

THE MINERAL INDUSTRIES OF EUROPE AND CENTRAL EURASIA

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From 1990 to 1995, the area referred to as Europe and Central Eurasia displayed unprecedented social, political, and economic dynamism. The formerly centrally planned economy countries of Eastern Europe and the former Soviet Union (FSU) began the process of transition to market economy systems, and the countries of Western Europe accelerated their effort to integrate their economies into a single federated organization. However, by yearend 1995, the economies of Western Europe, on the one hand, and those of Eastern Europe and Central Eurasia, on the other, remained asymmetrical, requiring further economic development among countries in the later group. The interaction of Western Europe with the formerly centrally planned economy countries in the minerals sector was based on this asymmetry. Western Europe imported mineral commodities from, toll smelted raw materials in, sold equipment and technology to, and invested in mineral enterprises and mineral development projects in the formerly centrally planned economy countries of Eastern Europe and the FSU, largely without any reciprocal activities on the part of the formerly centrally planned economy countries.

Western Europe

The European Union (EU) increased from 12 to 15 in number on January 1, 1995, when Austria, Finland, and Sweden formally became members. This entry undoubtedly marked the end of an era when Western Europe was divided into two groups of countries: those which belonged to a simple free trade area in the shape of the European Free Trade Association on one hand and members of the European Community in favor of more intensive integration on the other.

In June 1995, three Baltic nations, Latvia, Lithuania, and Estonia, signed Association Agreements with the EU that formally puts them on the track for eventual EU accession. Also, Slovenia and the EU initialed an Association Agreement that is awaiting final signature. With the exception of Liechtenstein, Iceland, Norway, and Switzerland, every country in Western Europe has chosen to join the EU. The six Central and Eastern European countries Bulgaria, Czech Republic, Hungary, Poland, Romania, and Slovakia, have expressed interest in joining the EU around the turn of the century.

After a period of low growth and recession in most areas,

Western Europe's economic development was moving ahead. There was a rapid increase in investment flows in 1995. The economic growth in major EU countries resulted in increased consumption of minerals, allowing prices to rise to profitable levels for producers of some commodities.

Efforts by various EU nations toward privatization of nationalized mining companies and state-owned mineral enterprises, liberalization of investment laws allowing foreign ownership of mining companies, and the repatriation of profits were continuing. Government support for high-cost production was withdrawn or significantly reduced.

The EU is a leading world industrial and trading power. It has a population of 370 million, and its 6 billion Ecu¹ gross national product is 10% higher than the United States and 64% higher than Japan. The EU is the world's leading exporter at \$546 billion, excluding intra-Union trade. It accounts for almost 19% of world exports, ahead of the United States and Japan, both with 16%.

In addition to being a large metals producer and consumer, the EU trades heavily in nonferrous metals. In the case of mineral raw materials, the EU is a net importer. The EU is a net exporter of aluminum, copper, and lead semi-manufactures.

EU production tends to be concentrated in refined metal with relatively low shares of mine output. Production of copper and copper alloy semimanufactures represent about 40% of world production.

Nonetheless, in the certain mining areas, EU nations are important producers of bauxite (Greece), copper and tin (Portugal), nickel (France and New Caledonia), lead (Ireland and Spain), and zinc (Ireland and Spain).

In Western Europe, emphasis continued on exploration for gold, bauxite, copper, lead, and zinc. New finds of gold mineralization on Sardinia Island, Italy, and in Scotland, United Kingdom, were encouraging. Exploration for lead and zinc in Ireland and Spain and for copper in France and Portugal also continued.

Various incentives, including tax relief, revised regulations, and less government involvement have been offered to encourage exploration by foreign countries. However, it has been reported that, of about \$450 million spent on exploration by European-based companies, less than \$40 million was invested within Europe itself.

Central Eurasia

The territory of the FSU is comprised of 15 independent countries, each of which possesses its own particular situation regarding government, legal structure, financial institutions, and investment climate.

