

# THE MINERAL INDUSTRIES OF EUROPE AND CENTRAL EURASIA

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Central Eurasia, Eastern Europe, and Western Europe encompass three subregions that because of their divergent histories, as well as varied resource bases, perform different functions in the world's mineral economy. The Western European subregion was a large processor and consumer of minerals and metals, but not a significant mining region. The Eastern European subregion, which consists of formerly centrally planned economy countries, was only a modest mineral mining, processing, and consuming area. The Eastern European and Western European subregions were deficient in many nonfuel mineral raw material resources needed by their economies, and their mineral processing and manufacturing industries depended on imported mineral raw materials and mineral products. In the case of fuels, Western Europe had significant petroleum and natural gas resources, and Eastern Europe and Western Europe had adequate coal resources. Since the breakup of the Soviet Union, the Central Eurasian subregion was no longer a major mineral consuming region, but still remained one of the world's largest mineral mining and processing areas and was a major exporter of fuel and nonfuel mineral products to world markets.

Mine output of metals in Western Europe played a small role in world production, with mine output for all metals listed in table 1 accounting for less than 10% of world output in 1998. However, the area played a more significant role in world output in the extraction of some industrial minerals and mineral fuels, such as salt (23%), potash (20%), lignite (28%), and natural gas, (12%). In 1998, Western Europe remained a major world mineral processing and consuming region, accounting for a significant share of world production of such ferrous and nonferrous metals as primary zinc (26%), secondary zinc (31%), primary lead (21%), secondary lead (34%), crude steel (21%), pig iron (17%), primary aluminum (16%), secondary aluminum (28%), alumina (11%), primary copper (8%), and secondary copper (44%); and such industrial mineral products as hydraulic cement (12%), sulfur (11%), and nitrogen (10%). Germany remained Western Europe's dominant producer of most metals, a number of industrial minerals, and coal. Other Western European countries that were particularly large regional producers of a specific mineral commodity included Finland (mine output of chromite, mercury, and phosphate rock), Greece (bauxite), Sweden (mine output of lead and silver), Portugal (mine output of tin and tungsten), Austria (mine output of tungsten), and Norway and the United Kingdom (crude petroleum).

In 1998, the trend in mineral exploration in Western Europe continued to be for copper, gold, lead, and zinc, as well as for diamond exploration in the Scandinavian area. Sweden, which has had significant metal mining activity for at least 1,000 years,

was still relatively unexplored and was experiencing an exploration boom.

Eastern Europe comprises the Czech Republic, Hungary, Poland, and Slovakia (these countries also are referred to as part of Central Europe) and the Balkans (Albania, Bulgaria, Romania, and the successor states of the former Yugoslavia). Under central economic planning as members of the Soviet-based Council for Mutual Economic Assistance (CMEA), Eastern Europe, as a whole, developed mineral industries that, for the most part, were isolated from world markets. During that period, the region also was dependent to a great extent on the Soviet Union for many base metals, as well as for substantial amounts of coal, natural gas, and petroleum. Following the dissolution of the central economic planning system in the region, many mineral industries—mining, processing, and semimanufacturing—could not be economically sustained. With respect to mining in Eastern Europe, Poland appeared to be the only country to have commercial resources of world significance, which were coal, copper, lead, salt, silver, sulfur, and zinc. After an initial economic winnowing process in Eastern Europe, the surviving mineral industries increasingly were able to attract foreign investment.

By 1998, major minerals-oriented foreign investment centered on such industrial minerals industries in Central Europe as quarry products, cement plants, and construction materials. In Hungary and Poland, some foreign investment also was apparent in the base metals sector. In the Balkans, Bulgaria's copper and gold sectors continued to attract the interest of foreign investors. Exploration for gold continued in the Czech Republic, Hungary, and Slovakia.

Despite the large decline in production and consumption levels from those of the Soviet period, the former Soviet Union (FSU) subregion remained a major world mineral producing region and had increased its exports of a number of mineral commodities to world markets in comparison with that of the Soviet period. The FSU was a significant world producer of such nonferrous metals as mine output of mercury (31%), primary aluminum (15%), alumina (11%), mine output of tungsten (10%), and mine output of copper and refined copper (8% each) and of such precious metals as palladium (53%), platinum (15%), gold (9%), and silver (5%). With respect to ferrous metals, the FSU had a significant share of the world output of manganese ore (31%), mine output of nickel and refined nickel (22% each), chromite (14%), iron ore (13%), and pig iron (10%). This subregion also produced a significant share of the total world production of such selected industrial minerals and fuels as natural gas and potash (28% each), uranium (17%), nitrogen and sulfur (11% each), crude petroleum (10%), and phosphate rock (10%).

