49% since 2002, health indicators show that there is much room for growth in Turkey. Public health expenditures, totaled \$18.8 billion in 2005, represent 5.2% of GDP, compared to 8-18% for the EU. The Economist Intelligence Unit estimates the healthcare spending to be \$27 billion in 2005, and foresees this to rise to about \$41 billion in 2010. About one third of SPO data and one quarter of EIU data relate to the drug expenditures.

Turkey's health indicators are not satisfactory considering its level of socioeconomic development. Though improving over the years, the health status of the population is poor, both in absolute terms as well as in comparison with other countries at the same income level. Life expectancy is nearly 10 years below the OECD average and infant and maternal mortality rates are very high. The country suffers inequality with regards to access to healthcare services. Health spending in Turkey lags far behind the EU average of 8-10% with 5.2% of GDP in 2005.

#### TURKEY'S HEALTH STATISTICS, 2005-2013

Indicators	2005	2006	2013
Population growth rate, per thousand	12.6	12.4	10.10
Crude birth rate	2.19	2.18	2.07
Infant mortality rate, per thousand	23.6	22.6	18.50
Life expectancy at birth, years	71.3	71.5	79.0
Expenditure of GDP, %	5.2	5.3	-

Source: State Planning Organization, Ministry of Health

Per capita health expenditure on purchasing power parity basis stands at \$452, while this is \$5,635 in the U.S., \$3,003 in Canada, \$2,258 in Italy and \$1,835 in Spain. The State Planning Organization foresees 3.8% annual growth in health spending until 2023 and the share of health expenditures in GDP is expected to gradually converge at the low end of the EU range, at 8%. Bed capacity is quite low compared to the OECD countries. The total number of beds is 197,170, one hospital bed for every 372 people compared with one bed for every 154 people in EU countries.

## PRIVATE HOSPITALS

The private sector, taking a 26% share in total health expenditure compared to an average of 38% in OECD countries, still has room for growth. A substantial portion of health care services is provided by the public sector. The Ministry of Health operates 769 of Turkey's 1,225 hospitals with 133,000 of 197,000 total beds.

### DEVELOPMENT OF HEALTH INDICATORS, 2005-13

	2005	2006	2013	EU
Number of beds	192,658	197,000	236,600	-
Population per bed	374	372	335	154
Bed utilization rate, %	64.5	-	-	77.5
No of physician	100,800	103,150	120,000	-
Population per physician	715	707	658	288

Source: State Planning Organisation

Turkey has a generous incentive system for health investments. Hospitals can import all required machinery and equipment listed on their incentive certificate free of customs duty and related charges, and can make deferred payments on value-added tax. The private sector began to take advantage of the incentive system in recent years. Supported by the increasing demand for private health care services, the number of private hospitals increased from 1993 onwards, rising from 141 in 1995 to 332 in 2006. The private sector operates 26.29 percent of Turkey's hospitals and accounts for 8.63 percent of beds.

The Ministry of Defense in 2006 ran 42 hospitals with 16,000 beds and municipalities had six hospitals with 1,389 beds.

### MEDICAL HOSPITALS AND BED CAPACITIES IN TURKEY IN 2006

Organization	Number of Hospitals	Number of Beds
Ministry of Health	769	133,000
Private*	332	17,000
Ministry of Defense	42	16,000
Municipalities	6	1,389
<b>Total</b>	<b>1,225</b>	<b>197,000</b>

\* Includes those run by associations, religious foundations and state enterprises

Source: Ministry of Health

In 2007, Abraaj Limited of the United Arab Emirates acquired a 21.66 percent stake in Acibadem Sağlık Hizmetleri, one of Turkey's leading private healthcare companies and hospital operators, for \$162.5 million; the Global Environment Fund of the U.S. purchased dental care company DentIstanbul for an undisclosed amount; and Julius Baer Holding of Switzerland purchased 60 percent of the private Şafak Hospitals for an undisclosed sum.

Other foreign involvements are Memorial Sloan-Kettering, Johns Hopkins and Harvard Medical International. IFC has recently provided long-term loans to the Acibadem Healthcare Group in Istanbul and Mesa Group in Ankara to finance their expansion and construction of three hospitals.

Recent developments in the healthcare policy will have further positive effects on the development of private healthcare services. As a result of successive health reforms partly supported by the World Bank, the health sector has been undergoing a significant restructuring, whereby a greater reliance is being put on private sector funding. The IMF-sought Social Security and General Health Insurance Law, which was adopted by Parliament, increased the retirement age, unified all social security beneficiaries under one umbrella and established a universal health insurance fund.

The new health policy expanded the base for private hospitals, allowing more people to benefit from private health services. Mehmet Ali Aydinlar, CEO of the Acibadem private hospital in Istanbul, which is associated with the Harvard Medical Foundation, said the new provision had already made a drastic impact on the private sector and private hospitals were under construction all over the country in anticipation of growing demand. Aydinlar said leading hospitals such as his are not developing fast enough to serve the number of patients who come to them for care.

## **PUBLIC-PRIVATE PARTNERSHIP**

In March 2006, the Ministry of Health unveiled a public-private partnership model hospital project. Accordingly, various medical centers will be built in three major cities and preliminary projects are being prepared for the construction of the health facilities in 13 separate regions throughout the country. The project allows private companies to build campuses on predetermined state lands and to rent them to the state. The campus will include a hotel, cafeteria, bank and shopping center. Companies from the UK, Spain, Germany, Dubai and US have presented their proposals to the Ministry for this \$4 billion project.

## PRIVATE INVESTMENTS IN HEALTH CARE

Private health care investments, which stood well below the level of public health care investments in 1980s, started to exceed the public figures after 1991, and even doubling it after 1998.

Benefiting from investment incentives, the share of private sector in total health investments increased from about 15% during the 1980s to 70% in 2003. This ratio is set to increase further due to the current health policies of the government.

Major opportunities for foreign companies include investments in health care facilities and software and application development services.

The Turkish private health sector has also developed the capacity to transfer knowhow for establishing hospitals in the countries in the region and is open to collaboration in this area.

*Source:* Meri Bahar, Acibadem Health Group, Marketing Director

## MEDICAL SUPPLIES

The medical equipment market has gained the status of an industry in the last two decades, in line with the increased investment in total health facilities, and the trend towards privatization. The market is estimated to grow 12-14% annually in recent years, and reaching around \$3 billion in 2005. The growth has been mainly fuelled by the increase in imports rather than production.

Ninety percent of all medical equipment is imported. Demand is especially strong in sophisticated laboratory and computerized equipment and items for nuclear medicine, cardiovascular surgery, X-ray, anesthesia and intensive care, including ultrasonic scanning apparatus, magnetic resonance imaging apparatus, patient monitoring systems, computed tomography apparatus and apparatus based on the use of alpha, beta, gamma radiation, according to the U.S. Department of Commerce.

Local production of medical equipment is now quite extensive. Thousands of products, ranging from the simplest of disposables to complicated medical equipment are now manufactured in Turkey. But local production is negligible in terms of high-technology products. Basic items such as utensils or syringes, which do not require high technology, are produced, both for domestic consumption and for export.

Major medical supplies and devices produced in Turkey and exported include:

- Medical textile products: nonwovens, impregnated, coated or uncoated, covered or laminated.
- Instruments and appliances used in medical, surgical, dental, or veterinary sciences, including scintigraphic apparatus, other electro-mechanical apparatus and sight-testing instruments.
- Wadding, gauze, bandages and similar articles impregnated or coated with pharmaceutical sciences.

- Orthopedic appliances, including crutches, surgical bells and trusses.
- Medical, surgical dental or veterinary furniture.
- Mechano therapy appliances, massage apparatus, artificial respiration or other therapeutic respiration units.
- Sterile surgical catgut, similar sterile suture materials and blood-grouping reagents.

The Turkish government is encouraging foreign companies to invest in this field. Germany's MAQUET, for instance, produces sophisticated surgical operating tables and cardiopulmonary equipment, including catheters, in the Antalya Free Zone, along the southwest Mediterranean coast of Turkey. However, local industry is beginning to move into production of electronic medical equipment, such as electroconvulsors, electrocardiograph (ECG) monitors.

The main suppliers of high-tech electro-diagnostic equipment are: GE Medical Systems, Picker International, DuPont, and Hewlett Packard of the U.S., Siemens of Germany, Philips of the Netherlands, Simatsu, Hitachi, Keymed Ltd. and Toshiba of Japan. South Korea, Taiwan and Hong Kong have been supplying a significant amount of equipment to Turkey, mainly for physical therapy. A French firm, Trophy, has a joint venture agreement to produce X-ray equipment in a plant in Bolu (western Anatolia - on the Ankara/Istanbul highway) with a capacity of 1500 units per year.

In the field of diagnostic imaging equipment, the United States is among the top four suppliers, with Germany, Japan, and the Netherlands. Germany has traditionally been Turkey's prime supplier, and is expected to continue to enjoy this position, because of the customs union with the European Union.