Each country is confronting different circumstances regarding its future mineral production and supply because of its resource endowments, geography, and political and economic structures.

Among the new countries of the FSU, Russia, Kazakstan, and Ukraine are major international producers for a wide range of minerals. Also of importance is Uzbekistan, one of the world's major gold producers. Azerbaijan and Turkmenistan are important mineral fuel producers; and Armenia, Belarus, Georgia, Kyrgyzstan, and Tajikistan produce or have reserves of one or more minerals of international significance. The three Baltic states (Estonia, Latvia, and Lithuania) and Moldova are not important mineral producers, but the Baltic states are important transshipment points for minerals. Despite the differences among these new countries, there are some broad trends that affected the region of the FSU in 1995.

In 1995, the mineral industries of some FSU countries, after 4 years of continuously decreasing output, began to revive. Since the breakup of the Soviet Union, there had been a severe decline in production for many mineral commodities with mineral industries often operating at far below capacity.

Along with decreasing production, there was a sharp fall in domestic mineral consumption within the FSU with metal-producing, fabricating, and manufacturing industries, particularly those involved in defense industries, producing less and hence consuming less metal. In Russia, for example, between 1990 and 1994, according to the Russian Committee for Metallurgy, aluminum consumption fell 3.1 times, copper 2.2 times, lead 2.5 times, magnesium 1.8 times, molybdenum 3.7 times, titanium 3.2 times, and zinc 2.8 times. The fall in consumption was generally greater for the other countries of the FSU.

The fall in domestic consumption was coupled with large exports for hard currency of a wide variety of minerals, both produced and stockpiled, with large impacts on world markets, particularly for aluminum, cobalt, ferroalloys, magnesium, nickel, potash, titanium, uranium, and zinc.

In 1995, the trend of increasing exports continued. There was an increase in exports from the FSU of practically all metals in terms of physical volume, total dollars earned, and dollar price per unit of commodity exported.

In 1995, in the FSU, there continued to be domestic shortages of minerals, particularly fuels, as the mineral consumers in the FSU were unable to pay for mineral inputs, and the mineral producers in these countries also preferred to export their mineral output for hard currency.

The fall of the Soviet Union left the newly independent

states without domestic resources of some or most of the mineral raw materials on which they depended. For example, all titanium raw material came from Ukraine; almost all chromite from Kazakstan; all manganese from Ukraine, Georgia, and Kazakstan; all antimony metal from Kyrgyzstan; and so on. A number of new programs are underway in FSU states to develop full-cycle mining and processing facilities to supply their own mineral commodities rather than to continue with former supply and production linkages with each other.

It is far from clear that these programs are based on comparative advantage or the desire to produce value-added mineral products rather than the desire not to be dependent on foreign sources for mineral raw materials, processing facilities, and products. However, the striving to lessen dependence on FSU states is based not only on old autarkic thinking, but also on realistic concerns about the ability of these new independent countries to be reliable suppliers of essential raw materials as well as processors and suppliers of mineral products.

The sometimes opposing tendencies for the new states of the FSU to seek both mineral self-reliance and greater cooperation among themselves were evident. The realities regarding the location of mining, processing, and consumption within the FSU as well as the fact that to export minerals the FSU states often have to rely on railroads, roads, and pipeline systems through each other's countries coupled with other political and economic issues were forcing greater cooperation.

The entire mining and metallurgical industry of the FSU is in need of investment to maintain and modernize facilities, to develop new mines and processing plants, and to improve pollution controls. During the Soviet period, the mining and metallurgical sector lacked the state-of-the-art technology and pollution controls of mineral industries in advanced market economy countries. Furthermore, the economic downturn following the breakup of the Soviet Union exacerbated this situation as there was a sharp curtailment of investment needed to maintain mines, processing plants, transport networks, and other infrastructure. While output in all sectors could be greatly increased if new investment funds were available because there is now much underutilized capacity, profitable investment could be made only in those enterprises that meet the economic criteria for competing on domestic and world markets.

