TURKEY

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Whereas geological instability in 1999 had rudely interrupted Turkey's economic and social progress, in 2000 the main culprit was human frailty. The discovery of substantial fraud in the banking industry, which had incurred a deficit of US$566 million in 1999, started a chain of events that led to a spectacular crisis of financial markets confidence in late November 2000. Although international agencies rallied round to stabilise the situation by year-end, a relatively minor dispute between President Sezer and Prime Minister Ecevit was enough to fire a financial meltdown in February 2001 that forced the government to float the Turkish Lira. Meanwhile, at the turn of the year, an investigation into corruption known as 'White Energy' alleged illicit practices in the energy sector at very senior levels.

All this was a great shame as the government and industry had been making good progress with the 'economic cleansing' programme and the eighth Five-Year Development Plan (introduced in mid-2000) having projected an average annual growth rate of 6.5% through the Plan period. Just before the November debacle, a feature in the highly-regarded London *Financial Times* newspaper proclaimed "Turkey on target for an economic turnaround". As things turned out, according to the OECD, Turkey achieved 7% growth in 2000. This achievement was especially laudable given the disparate political elements within Mr Ecevit's coalition government, which do not make rapid and resolute action very easy at times.

The appointment of former senior World Bank official Kemal Dervis as Economy Minister, following the February devaluation, emphasised the government's intention to maintain the reform programme. The Prime Minister wants to focus on fundamental problems, such as the continuing poor performance of many of the State Economic Enterprises (SEE), including some of those in the energy, minerals and metals sectors. Losses by the SEE are a major financial burden on the Treasury. Potentially, perhaps, the silver lining to the economic cloud may be that the pressure to restructure may now be irresistible.

Energy Supply

Energy supply and pricing continue to make the headline mineral news in Turkey. The country is assessed to be Europe's fastest growing energy market, and electricity supply is unable to keep up with demand, despite novel methods of project funding and considerable international interest. In a bid to minimise rationing by supply interruption, the government idled inefficient state-owned plants, including Eti Holding's Seydisehir aluminium smelter and Isdemir's steel-making facilities. There are a large number of power generation projects at various stages of development but it seems likely that the White Energy investigation and the ongoing financial difficulties will have a delaying effect. However, long-term plans to secure oil and gas imports have made some progress.

As of the late 1990s, electric power generation was based as to 38% on hydro-power, 30% on lignite-fired thermal plants, 22.5% and 7% on mainly imported natural gas and oil, respectively, and 2.5% on (hard) coal-fired plants. Development of hydro resources continues, although there is considerable international opposition to the largest remaining scheme in the GAP region, while lignite reserves total approximately 8,000 Mt. The plan to build a nuclear power plant at Akkuyu was put on hold during 2000 and has not been included in the investment plans for 2001.

Present lignite output of 60–65 Mt/y is mined by the state-owned agencies TKI (around 60%) and Afsin-Elbistan Enterprises (some 27%) and by private companies. As well as for firing power stations, lignite output meets another 14% of Turkey's primary energy production. During 2000, lignite-based generating capacity was boosted by completion of the 620 MW power plant at Cayirhan, operation of which has been transferred to Park Enerji. It will again increase substantially when the 4 x 360 MW Afsin-Elbistan B complex is completed in 2003 by a consortium led by Mitsubishi and including Deutsche Babcock, Cegelec and four Turkish contractors. Unfortunately, however, development of the necessary new mine has been held up by the government's financial problems.

As of end-November 2000, year-to-date production of lignite was reported at 55.28 Mt, oil output at 2.52 Mt and hard coal mined at 3.06 Mt. However, it is calculated that the hard coal producer TTK loses TL81 million per tonne of coal produced as well as having outstanding debts of TL123,3000 billion, this despite continuing investment in the production facilities. The government submitted a draft law on the autonomy of TTK as a step towards addressing the problem.

On the fuels importing front, work started on the Blue Stream gas pipeline link with Russia in February 2000, Iran agreed to delay the start of gas exports to Turkey until July 2001, and the 1,750 km oil pipeline from Baku in Azerbaijan to Ceyhan, via Georgia, was approved in October 2000. Meanwhile, cessation of terrorist activity in the area, allowed TPAO to recommence hydrocarbons exploration in southeast Anatolia.

Minerals and Metals Strategies

Reflecting the general economic advance, mining sector production partially recovered from the sharp decline in 1999 but still contracted by about 4% in 2000.

In the public sector, privatisation-planning continued to head the agenda. In steel, Erdemir, the Eregli-based integrated producer, was added to the privatisation programme in January 2000, while its Iskenderun counterpart Isdemir was tendered for privatisation in April, together with the mini-mill producer Asil Celik. Sale of the latter was approved in August 2000 but the Isdemir tender was cancelled. Subsequently the Privatisation Minister transferred Isdemir to Erdemir at a "symbolic" price of US$50 million, with the Eregli concern committed to invest US$750 million in the Iskenderun facility within a five-year period. This would raise capacity at Isdemir to 2 Mt/y, while investments at Eregli would build capacity there up to 5-6 Mt/y by 2005/6. TDCI was added to the privatisation slate in January 2001.

The Eti Bakir (copper) operation was added to the privatisation programme in August 2000, joining Karadeniz Bakir Isletmeleri and also Eti's chrome, electrometallurgy and silver subsidiaries. It is anticipated that the Privatisation Administration will either merge the two interdependent copper companies or sell them together. In December, the government informed the IMF that the remaining Eti operations (boron products and aluminium) would also be added to the programme. Meanwhile, the IGSAS and TUGSAS fertiliser manufacturing operations are also to be privatised. The IGSAS operations in Istanbul, which had been severely damaged by the 1999 earthquake, were rehabilitated during 2000.