## **PROSPECTS**

- The demand for health care services and equipments is predicted to continue to expand in the next several years due to:
  - the high population growth rate,
  - an aging population,
  - increasing per capita income,
  - rapid urbanization,
  - the increasing potential in health tourism, and
  - improvements in the health insurance system.
- The trend toward privatization of health services coupled with increasing demand of private hospitals for advanced technology paves the way for modern and specialized health facilities

and a larger health care market. Private sector health care services are expanding, with its share in total fixed capital health investments on the rise - from 48% in 1993 to over 60% in recent years.

- As growth in the health care sector is expected to continue and restructuring of the health financing system is on the agenda, Turkey will remain an attractive market for exporters of equipment and supplies, as well as medical consulting services and knowledge transfer. Being an import-dependent sector, the emphasis put on privatization in the health sector will increasingly mean easier sales and higher technology products for foreign equipment suppliers. This growth would be driven by the recently introduced private insurance as well.
- In addition to its growing internal market, Turkey also offers opportunities for health care service and equipment providers as a stepping-stone to the markets in the Central Asia and North Africa.

### INCOMING FOREIGN PATIENTS

Turkish private hospitals enjoy costs 3-4 times lower compared to Europe and have been investing significant amounts in state of the art medical equipment in recent years. Hence, an important new trend is towards receiving incoming patients from European and Middle Eastern countries and some arrangements have been made for patient exchange on a private basis from various European countries including the Netherlands and UK

The most promising areas include ophthalmic, cosmetic surgery and dentistry. For example, the new hospital of Dünya Eye Hospital, which was opened in 2004 as the world's biggest eye hospital attracts patients from more than 40 countries. In 2005, almost 165,000 foreign tourists, out of total arrivals of over 20 million, entered the country to take advantage of Turkey's treatment centers. This represented a 23.7% increase on 2004.

\* There is a huge potential for growth in the private healthcare services:

\* Progress towards the EU accession will further help this potential to materialize.

With the coming into force of the much-sought Social Security and General Health Insurance Law as of 2007, private hospitals are under construction all over the country in anticipation of growing demand for medical care

## 4.6 CHEMICAL PRODUCTS

Turkey has a thriving chemical products industry (CPI), but is heavily dependent on imports of chemical raw materials, many basic chemicals and finished products. Chemical imports are the second biggest import item of the country after fossil fuels. Imports exceed exports by three times.

The foreign trade in chemical products has increased threefold in the past four years.

The country's CPI is roughly divided into manufacturers of petrochemicals and basic chemicals, synthetic fibers, plastic products, agricultural chemicals, industrial gases, abrasives, explosives, chemical fertilizers, textile chemicals, pharmaceuticals, paint, soda, rubber, adhesives, chromium chemicals, boron chemicals, sodium sulfate, personal care products, soap and detergent products, essential oils and cosmetics.

Turkey has at 4,286 companies manufacturing various chemicals, according to the Export Promotion Center of Turkey (IGEME). Some 95 of these firms are large-scale producers in terms of Turkey with annual sales of over \$15 million and more than 150 employees. The rest are small, and medium-scale, family-owned firms. (Medium scale: 51 to 150 employees. Small scale: 1 to 50 employees). Most of the firms are undercapitalized.

Foreign investment exists in 314 Turkish chemical companies, mainly pharmaceuticals and plastics.

In 2007, Japan's Kansai Paint Co. acquired a 51 percent stake in the Turkish pharmaceutical company Akzo Nobel for \$19 million; Eczacıbaşı Pharmaceuticals Manufacturing signed a share purchase agreement with Zentiva NV of the Czech Republic, transferring it a 75 percent stake in Eczacıbaşı Health Products and Eczacıbaşı Fine Chemical Products for \$601.8 million and establishing the generic products manufacturing company Eczacıbaşı-Zentiva; and Sealed Air Corp of the U.S. purchased a 50 percent stake in plastics packaging company.

Teknik Plastik Ambalaj for an undisclosed sum.

The industry has been neglected by the government in the past two decades, probably because it has been import-dependent and hasn't been able to generate much foreign exchange, compared to other industries and services, such as clothing, textiles, motor vehicles, processed food, iron and steel, cement and tourism.

The Turkish government earmarked the chemical industry for extensive incentives in the coming years to allow companies to make new investments and make the industry competitive. With Turkey now a candidate for full membership in European Union, small and medium-size Turkish chemical companies stand to benefit from EU funds to develop research and development programs, officials say.

In 2007, Turkey's chemical products (CP) imports, excluding fossil fuels and petroleum products, stood at an estimated \$28.554 billion while exports were \$8.333 billion, according to the Turkish Statistics Institute.

Turkey imports chemicals mainly from Italy, France, Germany, Russia and the U.S. Turkey exports to 180 nations with the European Union as the main market, followed by the former Soviet Union, Eastern Europe and the Middle East.

Plastics and plastic products combined was the biggest export item with a 33 percent share. Flexible intermediate bulk containers, sacks and bags made polyethylene or polypropylene traps and bags made of ethylene polymers, plates, sheets, film foil and plastic packaging materials lead these. Rubber products, including tires and tire tubes, are Turkey's second largest chemical products exports, accounting for about 19 percent of CP exports.

**CHEMICAL PRODUCTS IMPORTS OF TURKEY 2001-2003**  
(IN MILLION U.S. DOLLARS)

<b>Chemical Groups</b>	<b>2001</b>	<b>2002</b>	<b>2007</b>
Plastics and plastic products	1,733	2,382	8,684
Organic chemicals	1,625	2,227	3,993
Pharmaceuticals	1,087	1,439	3,522
Other chemicals	484	579	1,536
Paint material	491	680	1,528
Inorganic chemicals	356	434	1,103
Fertilizers	266	266	996
Essential oils and cosmetics	237	290	754
Cleaning materials	150	184	511
Products related to photography	120	133	243
Albuminoid materials, glue etc	90	119	326
Explosives	6	7	28
<b>Total</b>	<b>6,635</b>	<b>8,398</b>	<b>25,100</b>

Source: State Institute of Statistics (DIE)

Other major CP exports include soap, detergent, organic and inorganic chemicals, pharmaceuticals, dyes, pigments, synthetic fibers, essential oils and cosmetics.

Raw materials and semi-finished products accounted for almost 90 percent of Turkey's chemical imports.

**CHEMICAL EXPORTS OF TURKEY 2001- 2003**  
(IN MILLION U.S. DOLLARS)

<b>Chemical Groups</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Plastics and plastic products	610	679	2,820
Synthetic fibers (continuous)	108	118	1,260
Synthetic fibers (non-continuous)	56	67	1,044
Cleaning materials	233	261	516
Inorganic chemicals	211	219	516
Organic chemicals	155	164	374
Essential oil and cosmetics	83	98	360
Pharmaceuticals	127	144	357
Paint material	92	113	356
Other chemicals	64	76	280
Fertilizers	18	36	84
Albuminoid materials, glue etc	10	13	55
Explosives	8	9	11
Products related to photography	6	7.8	11
<b>Total</b>	<b>1,617</b>	<b>1,820</b>	<b>8,333</b>

*\*Figures for 2003 are estimates*

*Source: State Institute of Statistics*

## **PETROCHEMICALS**

Demand for petrochemicals is steadily rising in Turkey, increasing an average 11 percent a year. Total local demand for petrochemicals, which was 2 million tons in 1991, doubled to an 4.100 million tons in the year 2003 and quadrupled an estimated 8.100 million tons in 2006, industry officials said.

In 2006, Turkey produced 873,392 tons of thermoplastics -- low and high density polyethylene, linear low density polyethylene, polyvinyl chloride, polypropylene, polystyrene, acrylonitrile butadiene styrene -- but imported and estimated 5 million tons, according to industry experts.

Demand for thermoplastics is expected to exceed Turkey's production capacity seven-fold by 2015, leading to a boom in imports, the Istanbul Chamber of Industry (ISO) said in a report on the chemical industry. A supply shortage of tire raw materials will be around 272,000 tons a year by 2010, the report said.

Since the economic life span of existing facilities will come to an end in 2015, thermoplastic production will cease to exist in Turkey, and major new investments will be needed, the ISO report said.

"The thermoplastics demand of Turkey in 2010 will require building of a new ethylene plant with a capacity of 1 to 1.5 million tons a year, and its downstream units. If petrochemical production remains at the current level, the petrochemicals imports (of Turkey) will amount to about \$11-12 billion in 2015," a top executive with Petkim, the state petrochemical concern, declared.

As the extensions on the state petrochemical concern Petkim's capacities have fallen far behind demand, Petkim's market shares in petrochemicals, thermoplastics and basic chemicals have plunged.

Petkim has wanted to build a third petrochemical complex on the Mediterranean Coast since the late 1970. But plans to privatize Petkim and lack of financing have kept the \$2.5 billion project on paper only. The ISO urged the government to sell the state petrochemical concern to encourage private investment in the petrochemical industry.

Tüpraş, the state oil refineries concern, operates Turkey's second biggest petrochemical products refinery in Yarımcı, along the Sea of Marmara, having acquired it from Petkim in 2002.

Turkey has become a big importer of petrochemicals since its entry into a customs union with the European Union in 1996. Producers in the EU meet shortages in ethylene, caprolactum, and polyvinyl chloride, polypropylene, low-density polyethylene and other products, for which demand is rapidly rising in Turkey.