Investment now is occurring in a combination of forms. In the late Soviet period and for a time thereafter, the only investment opportunities were for joint ventures, where the foreign investor and FSU investor would become near equal partners. Now it is possible for Western investors to take more active or passive investment roles. For example, foreign investors in some sectors are allowed complete ownership and management of mineral enterprises, while in other enterprises foreign investors have chosen to be minority stock holders.

In the minerals sector, Western participation has taken a number of forms. The most prominent forms are investment in development of gold and oil deposits, metals trading, toll smelting, supplying equipment and raw materials to enterprises, purchasing shares of enterprises, and providing managerial and technical expertise.

While all countries of the FSU have created programs to solicit Western investment to develop a wide variety of mineral deposits, foreign investment in developing mineral deposits has been made almost exclusively in oilfields where the investment decisions apparently have been justified in part on the basis of the enormous reserves and in gold deposits because they appear to promise the quickest and safest return on investment.

All FSU mineral industries are developing processes for privatization. Depending on the country and industry, privatization may or may not involve government ownership of anywhere from a minority to a majority share of the industry. Privatization is generally conducted through the issuance of stock that are either purchased or allocated, depending on the circumstances, to employees and managers of the enterprise, local and national Government entities, and domestic and foreign purchasers.

Russia, among the major mineral producing countries, is furthest along in the process of privatization with practically all metals industries privatized in some form, while other countries still envisage government ownership of the majority of shares of certain major mineral industries.

Kazakhstan has come upon a unique solution of placing enterprises under foreign management for a limited number of years in a system that combines foreign management with government ownership, foreign investment, and privatization. The enterprises involved comprise the majority of the major metal producers in Kazakhstan. The foreign managers are investing in upgrading equipment and dealing with social and ecological problems, paying off debts, striving to increase production and profitability, and attracting investors in return for a percentage of the enterprise's profits and a share in the ownership of these enterprises. This approach of placing firms under foreign management was also being attempted to a more limited extent by other former republics, including Azerbaijan and Georgia.

Those FSU metals industries that have been able to integrate into world markets through exports, toll smelting, foreign investment, and foreign management have been best positioned to ameliorate the downturn that affected all FSU mineral industries.

It appears that metals industries that exported to foreign markets, but did not attract foreign investors, managers, or traders, while able to survive, still suffered significant production decreases as was the case with the Russian nickel and gold industries.

It also appears that the current success of the FSU metals industries is proportional to their rate of participation in world markets through exports, toll smelting, foreign

investment, and foreign management because so far there has been no significant revival of domestic demand within the FSU. This situation probably will persist for the near future. In the longer term, domestic demand should revive, and there will be a need for additional down-stream metal-processing and fabricating facilities. In addition to supplying domestic markets, these downstream facilities can provide value-added metals exports. However, owing to a lack of capital and the need to produce value-added products that meet world standards, the need for foreign investment will remain high.

Eastern and Central Europe

From 1990 through 1995, commercial activity in Eastern Europe was characterized by a process of transition from centrally planned economic structures to market driven economic systems. The decentralization of economic and political institutions during this period also has had a destabilizing social effect in Eastern and Central Europe with the steady rise in unemployment. Ethnic aspirations were held under tight reign by the former communist governments in the region, which, in the case of Czechoslovakia, had led to the relatively peaceful dissolution of the country into the Czech and Slovak Republics, and, in the case of the former Yugoslavia, to a civil war among several of the constituent Republics. Conditions that apparently were common to all countries in the region following the dissolution of central economic planning were (1) initially declining industrial output—including that of the minerals industries, (2) high levels of residual underemployment, the reduction of which is often socially unacceptable in transitional stages moving from nonmarket to market economic conditions, (3) high levels of environmental pollution stemming from industrial point sources, and (4) generally outdated technology, equipment, and knowhow relative to European member states of the Organization for Economic Cooperation and Development (OECD).