In the private sector too, share sales proved a popular means for raising funds last year. The already privatised Kardemir raised capital via an international share offering, and sodium sulphate producer Alkali Kimya used a public offering to raise money for a 50:50 potassium sulphate joint venture with Israel's Dead Sea Works. Meanwhile, Soda Sanayi, which is part of Sisecam's chemicals group, saw its public offering in April 2000 heavily oversubscribed.

The government's Mineral Research and Exploration agency MTA ordered a US$25 million seismic exploration vessel.

Integrated Minerals Industries
By utilising a mix of mainly indigenous plus some imported raw materials, Turkey has become a major force in the world markets for glass, ceramics, boron products and building stone, as well as steel and cement. The country also exports substantial quantities of mineral raw materials that are not yet processed locally to any great extent.

During the 1990s, ferrous and non-ferrous metal exports accounted for 11.2 to 14.4% of total Turkish exports by value; with overall rock and mineral-based production contributing 1.96 to 2.6%.

In 2000, iron and steel product exports rose by 4.84% to US$2,276 million, jewellery exports rose by 37.5% to US$350.6 million, sales of aluminium products rose by 13% to US$295.2 million, and copper materials exports rose 26% to US$227.5 million. Rock and minerals production estimates by the Istanbul Mineral Exporters' Association show a 1.46% decline in total value for 2000 relative to 1999. Healthy increases in natural stone production and processing, and in non-ferrous ores and concentrates output, were offset by large falls in the borates and ferroalloys sectors.

The prospect of privatisation has not slowed Erdemir's drive for efficiency. In August 2000, the company announced that it had secured a US$49.3 million loan to part-finance the purchase of a 250,000 t/y continuous galvanising line. The credit facility is co-financed by BNP Paribas and the Japanese Bank for international Co-operation. Erdemir has received bids for installation of a 275,000 t/y continuous annealing line, and envisages more projects to align capacity with market demand.

In 2000, the Cayeli underground copper-zinc mine (Inment Mining 49%, Eti Holding 46% and the Government of Turkey 5%) treated 861,000 t of ore and produced 37,4000 t of copper and 26,000 t of zinc. The Cinkur refinery remained shut in 2000, and was tendered for sale. If Eldorado Gold is allowed to proceed with its planned 185,000 oz/y heap leach operation at Kisladag, Turkey will become a significant gold producer by mid-decade.

Turkey is a substantial net exporter of glass products (lead crystal glasses and tableware, glass bottles and other drawn/blown glassware, float glass) in terms of both volume and, especially, value. At the same time the industry is meeting rapid growth in domestic demand, particularly for construction and automotive glass. However, although Sisecam has increased the tonnage of float glass exported, the market value of these sales has declined. The group has responded by consolidating some subsidiaries and planned further participation in East European glass sector privatisation.

With a capacity in the region of 200 Mm^2/y, Turkey is the world's fifth and Europe's third largest producer of ceramic tiles. Exports more than doubled between 1989 and 1993 and again from 1994 to 1998 while domestic consumption is also substantial. The industry is primarily based on local raw materials, some of which are also now exported to ceramics manufacturers elsewhere. Kale Group is much the largest producer, followed by Toprak, Ege, Kutahya, Eczacibasi and about 16 smaller firms.

The country is a minor net exporter of ceramic clays, kaolin and quartz; a significant net exporter of dolomite and calcite; and a major exporter of sodium feldspar. Although the bulk of the potassium feldspar needed is mined locally, some is imported. Similarly, the lining materials and media required for grinding the ceramic raw materials are mostly made locally, with some exports and also some imports. The main trend in terms of operation has been for some major manufacturers to establish their own mining and processing units instead of relying on contracted suppliers. This not only makes it easier to control quality but also allows the companies to take advantage of export opportunities.

Although the value of processed and raw building stone exports now exceeds that of boron minerals and concentrates, Eti Bor has been using its market power to persuade customers to buy more of its intermediate products rather than raw material (much as major phosphate rock producers have tried to add value and increase the export of phosphoric acid). However, the state-owned company has faced some market opposition to this strategy and some industry experts are worried that the proposed privatisation of the industry might draw attention away from the need to solve marketing problems.

MineralProduction-US$Values		
	1999	**2000**
Workedmarble,travertine	115,526	141,911
Naturalborates&concentrates	122,602	108,141
Copperores&concentrates	46,683	51,357
Feldspars	36,034	41,920
Chromiumores	37,165	38,713
Magnesite	37,556	35,411
Marble,onyx,travertineblock/slab	21,671	30,535
Ferrochrome	68,830	19,889
Zinc/zinc-leadores&concentrates	17,886	18,680
Gypsum,anhydrite,plasters	6,139	8,446
Kaolin,otherkaolinclays	7,515	7,531
Metallicash&residues	4,323	6,951
Pumice	6,945	5,638
Barytes,witherite	3,453	5,552
Bentonite	4,586	5,466
Otherworkedstones	2,102	4,593
Workedgranite	3,199	4,198
Perlite		3,548
Graniteblock/slab	3,639	3,156
Slagwool,rockwool	2,844	2,469

Source:IMMIB

Another significant group of Turkish mineral products are magnesite-based. In March 2000, the Comag mines were idled when Cukurova Holding decided to exit the business. They were then purchased by Austria's Styromagnesit Steirische Magnesitindustrie (Styromag) and the company was renamed Calmag. The Austrian and Turkish operations are complementary as they mine different types of magnesite used for different applications.

Canada's Odyssey Resources has located zinc and lead mineralisation at the Lucky Star prospect in eastern Turkey, close to a similar earlier discovery by MTA. Rio Tinto is continuing exploration for copper/gold with reconnaissance drilling programmes.