The only major producer is Başer Kimya which produces polystyrene. SASA and Korteks are major producers of synthetic fibers for the textile industry.

## **PHARMACEUTICALS**

Turkey's foreign-dominated pharmaceuticals industry accounts for about 10 percent of the chemical industry's production. The country has 85 manufacturers of pharmaceuticals and 11 producers of raw materials and 38 importers. Sixty-seven multinationals have investments in the Turkish pharmaceuticals industry, with 14 having their own production facilities.

Major multinational pharmaceutical companies with investments in Turkey include Roche, GlaxoSmithKline, Novartis, Bayer, Hoechst Marion Roussel, Sanofi Synthelabo, Aventis, Boehringer Ingelheim, Johnson and Johnson, Baxter and Pfizer.

National expenditure on pharmaceuticals in 2006 stood at \$5.240 billion, an increase of 2 percent from 2005, according to the Pharmaceutical Manufacturers' Association (IEIS)

Turkey turned out 5,000 pharmaceutical products in 2006, the IEIS reported. The association promotes use of generic medicines and represents 37 of the country's biggest drug companies. Twenty companies account for 74.3 percent of sales in pharmaceuticals. The industry employs 23,000 persons.

In 2007, Turkish pharmaceutical imports totaled \$3.622 billion. About 50 percent of the imports were for raw materials and 50 percent for finished products, the Turkish Statistics Institute reported. Exports in 2007 reached a record \$357 million, with about half in raw materials and half in finished products.

Major suppliers of pharmaceuticals include England, Germany, France, Switzerland, the U.S., and Italy. Germany is the main recipient of Turkish pharmaceutical exports, followed by Spain, Switzerland, the U.S., Poland and England.

The country had Turkey had 22,700 pharmacies in 2006. The country had 434 registered wholesalers, although fewer than 100 are currently operational.

In contrast to the European and North American markets, where cardiovascular drugs lead consumption, antibiotics, antirheumatic drugs and muscle relaxants, analgesics and antimigraine preparations and cough and cold preparations are the most widely consumed drugs in Turkey, accounting for about 46.8 percent of the total market in 2006, the IEIS reported. Cardiovascular drugs totaled only 7.4 percent of total consumption in the Turkish market.

In 2006, per capita consumption of medicines in Turkey stood at only €81.4, one of the lowest figures among European countries, the European Federation of Pharmaceutical Industries' Associations reported.

**PER CAPITA PHARMACEUTICALS CONSUMPTION  
IN TURKEY BY YEARS IN U.S. DOLLARS**

YEAR	PER CAPITA CONSUMPTION
1990	17
1995	25
1996	26
1997	32
1998	35
1999	38
2000	42
2001	38
2002	68.6
2003	85
2006	81.4*
*in euros.	

Source: Pharmaceutical Industry Employers' Association, Istanbul Chamber of Industry

The market though was expected to rapidly grow, driven by rising income levels and population growth and greater importance given to health care.

The pharmaceutical industry is one of the few sectors in Turkey where the government has significant control over prices. All drugs have to be registered with the Ministry of Health. The Ministry of Health determines the rates by which pharmaceutical companies can increase their prices - often lower than increases in the wholesale and consumer price indexes.

The Ministry of Health's policy is of purchasing the cheapest alternative among pharmaceuticals comprising of the same molecular structure.

## **PATENTS AND INTELLECTUAL PROPERTY RIGHTS**

Despite aspiring for membership in the European Union, Turkish compliance with patent protection and intellectual property rights, particularly in pharmaceuticals, remains an issue of contention. Major foreign drug manufacturers producing patented medicines say the Turkish government has turned a blind eye to many domestic manufacturers turning out illegal, cheap, generic pharmaceuticals, similar to patented drugs, to cut down costs of government agencies for drug purchases. Such a move they say comes at the expense of major manufacturers that have spent fortunes to develop drugs.

*"Laboratory and clinical tests to develop an original molecule drug cost \$700 million to \$800 million,"* Bülent Eczacıbaşı, president of the Pharmaceutical Industry Employers' Association (IEIS), told a seminar on Turkish-EU relations. *"Rising costs for drugs caused by high costs for research are putting serious pressure on health spending."* He predicted that there would be a big increase in the manufacture of generic products in the coming years in Turkey, as in other European countries combating high health costs.

A recent government decree allows for data protection and data exclusivity. Under this decree, set up in compliance with the World Trade Organization's TRIPS agreement, generic drugs similar to patented medicines can only be produced six to 10 years after the original product has been introduced on the market. Patents are protected for 20 years.

*"Data exclusivity brings market exclusivity,"* Eczacıbaşı warned.

## **PLASTICS**

Domestic production of basic plastic raw materials has resulted in a strong plastic processing industry. Some 6,000 companies, including 113 foreign firms, are involved in processing of plastics, of which most are small and medium size operations.

One-third of the demand for thermoplastics, the raw material of the industry, is met by the state-owned petrochemical company, Petkim.

Plastics processing, along with rubber processing, account for a total 6 percent of the manufacturing industry, according to the Export Promotion Board (İGEME). Turkey manufactures all kinds of plastic products, ranging from plastic building materials (Polyvinyl Chloride -- PVC -- window panes, pipes, doors, rain water downspouts), irrigation products (hoes), auto parts, tables, chairs and kitchenware, plastic parts of electronic, electrical household items and plastic packaging products.

Turkey's exports of plastics in 2007 stood at \$2.820 billion. Finished products, accounted for 75 percent of plastic exports. Italy, Germany, Russia, England, France, the U.S, Holland. Ukraine, Iran, Israel and Italy are the main importers.

In 2007, the nation imported \$8.684 billion in semi-finished and finished products. Most of the imports come from the European Union.

## 4.7 INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT)

### MARKET SIZE DOUBLES IN FOUR YEARS

Turkey's information and communication technologies (ICT) market reached a size of \$23.5 billion in 2007, an increase of 12.4 percent from 2006, according to the Turkish Informatics Industry Association (TÜBİSAD). The market, which more than doubled from 2003, has had double-digit growth over the past five years in contrast to the single digit expansion in the U.S. and the European Union. Telecommunications accounted for \$18 billion of the market, while information technologies corresponded for \$5.5 billion.

Over the past decade, Turkey's telecommunication industry has been booming, driven by the market liberalization designed to enhance competition. As the new fixed-line backbone companies and ADSL systems are extended and 3G established, the telecommunications market is expected to grow.

**BREAKDOWN OF TURKISH ICT MARKET, 2005-2007**  
\$ billion

Market	2005	2006	2007
Telecommunications	14.3	15.4	18
IT	4.4	5.5	5.5
ICT total	18.7	20.9	23.5

Source: InterPro Marketing Services and Research Group, Turkish Informatics Industry Association (TÜBİSAD)

Although great momentum has been gained in recent years, the share of ICT in GDP remains around 2.5 percent compared with 8 percent to 10 percent in the European Union. ICT imports widely exceed exports and average spending per person on ICT is around \$40 compared to \$500 in Western Europe and \$1,200 in the USA.

## TELECOMMUNICATIONS

On January 1, 2005, authorities lifted Türk Telekom's monopoly on telephony. Türk Telekom itself was partially privatized at the end of 2005 through sale of 55% shares to Oger Telecoms, owned by the family of the slain former Lebanese Prime Minister Rafiq Al-Hariri, for \$6.5 billion. The Turkish government plans to sell its remaining stake in 2008 through a public offering.

Key players, which merged with the world's leading mobile operators, are now closely watching the competition and appraising the quality of their services. With the entry of giant global players, the market is expected to continue to grow through introduction of new services and products. Recent mergers and acquisitions (M&As) pose significant growth opportunities in almost all segments of the market over the next 10 years. Much of the past infrastructure upgrade has been in network digitalization and modernization. Future upgrades are expected to focus on increasing bandwidth and introduction of next generation networks to cater for growing broadband usage and broadband services. With number portability expected to be launched in 2008, 3G licenses, new legislations regarding mobile virtual network operator (MVNO) and new Electronic Communications Law will be hot topics on the Telecommunications Authority's agenda this year.

Within the liberalization and deregulation efforts, telecommunications players are entering into different segments of the market. As of February 2008, the operators licensed by Telecommunications Authority (all of which have not necessarily launched service provision) totaled 220. These included:

- Authorization agreement:
  - Satellite and cable TV services 1
  - Maritime communication and course 1
- Concession agreement:
  - GSM services 3
  - Various telecommunication services 1
- 2nd type telecommunications license
  - Satellite Communications 33
  - Satellite Platform 4
  - GMPCS Mobile Telephony 8

- Data Transmission over Terrestrial Lines 27
- Long Distance Telephone Services 45
- PMR/PAMR Service License 68
- Infrastructure Operation Services 15
- Cable platform services 5
- General authorization
  - Wired and wireless Internet services 162

## MOBILE VERSUS FIXED

As opposed to the slow growth in fixed-line services, the mobile sector has grown dramatically in the past decade. The number of mobile phone subscribers, which stood at 15.1 million in 2000, rose to 61 million in 2007. The incumbent telecom operator Turk Telekom has gradually lost ground to mobile operators with increasing GSM penetration. Turk Telekom has been aggressively marketing ADSL, which reached 4.5 million subscribers in 2007. The mobile market is poised for substantial growth over the next five years, with penetration reaching over 90% by 2010.