Although all the countries of Eastern and Central Europe have a common history of central economic planning, the Czech Republic, Hungary, Poland, Slovakia, and Slovenia, have demonstrated the strongest determination to make structural transformations as quickly as possible to join the OECD Western European Community. The Czech Republic, Hungary, Poland, and Slovakia formed the Central European Free Trade Association (CEFTA) in December 1992 to accelerate the development of markets in member countries. On the other hand, the other countries in Eastern Europe have taken a more cautious approach toward reforms, retaining a greater degree of centralized control of social and economic processes.

The general trend of reducing production in the steel industries in Eastern Europe continued, mainly because of the dissolution of intra-CMEA trade, although some stabilization of production was discernible during 1994 and 1995. Eastern European steel producers, where possible, sought to

find hard currency markets to export steel to maintain industrial operations and critical levels of employment following the dissolution of barter-based CMEA trade. In many cases, quotas were set for these goods in both EU and non-EU OECD European regions to prevent the flooding of their domestic markets with still very highly subsidized products. The relocation of some automotive component manufacturing industries, industry mergers, and/or joint ventures (e.g., Volkswagen-Skoda) from the EU area to the Czech Republic and Poland also stimulated the interest of EU steel producers in acquiring steel production capacities in these countries. In 1992, Lucchini Siderurgica S.p.A. of Italy acquired a controlling interest in Huta Warszawa of Poland; and, in 1995, Bekaert of Belgium reached an agreement with the Czech Republic to build and operate a 80,000 ton-per-year steel wire plant in the Czech Republic.

Because of the civil war in the former Yugoslavia and subsequent international sanctions placed against Serbia and Montenegro, the relatively strong copper and lead and zinc mining and metallurgical industries of Serbia and Macedonia, which supplied Western Europe as well as some of the former CMEA countries with both metals and toll smelting and refining capacities, ground to a virtual halt. Poland, however, has remained a major world mine, smelter, and refinery producer of copper and a major European mine and metals producer of lead and zinc. Reportedly, discussions between Poland's copper producer, KGHM, and potential OECD investors continued to proceed in fits and starts with the major obstacle being the social consequence of rapidly restructuring this giant enterprise with 28,000 employees. In 1995, KGHM officials indicated that privatization would be completed in 1997. In 1995, there was notable foreign interest and investment in gold deposits in Bulgaria, the Czech Republic, Hungary, and Slovakia.

The importance of the industrial minerals sector in the

region became increasingly evident as Belgian, French, German, and Italian cement producers took advantage of investment opportunities in the CEFTA area in the early 1990's, notably the Czech Republic, Hungary, and Poland. EU firms such as Belgium's SA des Cimenteries CBR and Heidelberger Zement of Germany have invested in this region because of their relatively modern operations as well as large exploitable resources of limestone, gypsum, and other quarry products. These investments have poised EU companies to take advantage of potentially major infrastructure development in Eastern and Central Europe and also to sell lower cost but good quality construction materials in the European region of the OECD. Additionally, the EU investors would be in a good position to take advantage of similar developments in former centrally planned economy countries in other regions. In 1995, more than 60% of the cement industries in the CEFTA region were foreign owned and operated.

With the possible exception of Poland, activity in Eastern Europe's mineral fuels sector should be dominated for the foreseeable future by domestic production of low-grade coals for thermal electric power generation and by deliveries of natural gas and petroleum, largely from Russia and other members of the Commonwealth of Independent States (CIS). CIS exports of natural gas and petroleum to Eastern and Central European countries have accounted for up to 60% of the domestic primary energy consumed in these countries. Foreign investments in this sector included sales of coal desulfurization processes and more efficiently designed electric powerplants.

¹ The value of the Ecu is the weighted average, based on central rates, of a basket of 12 currencies against the U.S. dollar. The Jan. 1996 rate was Ecu0.76=US\$1.00.