### TURKEY'S GSM MARKET AS OF DECEMBER 31, 2007

Name of Operator	Number of Subscribers (in Millions)	Market Share
Turkcell	35.38	58
Vodafone	15.86	26
Avea	9.76	6
<b>Total</b>	<b>61.00</b>	<b>100.0</b>

Source: Avea

Turkey has three main cellular phone service operators:

- **Turkcell İletişim Hizmetleri.** Turkey's number one cellular phone services operator, Turkcell is a joint venture between Sweden's TeliaSonera, Turkey's Çukurova Holding and Russia's AlfaGroup and businessman Murat Vargı. Listed on the Istanbul Stock Exchange, Turkcell had 35.38 million subscribers at the end of 2007 and a 58 percent share of the GSM market. Turkcel

l also provides cellular phone infrastructure services in Azerbaijan, Kazakhstan and Georgia and the Turkish Republic of Northern Cyprus, and Moldova and Ukraine either on its own or through subsidiaries and local partners.

- **Vodafone:** The British mobile phone services company acquired Telsim, the country's second biggest GSM company in 2006 from a state banking receivership fund for \$4.5 billion. The company's name was changed to Vodafone Telsim and the last name was dropped altogether in April 2007. Vodafone had 15.86 million subscribers at the end of 2007, and a 26 percent market share.
- **Avea,** Turkey's third GSM network operator, was founded in February 2004 as a merger between Türk Telekom's Aycell and İŞ-TİM's Aria GSM networks. Oger Telecom took a 67 percent stake in Avea after acquiring a majority stake in Turk Telekom for \$6.550 billion in November 2005. The government owns a 13 percent stake in Avea, and İşbank and affiliate companies control 20 percent. Avea had 9.76 million subscribers at the end of 2007. It controls 16 percent of the GSM market.

## **IT MARKET**

Though relatively small with an estimated \$5.2 billion, Turkey has one of the fastest growing IT markets of the world. The IT market is dominated by hardware sales, with 53% of the market being made up of hardware and 33% by services in 2006.

Nearly 3 million personal computers (PCs) were sold in Turkey in 2007, a fivefold increase from 2002, when only 600,000 PCs were sold, Izi Kohen, general manager of Arena Bilgisayar, one of Turkey's top distributors of PCs, told IT-Business magazine.

There has been a remarkable increase in notebook sales in recent years due to the high interest for internet/PC and sustained growth of the economy. When compared to developed countries, Turkey still has a very low Internet penetration ratio of around 25.3 percent. The population segment ages 15 to 44 offers a high potential in terms of consumption of technology products and accessories. Accordingly, growth of computer sales in Anatolian cities has been remarkable over the recent years.

## INTERNET SUBSCRIPTIONS BY YEARS

Years	Number of Subscribers
1999	2,000,000
2000	2,500,000
2001	,500,000
2002	4,000,000
2003	6,000,000
2004	11,279,000
2005	14,844,000
2006	16,406,000*
2007	17,851,000*
2008	19,052,000*
2009	20,104,000*
2010	20,957,000*

\*Estimated

Sources: Ministry of Transportation and Telecommunications, SPO and Pyramid Research, and Economist Intelligence Unit

The IT market is expected to continue its expansion after 2006 as well, triggered by investments both in public and private sector. Currently, finance and public sectors are top two verticals in terms of IT services expenditures.

Turkey's IT equipment manufacturing capability is "modest" and software is largely imported. Local manufacturing activity is limited to assembly. The current share of software in total market is 15%, which is far below worldwide averages. The IT sector views software as its strategic growth segment for exports and, Turkish software companies have started to direct their expertise to exports, to almost 90 countries. In 2005, the total value of registered software exports exceeded \$15 million. This figure, however, does not reflect the real value of sector exports, because software products are often a part of other products and services such as machinery, electronics, electronic machinery, engineering, medical equipment, etc. The main export markets for Turkish made software are the USA, Germany, Iraq, Kazakhstan, the Netherlands, Ukraine and Greece.

## OPPORTUNITIES

- The Turkish ICT market will be shaped by stronger and more global players in the coming periods. All the new entrants in 2005 including Oger Telecoms and Vodafone as well as Turk Telekom, which is aggressively pushing ADSL investments, unveiled significant amount of investment plans for the next few years. This suggests that the new era will be one where quality of services and new infrastructure, rather than price-cutting, will be the main drivers on the market.
- The sector is far from being saturated. Penetration rate is 26 percent in fixed line telephony services is one of the lowest in Europe. Internet penetration rate as of end-2007 is a low 25.3 percent. Although Turkey shows a doubling of broadband lines from 2003 to 2004 and further on, it is still well behind most European countries. With the expected introduction of 3G, possibly in 2008, the range of telecommunication services will diversify to a great extent to include broadband communications services, WiFi, Wimax and value added services. Given that and continuing progress in deregulation and commercialization activities, the Turkish wireless market provides plenty of room for growth, offering opportunities for exporters and existing and new players.
- Many issues including 3G, WiMax, WiFi, the authorization of broadband wireless access services and of mobile virtual network services wait to be clarified during 2008. These are areas which will attract many local and foreign investments into the sector in various capacities.
- The convergence in voice and data transmission and the integration of various software into new dual-mode mobile devices are likely to put pressure on mobile operators while paving the way further for IT companies.
- As the voice market become saturated value-added services will be the main way for operators to maintain competitiveness. There is room in all segments of the services market, including software and application development, hosting, system integration, content aggregation, content creation and creation of mobile community sites.
- E-Transformation Turkey and e-government projects, which are being executed as part of the EU convergence, will create a lucrative demand for ICT companies, paving the way for large e-Government projects with large amounts of public funding and fueling internet use and content creation. The enactment of the Law on Electronic Signature, which took effect in July 2004, and the draft Law on the Electronic Communications will further enhance e-government as well as e-commerce applications. Cisco's investment plans worth \$275 million, which was announced in September 2006, involves supporting Turkey's e-transformation agenda by providing networking technology and prototypes to support pilot programs targeted towards rural broadband for education, as well as connectivity for small and medium businesses, municipalities and local communities.

- There are long-term prospects for Turkey becoming strong in software exports. The IT sector views software as its strategic growth segment for exports and a great deal of Turkish software companies is on the way to obtain CMMI, SPICE: ISO 15504, ITIL, and COBIT. The Silicon Valley Project, which started under the auspices of the Ministry of Industry, is expected to give a push to these efforts. Meanwhile, Oracle opened its "Istanbul ISV Migration Centre" in mid 2006 to meet the software requirements of the EMEA region. YASAD (Software Industrialists Association) has set its target as software exports worth \$2 billion during the next five years.
- In addition to the mounting demand from local companies, Turkey has substantial strengths to be the location for offshore outsourcing services, including European calls.
- Growth of technology supermarkets, such as **Smile**, **Bimeks**, **Vatan Bilgisayar** and **Teknosa** are also fueling retail sales.

## TELECOMMUNICATIONS EQUIPMENT MANUFACTURERS

The country has 33 big telecommunications equipment manufacturers, producing a wide range of products, including PTT type and private office telephone exchanges, serial telephone systems, analog and digital multiplex systems, telephone sets, telephone machines, radio link systems, optical fiber line equipment, data modems, mobile and fixed wireless phones, copper and fiber optic telecom cables, telephone change analyzers, and analog, digital and multiplex equipment.

Three major foreign-controlled manufacturers dominate Turkey's telecommunications equipment market:

- **Siemens Sanayi** manufactures telecommunications equipment and cables, IT and software and unlimited power supplies (UPS).
- **Nortel Networks Netaş Northern Electric Telekomünikasyon A.Ş.**, a joint venture between **Nortel Networks** of Canada and Turkish shareholders, produces network solution and communication infrastructure.
- **Alcatel Teletaş**, a joint venture between **Alcatel** of Belgium and Turkish shareholders, produces wireless and wireline solutions, including switching systems.

## 4.8 CONSUMER ELECTRONICS

After more than a decade of heady growth in consumer electronics, Turkish production of color television (CTV) sets has been in a decline over the past two years as the country's CTV manufacturers were slowly phasing out output of cathode ray tube (CRT) television sets in favor of liquid crystal display (LCD), plasma and other flat panel television sets.

Color television set production, which increased three-fold from 6.997 million in 1999 to 20.457 million in 2004, as Turkey became the main producer for European markets, fell to 16.759 million in 2006.

Turkey's number one producer of color television sets Vestel Elektronik urged the other two producers, Beko Elektronik and Profilo Telra, and Turkish glass manufacturing giant Şişecam, to join forces to invest \$3 billion in LCD and plasma technologies.

### TURKISH COLOR TV PRODUCTION 1999-2006 IN MILLION UNITS

Year	Amount
1999	6.997
2000	8.878
2001	8.113
2002	12.535
2003	15.278
2004	20.457
2005	19.571
2006	16.759

Source: Turkish Electronic Industrialists' Association (TESİD)

Turkey is also a major manufacturer and exporter of household appliances, including refrigerators, washing machines, dryers, air conditioners, space and water heaters, vacuum cleaners, respirators, electrical ovens and kitchen appliances. Leading producers of household appliances are Arçelik, Vestel White Furniture, and Bosch-Siemens. Arçelik-LG, Alarko Carrier and E.C.A. are the leading producers of air conditioners and space and water heaters.

Turkey produced 5.410 million washing machines, 6.222 million refrigerators, 1.486 million vacuum cleaners and 5.645 electrical ovens in 2006.

## 4.9 FOOD AND AGRICULTURE

### AGRICULTURAL ASSETS

- Turkey's agricultural production is equivalent to 40% and 20% of EU-25 production of fruits and vegetables respectively.
- In arable crops, it is a major producer (in EU terms), while in other crops it is a competitive producer (in EU and world terms) of certain grain legumes such as chickpeas and lentils, of cotton, and of some qualities of tobacco and olive oil.
- About 39 million hectares devoted to agriculture represents 23% of the EU-25 agricultural area. Turkey has a far richer endowment of agricultural resources in terms of cultivable land and availability of water than any Middle Eastern country.
- Turkey boasts the largest land mass devoted to organically grown agricultural products in the Mediterranean region.

### MARKET TRENDS

Turkey is a significant agricultural exporter. In fruit and vegetables in particular, it is a major world producer and net exporter. Its levels of production currently amount to around 40% and 20% of EU-25 production of fruit and vegetables respectively. In the arable crops it is a major producer (in EU terms) and for other crops it is a competitive producer (in EU and world terms) of certain grain legumes such as chickpeas and lentils, of cotton, and of some qualities of tobacco and olive oil.

Agricultural output has ranged between \$40-43 billion in recent years. The bulk is accounted by plant products. According to the Food and Agriculture Organization of the United Nations, Turkey ranks among the top 10 countries in terms of vegetable and fruit production per capita as well as total output. Turkey's great advantage is the conjunction of ample land with a variety of climatic conditions. All temperate-zone and Mediterranean climate crops can be grown in the country, as can a number of subtropical crops.

In 2006, the most important agricultural products were cereals (34.3 million tons), followed by various types of vegetables (23.6 million tons) and fruit (14.990 million tons). The bulk of cereals is wheat with 20 million tons and barley, while grapes ranked first in fruits with 4 million tons, followed by citrus fruits and apple.

Overall agricultural production fell 3.4 percent in 2006, as a result of a combination of global warming, draught and reduced agricultural subsidies. The sharpest drop was seen in cereals, particularly in wheat and maize. Fruit production rose 1.9 percent.

### AGRICULTURAL PRODUCTION, 2003-06

Products	2003 000 tons	2005 000 tons	2006 000 tons
<b>CEREALS</b>	<b>28,907</b>	<b>36,231</b>	<b>34,364</b>
Wheat	17,100	21,500	20,010
Barley	8,100	9,500	9,551
Maize	2,800	4,200	3,811
Rice	372	360	417
Others	535	671	575
<b>PULSES</b>	<b>1,552</b>	<b>1,565</b>	<b>1,606</b>
Cotton	2,346	2,240	2,550
Tobacco	112	135	98
Sugar beet	12,623	15,181	14,452
Potato	5,300	4,090	4,397
Sunflower	800	975	1,118
<b>FRUITS</b>	<b>14,002</b>	<b>14,715</b>	<b>14,990</b>
Citrus	2,488	2,913	3,220
Apple	2,600	2,570	2,002
Grapes	3,600	3,850	4,000
Olive	850	1,200	1,766
Hazelnut	480	530	661
Tea	869	1.192	1,121
<b>VEGETABLES</b>	<b>18,137</b>	<b>23,988</b>	<b>23,670</b>

Source: SPO, TURKSTAT

Main export items are fresh fruit and vegetables, which account for around 45% of all Turkey's processed food and agricultural exports. The shares of vegetable oils and confectionary and chocolate products are increasing in the total exports.

In 2006, Turkish agricultural and processed food exports stood at \$8.9 billion. About of its food and agricultural exports go to the European Union countries. Food and agricultural imports stood at \$5.376 billion. Oil seeds and fruit and animal fats and vegetable oils were the biggest import items, accounting for 34 percent of imports.

## TURKEY: THE SLEEPING GIANT AWAKENS

I first visited the cherry production regions of Turkey in 1995. At that time I found evidence of generally high quality fruit being produced with little understanding of sound horticultural principles. When I returned in 2005, much had changed in the 10 years since I was there last. In 1995 Turkey was just starting to impact the European market in such a way that European cherry growers were fearful of the competition. Due to very low wages, they knew that Turkish growers could produce cherries at a fraction of the European cost. In an article that I wrote on Turkey for Good Fruit Grower magazine in the June 1996 issue, I predicted that within a few years Turkey would overtake the United States as the largest cherry producer in the world. That prediction came true within a few short years.

By 1996-1999, the average cherry production in Turkey was 215,000 tons surpassing the 180,000 ton U.S. average. Good soils, a perfect climate and the fact that sweet cherries are native to this area means that Turkey has perfect conditions to grow sweet cherries throughout the country. Although Turkey is, for the most part, a one variety producer, their production region extends over such a vast area, through changing climate and elevation, that their production season continues for 60 to 70 days. With the introduction of new early varieties from California and late varieties from Canada, the potential is an April through August harvest.

The most impressive thing about the orchards was that some of these were EUREP GAP certified, meaning that they had met strict environmental, labor and safety standards, allowing the fruit to be imported to Europe unimpeded.

*Source:* Lynn E. Long, Oregon State University Extension Horticulturist

The size of the Turkish agro industry market, as a combination of demand for food, beverages and tobacco, is estimated around \$60 billion. Cereals and cereal-based products accounted for 38% of food production according to the latest analysis by the State Planning Organization. Turkey is also an important producer in the following areas: It ranks 5th in olive oil production just after Spain, Italy, Greece and Tunisia, while it is a top contender in dairy with a milk market of about 11 million tons.

Official estimations foresee that the food market alone will be \$35.4 billion, food exports \$4.4 billion and food imports \$2.3 billion by 2013.

## IMPACT OF EU HARMONIZATION PROCESS

Turkey is reshaping its agriculture in preparation for the EU membership as well as in line with its commitments to the IMF and the sector holds the promise of making Turkey a major player in EU and world terms. The comprehensive agricultural reform being executed since 2000 creates a more competitive agricultural sector and reduces state involvement. The World Bank contributes to these projects under a \$600 million in loans.

The agricultural reform program puts emphasis on the creation of a rural development strategy aimed at modernization of subsistence and semi-subsistence farming, leading the way to commercially viable entities, while its pre-accession economic programs set the following targets for the agriculture:

- Short-range: Modernization of land registry system, food controls, and animal and plant health services.
- Middle range: Setting agricultural and rural development projects, increasing food processing institutions, hygiene, public health and food health test institutions.
- Long range: Determining quotas and credits and donations from the European Union budget.

The issue of food safety has been a priority area since the launching of the customs union with the EU in 1996. Harmonization of Turkey's food legislation with the EU acquis started in 1995. The pursuit of these reforms and alignment works will create profitable opportunities for the initiation of new projects for foreign as well as local investors.

### EU HARMONIZATION IN FOOD

Safety and quality measures constitute an area of major importance. State Planning Organization 9th Development Plan (2007-2013), expects yearly 3.1% growth in agro industry production, 3.8% in exports and 3.5% in imports. The most important developments are those foreseen in hygiene, quality and standards. The 9th Plan expects that out of 19,021 registered companies around 17,000 will make technology investments to improve hygiene standards and quality level.

Feyhan Kalpakcioglu, CEO of the Yaşar Group, regards the impact of the EU on the Turkish agro industry very positive, drawing attention to the upgrading and managerial requirements of the industry: *"The integration process with the EU will force consumption of packaged food products subject to hygienic processes. Currently, only 15% of production is packed."*

## TRENDS & OPPORTUNITIES

- The sector is developing fast in volume as well as in product variety and quality. Domestic demand is driven by increasing income levels and the changing demand patterns of the new generations. Integration with the EU as well as Turkey's increasing globalization are spurring exports. In the longer term Turkish accession can be expected to lead to an increase of trade in both directions as the EU membership would mean an end to the protectionist measures against EU products.
- Foreign investors' success with merchandising the same products that dominate Turkish agricultural output means that there are major opportunities for companies interested in the low-cost output possible in Turkey. Opportunities exist in animal products (meat and milk),

fishery products, fruit and vegetable processing, confectionery products, pasta and pastry production, herbal foods, processed organic foods as well as vegetable oil (especially olive oil) and viticulture. There is a new focus on organic farming techniques and the government is especially very supportive of organic food manufacturing projects. Turkey boasts the largest organically grown area in the Mediterranean region. The impressive advantage it has is that organic agriculture can easily be applied with low cost in the country.

- As a consequence of the trend to more commercial and capital-based production, major Turkish companies have been investing in animal husbandry projects and fruit and vegetable production. Foreign companies have the know-how and experience to improve processing techniques and create value by stimulating the integration of Turkey's rich agricultural base into the EU. As the quality and safety problems are solved, integration and mergers between agriculture and industry will increase and the sector will achieve rapid growth.
- GAP (The Southeastern Anatolia Project), Turkey's largest regional development scheme offers much to the investors. It is a gateway to the Middle East which represents an import market of over \$200 billion. The region, with its 210.3 million sqm area particularly available for organic farming, presents unprecedented advantages for organic agriculture and hence for organic textile and an excellent location for the food and beverages manufacturing industries.

## IEWS ON AGRO INDUSTRY OPPORTUNITIES IN TURKEY

The views of Feyhan Kalpakcioglu, CEO of Yaşar Group, include the following:

\* In the dairy and meat sector, the major issue is to improve the quality and quantity of raw material. The upgrading requirement in the dairy sector will lead small dairies to possible partnerships with other companies. Foreign direct investment could play an important role in diffusing new technologies in rural areas.

\* Leasing of the state farms could be another opportunity for further co-operation with foreign companies. The total size of the 22 farms slated for private involvement is 491 million sqm. Ceylanpinar in particular is unique in both size and product variety wise with its 180,000 ha.

Ethem Sancak, CEO of the Sancak Group, which controls over half of the pharmaceutical wholesale activities with its 50% stake in Hedef Alliance, puts emphasis on the timing: *"When the prices decline with the EU accession, only those with lower cost will survive and there will be ample opportunity for them to exploit"*. He added: *"Dairy and meat markets are untapped to a great extent. The dairy industry, with 20% net profit rate, and meat industry, with sale prices two fold of that in the EU - €3.0 /kg, poses great opportunities for investors."* He sees other promising areas for co-operation as land and animal registration, environment and animal health protection and food safety.

Flemming Morgan, Danone's Middle East and Africa regional director, said that Turkey is among Danone's first five priority markets for investment purposes. The company, he said, expected the market to grow 60% by 2010.

## TURKISH ORGANIC JUICES SPLASH INTO US MARKET

New York-based Organic Juice USA, Inc. has been extremely successful in the United States with Turkish organic fruit juices. Having attained almost \$1.5 million in revenue in 15 months, the company has recently entered the largest organic food chain store in the United States, Whole Foods Market.

Established a year-and-a-half ago, the company acquired the United States distribution representation from Elite Naturel, an organic fruit juice producer in Turkey. Then, they started introducing additive-free and sugar-free pomegranate, melon, mulberry, quince, grape, pear and rose juices into the United States market.

At first, Organic Juice USA entered Fairway, then to a more middle-income chain store in New York, Key Food, and has quickly attracted U.S. media attention. The company's products are sold in 150 markets in New York, New Jersey, Florida, Connecticut and Illinois. Its latest accomplishment is that it entered the organic foods giant Whole Foods Market.

*"We intend to expand our sales to the east also and reach \$4-5 million in revenue in the next three years,"* says Ali Rıza Süman, one of the two partners, reflecting their ambition in the market. Another important goal the two partners have set for themselves is for Organic Juice USA products to enter the school system in the United States.

Organic Juice USA's fruit juices sell for between \$7-10. This is quite a high price even by U.S. standards. *"While selling fruit juice at these prices, our duty is to educate our consumers about the benefits of organic fruit juices,"* says Süman.

Source: Turkish Daily News, February 22, 2007

## 4-10 EDUCATION

### EDUCATIONAL PROFILE

Reforms and increased spending on education in Turkey are generating some positive impact on educational attainment, but weaknesses in quality and accessibility of higher education remain significant. The U.S. is the number one destination for the Turkish overseas students. Around 25% of an estimated 50,000 overseas students went to the US in the academic year 2005-06. Of this, some 7-8,000 are estimated to be at the tertiary level.

Both the public and the private sectors offer education at the pre-school, primary, Lycée/high school and higher levels, as well as vocational education. State education is free, but suffers from a lack of resources, both human and physical. The recent education reform program aims to correct these weaknesses, but its successful implementation will require major levels of funding, as well as consistency in planning. The private sector is expensive. The cost varies from \$5,000 to \$15,000 for high schools and is higher for the respected universities with grades comparable to quality overseas education. The costs of high-profiled Turkish private high schools and universities are almost the same as overseas education.

The total number of students during the 2006-2007 school year was 17,328,160 at all levels of formal education in Turkey, including 10,846,930 enrolled in primary schools. There were 2.453 million students enrolled in universities and the number of students enrolled at private institutions is rising, accounting for 10% (over 160,000) of students at the tertiary level at the end of 2006. There are 97 universities, of which 30 are private. Five military academies, one police academy, and one foundation school also provide higher education Turkey for students in the military and security forces.

As of February 2008, only eight provinces out of 81 lacked universities or institutions of higher education: Yalova in western Turkey; Bartın and Artvin, on the Black Sea Coast; Iğdır, Gümüşhane and Tunceli in eastern Turkey; Şırnak and Hakkari in southeast Turkey.

#### BREAKDOWN OF STUDENTS IN FORMAL EDUCATION IN TURKEY, 2006-07

Academic Level	Number of Institutions	Number of Students
Pre-school	20 674	640,849
Primary Education	34 656	10 846 930
Secondary Education	3 690	2 142 218
Vocational and Technical High Schools	4 244	1 244 499
Higher Education	97*	2 453 664*
	64 883	17 328 160

\*Excludes military and police academies and one foundation school

Sources: Ministry of National Education, Higher Education Council

## DRAWBACKS IN THE TERTIARY EDUCATION

- Entrance to graduate and postgraduate courses is handled through a single national university entrance examination. Competition for university admission is fierce. Around 1.6 million students take the exam each year.
- Schooling rate at tertiary level is 27%. The number of candidates taking the university entrance examinations (ÖSS) has been rising every year. Students require a minimum grade to pass the exam. Generally, no more than 30-35% of applicants pass the multiple choice exams. University enrollment rates in Turkey have increased during recent years, but are still below those of most European countries. This rate is 27% in Turkey, 53% in Portugal, 59% in Spain, 44% in Hungary and 60% in Poland.

## SCHOOLING RATES IN TURKEY, 2005 / 06

	No of pupils, 000	Schooling rate, %
Kindergarten	550	19.9
Primary	10,674	95.6
High Schools	3,259	85.2
- General HS	2,076	54.3
- Vocational HS	1,183	30.9
Universities, total	2,181	43.4
Universities, excluding distance	1,382	27.5

Source: Ministry of Education, YOK

- The number of students eager to attend university far exceeds capacity in both public and private institutions and a great majority of the students who passed the exam could not be assigned places because of a lack of space. Those who pass the exam, but with lower scores, can only attend two-year colleges. Students with the highest scores are admitted to the university and faculty of their choice. Other less successful applicants must settle for one of their alternate choices.
- The skills of university graduates also do not meet the needs of the private sector. Tertiary education in Turkey encompasses all post-secondary programs of at least two years. For example, Turkey needs 70,000 IT graduate annually, and this requirement will add up to 213,000 by 2013, according to a study of Turkey IT Foundation. On the other hand, Turkey ranks as the 30th country in advanced networks technology with 23 percent in Europe.
- Turkish business executives and entrepreneurs consider the quality of science and engineering schools rather low. The university entrance examination drives what most young people study and learn.
- Other critical issues for the Turkish tertiary education system include the administrative and financial rigidity of the public university system, inadequate communication between universities and the private sector and lack of specialized technical or professionally oriented undergraduate degrees.

## IMPLICATIONS AND OPPORTUNITIES

As a fast-growing and converging country, Turkey needs to improve its higher education and offer increasing opportunities for investors and service providers. All indications point to the government welcoming financial and advisory resources in all areas.

- \* With the economy continuing to grow, Turks will have more money to invest in private education. Some of the private universities, which are founded by Turkey's wealthiest families, are very prestigious and their success shows the dynamism of this section of the educational market place.
- \* In recent years increasing number of Turkish universities, both public and private, have formed close links with universities abroad. Such collaboration has upgraded their curriculum and teaching methods and facilitated academic exchange.
- \* Turkey is a target for overseas education with an average 1.6 million students taking the examination for university entrance and only one third of them passing the examination. Turkey ranks sixth in the number of its students abroad.
- \* The overall ratio of foreign-language speaking population is a low 1.5% of the total population and there is still room in Turkey for foreign language education as Turkey's business world gives high importance to knowledge of a foreign language. Today, a few state universities are entirely English-medium and a German-medium university is about to be established.
- \* Employers in Turkey, like their international peers, are increasingly concerned about problem solving, creativity, confidence and communication skills than about specific technical skills. Turkey needs higher education institutions to develop differential missions and strategies, with a different balance of effort across the functions of teaching, research and service provision.
- \* The weaknesses in high school education and the intensely competitive university entrance examinations have spawned more than 4,000 private cram schools (dershane) that prepare students for the exams. These schools are located all over the country and often offer better education than existing secondary schools. Additionally, hundreds of private foreign language schools have opened in the cities to train students, adults and professionals in foreign languages, particularly in English, as Turkey links to the global economy.

## **4.11 ENTERTAINMENT AND MEDIA**

### **ENTERTAINMENT SECTOR BOOMS IN TURKEY**

The entertainment and media sector in Turkey has been expanding rapidly since 2001. The gross volume was estimated to be \$3.7 billion in 2006. According to the research of PriceWaterhouseCoopers, this will reach \$5.7 billion by 2010. Considering that the size of the sector was only \$1.5 billion in 2001, this represents a cumulative growth rate of 112 percent until 2005 and 75 percent until 2010.

## MEDIA & ENTERTAINMENT MARKET , 2001-10

	2001	2005	2006	2010
Market size, \$ billion	1.51	3.20	3.76	5.71
Broadband subscribers (000)	10	-	2,130 (1)	4,000

(1) As of June

Source: PriceWaterhouseCoopers, "Global Entertainment and Media Outlook 2006-2010, Turk Telecom

## DIGITAL TECHNOLOGIES PAVING THE WAY

The boom in the sector is mainly driven by the fast moving digital technologies. The availability of legal digital alternatives coupled with rising incomes serves to expand the market. Digital distribution technologies are becoming established and are changing the way consumers acquire entertainment and media content. Broadband penetration, which is currently 3%, is projected to reach 20% in 2010 and Internet penetration, currently 25.3 percent is expected to grow in the mid-term. In parallel to the increases in penetration rates, digital platforms, IPTV and video-on-demand mechanisms will expand the TV market through their impact on content provision. MUYAP, the music sector association, stated that mobil music market is currently about \$60 million.

The developments in the Turkish wireless market will continue to have positive impacts on the media and entertainment market. In recent years, mobile operators have launched additional value-added services aimed at a young population receptive to new and emerging technologies. Value added services currently account for 3% of total GSM services. Mobile music and mobile video download services were launched a few years ago over WAP and SMS channels. Turkcell offered consumers full-track downloads from EMI's catalogue in Europe in 2006. Given low penetration rates and continuing deregulation and commercialization in telecommunications and the expected launch of 3G in 2007, there is plenty of room for rapid growth for the entertainment sector. Mobile TV, music, video services appear to have the highest potential to grow and improve with the launch of 3G. Recent deals concluded between foreign and local companies geared towards launching new value added services in 2006 and early 2007 included those between Digiturk and WiderThan Co. for video-on-demand services and Skype and the local Internet firm e-kolay.

## FOREIGN INVESTMENT POURS IN

The media and entertainment markets offer major opportunities for foreign investors. Long-term growth prospects on the back of low ad spending/GDP ratios are seen among the main reasons to attract the foreigners in. Annual advertisement growth stood at 25% in 2005 and 22% in 2006, and reached an estimated \$2 billion in 2007 with an increase of 17%. Advertising has grown at 3-4 times more than GDP growth in the past and is expected to grow at a 9% compound average growth rate (CAGR) in the period 2005-15. Media companies continue to benefit from the promising advertisement market in Turkey, which is still relatively underdeveloped.

Foreign investors are buying up media companies in Turkish broadcasting, entertainment and public relations companies, or forming joint ventures with Turkish companies:

- CNN and CNBC of the U.S. were the first companies to enter the Turkish broadcasting sector forming joint venture news channels with Turkey's Doğan Group and the Doğu Group respectively in the early 2000s.
- CanWest of Canada entered the Turkish broadcasting sector with three radio acquisitions in 2005 and 2006.
- Australian media mogul Robert Murdoch's NewsCorp acquired TGRT TV and Germany's Axel Springer purchased a 25 percent stake in Doğan TV for \$480 million.
- Nielsen Media Research acquired Bilişim, which measures ad spending in the media.
- Deutsche Bank acquired a 22 percent share in Doğan Gazetecilik A.Ş., publisher of four daily newspapers including the mass-selling Milliyet and shareholder of two news agencies, and an advertising company and an Internet publishing company, from the Doğan Group for \$88 million.
- Germany's advertising giant Wall AG acquired a majority stake in outdoor advertiser ERA Outdoor from the Kamicili family for an undisclosed sum.
- Italy's Seat Pagine Gialle acquired a 50 percent stake in Katalog Yayın ve Tanıtım from the Doğan Group for \$7.6 million. The Doğan Group said the company would produce telephone directories in Turkey with its new partner.
- Los Angeles-based private real estate investment company Colony Capital acquired a 55 percent stake in Mars Entertainment Group, an operator of cinema houses and fitness centers.
- Turkish and Greek public relations firms Global Tanıtım and Civitas in January 2008 announced a merger.

## 4.12 DEFENSE

### **TURKISH DEFENSE INDUSTRY BECOMES REGIONAL POWERHOUSE**

In the town of Tuzla, near Istanbul, private Turkish shipyard RMK Marine has begun construction work on the first of four big search and rescue vessels for the Turkish Coast Guard. The Italian-designed vessels will each be 240 feet long, 33 feet wide and capable of 22 knots an hour.

Nearby, another shipbuilder, Yonca-Onuk, has developed high speed boats for the Turkish Navy and Coast Guard. It has already delivered more than 25 fast intervention vessels for the Turkish Coast Guard, and exported several to Pakistan and the Turkish Republic of Northern Cyprus. Capable of speeds up to 60 knots, the boats are designed to protect the littoral of the three states.

RMK Marine and Yonca-Onuk are just dozens of Turkish defense contractors that have emerged since the mid-1980s, producing military hardware for the Turkish armed forces and for export markets. Turkish defense products range from modern jet fighters and complex components for anti-aircraft missiles to high speed patrol boats and frigates to armored vehicles and sophisticated air defense and electronic command and control systems.

Heavy investments in defense industries in the past two decades have helped modernize Turkey's military into a crack fighting force while reducing the country's dependence on costly imported weapons. Its investments in defense also reflect Turkey's growing military might in a conflict-prone region stretching from the Balkans to the Caucasus and the Middle East.

Turkey's new defense procurement strategy, announced in 2004 and reaffirmed in 2007, seeks a greater contribution from Turkish firms in defense projects and aims to increase the rate of domestic inputs into defense purchases, presently 25 percent, to 50 percent by 2010. Defense Industry Undersecretary, Murat Bayar, said: *"An investment of \$3-3.5 billion is being made - apart from logistics - on an annual basis. Twenty-five percent of this corresponds to manufacturing in Turkey and 75 percents foreign. This ratio is a minimum of 50% in the countries similar to us."*

The turnover of the members of the Defense Industrialists Association stood at \$1.720 billion in 2006, up from \$1.591 billion in 2005, and exports climbed to \$351.9 million from \$337.4 million. Plans were underway to bolster exports to \$1.5 billion by 2010. The country exports its products from Middle East to Africa and from Europe to the Far East.

## TURKISH DEFENCE INDUSTRY

YEAR	SALES	EXPORTS	RESEARCH & DEVELOPMENT
2004	1337 120 000	196 341 000	63 860 000
2005	1 591 162 692	337 422 986	78 511 203
2006	1 720 405 000	351 989 000	80 089 000

Source: Turkish Defense Industry Manufacturers' Association

An estimated 200 private and state companies operate in Turkey's defense industry. Most of the companies turn out products mainly for civilian use. But about 30 companies manufacture mainly for the armed forces. A number of foreign defense contractors, including **Sikorsky Corp.**, **General Electric**, **United Defense LP** and **Loral Corp.** of the U.S., have direct investments in Turkey. The need to develop a domestic defense industry came to a head during 1975-1979 American Congressional embargo on sales of military equipment to Turkey, the nadir in Turkish-U.S. relations. The U.S. slapped the arms embargo on Turkey, a NATO ally, because it used American weapons in its occupation of Northern Cyprus in 1974. During the arms embargo, half of Turkey's military aircraft were grounded due to the lack of spare parts.

Turkey has a long tradition in defense industries.

The **Taşkızak Naval Shipyard** along the shores of Istanbul's Golden Horn has been producing warships since 1455. Galleons constructed at the shipyard in the 16th century helped fleets commanded by Ottoman Grand Admirals Hayruddin Barbarossa and Turgut Reis (Dragut) to turn the Mediterranean into a Turkish sea. The **Taşkızak Shipyard** built the Ottoman Empire's first steamboat in 1828 and first submarine in 1886. The shipyard has constructed more than 2,500 ships since its founding and 140 naval vessels since 1941, including landing craft, patrol boats, coast guard vessels, tankers and coasters. It also turns out cargo ships and small oil tankers for civilian use.

When Turkey launched its major military modernization plans in the mid-1980s, the task of developing indigenous defense industries was given to the Undersecretariat of Defense Industries (SSM).

Since its founding the SSM has started up two dozen defense manufacturers and more than 50 projects. It has financed projects through fixed levies paid by consumers on a variety of imported goods, cigarettes, alcohol and legal gambling.

Many of the industries have been established under government-to-government offset agreements, under which defense import procurements have been paid for by exports of domestically manufactured military and other products.

The SSM has insisted that large-scale exporters of defense products to manufacture their goods in country Turkey if they want to continue selling to the nation. Some of the investment projects it has encouraged are linked to all-NATO defense programs with the Turkish companies producing key components for assembly in other countries.

The country's defense budget was about \$10 billion in 2002. From 1996 to 2000, annual defense spending averaged 4.48 percent of Turkey's Gross Domestic Product (GDP), according to Annual per capita defense spending is around \$143.

With a military expenditure of \$9.9 billion, Turkey ranks the 5<sup>th</sup> largest country in Europe, and 4<sup>th</sup> largest in the Middle East in defense spending, according to the latest data of Stockholm International Peace Research Institute (SIPRI).

Among major players are Turkish Aviation Industry (TAI), and electronics manufacturers Havelsan and Aselsan. Some of the recent achievements of local producers include the following:

- Havelsan realized the first-ever CN-235 simulator export of Turkey. This was worth \$30 million and destined to South Korea.
- Vestel and SSM agreed on the production of a \$25.3 million simulator for radars.
- Eurofighter offered Turkey a \$9 billion industrial contribution contract for 120 aircraft.
- Electrical design of the Patrol and Anti Submarine Warfare Ships Acquisition Project is being carried out by Anel. The program comprises up to 12 vessels, with the first 8 to be completed by 2008 at a cost of \$1.6 billion.
- Kalekalp signed a contract to realize the Mini Manless Air Vehicle Project.
- TAI agreed with Northrop to produce aircraft bodies under a 20-year industrial participation worth \$4.3 billion.
- Commercial vehicle manufacturer and defense contractor Otokar signed a \$500 million contract to design and build "national" battle tanks.
- Italian Westland in 2007 signed a \$2 billion contract TAI and the SSM to build attack helicopters.

The Turkish Armed Forces widely relies on the United States and NATO for equipment and technology. The rate of dependence is estimated to be 50-60 percent as far as the land forces is concerned. In the air forces, the rate goes up to as high as 80 percent.

The armed forces of Turkey and the U.S. have been cooperating in Turkish military operations in northern Iraq against Kurdistan Workers Party (PKK) terrorist organization with the U.S. providing satellite information on the camps of the outlawed terrorist organization.

## ON THE U.S. AND TURKEY DEFENSE RELATIONSHIP

The Turkish defense industry, in line with the strategy of the Government Defense Procurement Agency is focusing on indigenous solutions for brand new platforms, modernization and joint development programs. This inclination does not mean the reduction in the volume of defense business of the U.S. companies in Turkey. On the contrary, the new model will give more room for cooperation in the long term with the American companies for subsystems, technological investment and production materials.

Turkey has been building up its modernization capabilities for the US-origin platforms such as F-16, S-70, C130, T38. An important aspect of this accumulation of know-how at TAI, TEI, other Turkish Industry and Military Air Supply Centers would be the integration with the third countries' modernization needs. The business base can also be extended to cover the logistics, MRO and modification needs of the US Armed Forces' platforms in the region.

Should the opportunities be treated well bilaterally, project-based partnership would offer broadened opportunities to extend the business model from pure one-way seller-buyer relation to a partnership relationship as is the case in the JSF Program. The latter, which is modeled for partnership in development, production and sustainment phases, is a good sign of long-term bilateral relations between the US and Turkish industries.

*Source:* Muharrem Dörtkaşı, TAI

Turkey has a growing involvement in the European aerospace sector. It has joined the Airbus A400M military transport consortium and has ordered 10 craft. Turkey is a partner in the US-led Joint Strike Fighter consortium, but a role in an alternative Eurofighter consortium is not ruled out. Within this framework, the process of EU membership could lead to a cutback in the relatively high level of defense expenditure of Turkey. The reduction could be offset to some degree by Turkey's goal of a smaller but better-equipped army, which may result in a higher proportion of defense expenditures going on purchases of equipment.

## 24 MAJOR PROJECTS TO BE COMPLETED IN 10 YEARS

As stated in mid-2006, the Defense Industry Undersecretariat targets to finalize a total 24 projects in the coming ten years. The main projects include the following:

- Phoenix II program (the depot level maintenance capabilities of 30 Eurocopter AS 532 UL/AL Cougars);
- Purchasing of 16 Sikorsky S-70B Seahawk helicopters;
- Helicopter Electronic Warfare Suite (HEWS) Upgrade for 145 new attack helicopters;
- A \$1.1 billion deal in April 2005 to upgrade F-16 fighter jets;

- Plans to buy nearly 120 F-35s to replace aging F-4 and F-16s after 2010 (about an over \$10 billion deal);
- The upgrade of the second batch of 48 F-4 planes;
- Structural and avionic modernization of 50 NF / F-5 A/B;
- Replacement of SF-260D and T-37C by a T-X single primary and basic trainer aircraft.
- Participation in the Military Transport Aircraft (A400M), taking a 9% stake.
- Procurement of 12 light -middle class reconnaissance observation helicopters
- Procurement of 16 new patrol boats

Major deals concluded in 2006 and early 2007 include the following:

- Modernization of 216 F-16 at \$635 million - with Lockheed Martin.
- Procurement of 100 F-35 at \$4.3 billion from Lockheed Martin

## **THE 2023 VISION**

The 2023 Vision study<sup>1</sup> of the Defense, Aeronautics and Space Industries Group recommends definition and implementation of programs under three main headings:

- Low altitude space vehicles and systems
- Manless land, marine and aircraft
- Technologies and components for joint use

A fund of \$700 million has recently been allocated for the National Aeronautics and Space Project which was designed under this program. The Defence, Aeronautics and Space Industries Group envisage the following targets for 2023:

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<sup>1</sup> The "Vision 2023: Strategies for Science and Technology" project involves the first-ever national foresight exercise of Turkey, together with three more sub-projects that aim at collecting and evaluating data on the current science, technology and innovation capacity of the country. It is an ongoing project, which aims to build an S&T vision of Turkey, and to develop S&T policies for a time period of 20 years.

## TARGETS FOR THE DEFENSE INDUSTRY

	2002	2023
Defense expenditure per capita (\$)	130	534
Defense spending (\$ billion)	9	48
Defense spending /GDP (%)	0.05	0.03
Ammunition, equipment spending (\$ billion)	5	14.4
Local equipment and R&D spending (\$ billion)	0.9	11.5
Production per employee in the sector (\$/ man year)	50,000	250,000
Exports per employee in the sector (\$/ man year)	10,000	58,500
Personnel employed in the sector	25,000	60,000
Defense R& D personnel	1,500	10,000

## NEW OFFSET GUIDELINE AND IMPLICATIONS FOR THE AMERICAN COMPANIES

SSM (The Defense Industry Undersecretariat) issued a new Offset Guideline with smart leverage tools for foreign contractors and local industry on February 14, 2007. Key provisions include the following:

- \* The Guideline supports the SME activities with increased multiplier for crediting.
- \* The investment in Turkey by the contractors with minimum of 10% share in the company will be credited temporarily for offset which will be conditionally subject to the export of goods from that investment.

There are increasing numbers of cluster/industrial zones for niche areas in several targeted sectors in Turkey. The Advanced Technology Park, owned by SSM and located in Sabiha Gökçen area, is promoted in the Offset Guideline with higher multiplier for investment there in high technology areas.

- \* The Guideline allows the bartering of offset liabilities in the foreign country with those of the local industry's liability arisen by the export of product in the contractor's country.

- \* The Guideline promotes exports of Turkish products with the highest multiplier.

Due to the availability of a full spectrum of supply chain with qualified small and medium sized enterprises, Turkey offers high level of competitiveness in the defense and aerospace areas compared to other emerging countries. The Government agencies, industries, universities, research institutes of Turkey are presenting and promoting the easy, profitable and less risky business environment to investors. The capabilities of the Turkish defense-aerospace industry including the MRO business comply with the requirements of US authorities. Therefore there is no barrier and weakness for Turkish industries to penetrate into the U.S. and, at the same time, for the U.S. companies to invest in Turkey.

Source: Muharrem Dörtkaşı, TAI

## DEİK ADMINISTRATION

**DEİK President**  
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**Chairman of the DEİK Executive Board**  
**Rona Yırcalı**

## TAK (TURKISH - US BUSINESS COUNCIL) ADMINISTRATION

### Governing Members of TAK Executive Committee

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<b>Őerif Egeli</b>	Vice Chairman	Shenco A.Ő.
<b>Ali Y. KoŐ</b>	Vice Chairman	KoŐ Holding A.Ő.
<b>Haluk DinŐer</b>	Vice Chairman	H.Ő. Sabancı Holding A.Ő.
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<b>Sedat Birol</b>	EczacıbaŐı Holding A.Ő.
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<b>BarıŐ Öney</b>	Deloitte - DTT Kurumsal Finansman Dan. A.Ő.
<b>Halil Dođan Bolak</b>	ATP Ticari Bilgisayar Ađı A.Ő.
<b>Koray Arıkan</b>	JP Morgan İstanbul Türkiye Merkez Őubesi
<b>KürŐat Özman</b>	General Elektrik A.Ő.
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