Although Kazakhstan, Ukraine, and Uzbekistan were important producers of a number of mineral commodities and many of the FSU countries were important producers of one or more mineral commodities, Russia, which had 75% of the territory of the FSU, was a significant producer of a broad range of mineral commodities. Russia's status as a world mineral producer in 1998 may be summarized as follows:

Asbestos.....	First
Natural gas.....	First
Nickel.....	First
Palladium.....	First
Titanium, sponge.....	First
Aluminum.....	Second
Mica.....	Second
Petroleum, crude.....	Second
Platinum.....	Second
Potash.....	Second
Antimony, mine output.....	Third
Boron.....	Third
Diamonds, gem and industrial.....	Third
Tungsten, mine output.....	Third
Beryl.....	Fourth
Cobalt, mine output.....	Fourth
Iron ore.....	Fourth
Magnesium, metal.....	Fourth
Phosphate rock.....	Fourth
Steel, crude.....	Fourth
Sulfur.....	Fourth
Copper, mine output.....	Fifth
Gold.....	Fifth

Russia also was one of the world's major exporters of a significant number of mineral commodities, which included aluminum, diamonds, gold, nickel, petroleum and petroleum products, platinum group metals, and titanium metal.

In 1998, mineral production in Central Eurasia, Eastern Europe, and Western Europe was mostly below the 1997 production level. The mineral economies of these three subregions were affected differently by global economic factors, which indicated the differences in their stages of economic development, in the development of their mineral industries, and in their dependencies on mineral trade. Furthermore, large disparities existed in mineral resource endowments and mineral production and processing capacities in countries within each of these three subregions, and factors that affected a subregion often were more dominant in one or several of the countries within that subregion.

After going through a period of economic recovery in 1997, the FSU was affected by a severe economic crisis in summer 1998 that started in Asia and quickly spread to Russia and then to other FSU countries. According to the World Bank, the Russian financial crisis dominated economic developments in the FSU. In August, the Russian Government sharply devalued the ruble and announced a moratorium on public debt. The Russian crisis severely worsened the external economic environment for many FSU countries, and the Russian currency devaluation put downward pressure on other FSU currencies (World Bank, 1999, Europe and Central Asia—The World Bank Annual Report 1999, accessed October 4, 1999, at URL <http://www.worldbank.org/html/extpb/annrep/eca.htm>).

For the majority of FSU countries, mineral exports were a large source of foreign currency earnings. In 1998, however, an unfavorable situation for the export of oil products from the FSU developed because of the drop in oil prices on the world market. Furthermore, the slowing of economic growth in Asian countries, which were large importers of metals from the FSU, was an important factor in the reduction of demand for FSU metals on the world market. Besides lowering the volume of exports, decreased demand also lowered commodity prices, which further diminished revenues from metal exports. Devaluation of currencies in the FSU made exports from this area more competitive, and a number of foreign governments took anti-dumping measures to limit exports of ferrous metals from some FSU countries.

Following the economic crisis, the Russian economy showed signs of improvement in the fourth quarter of 1998. The Russian and the other FSU Governments were able to avoid the worst-case scenarios of hyperinflation, precipitous falls in currency exchange rates, shortages and panic in the commodity markets, and social unrest. Nevertheless, the crisis exacerbated long-term problems and disparities that could not easily be dispelled. The budgets of most FSU countries still faced revenue shortfalls and problems of debt servicing, while real disposable incomes and investments were low.

The negative effects of the Asian and then FSU economic crises on the economies of the Western European subregion, and in particular the European Union (EU), were limited, because economic forces that were operating within the territory of the EU appeared to be the dominant factors. EU countries' mineral industries were affected by increased exports of ferrous metals and other mineral commodities from Eastern European and FSU countries, which resulted in a number of antidumping measures being initiated by the EU's European Commission. Still, the increasing importance of intra-EU trade and the successful start of the monetary union contributed to a favorable outlook in terms of macroeconomic activity, price stability, and public finances. Every EU country recorded a rise in production with the largest being Ireland (15%) and the lowest being the United Kingdom (1.2%). The decade-long downward trend in mineral production within the EU, however, continued. The EU countries' economies benefited from lower interest rates associated with the "flight to quality" as funds were reallocated from the troubled Asian region to more secure investments in Europe (Office for Official Publications of the European Communities, July 31, 1998, Dynamic EU trade with rest of world, Eurostat press release, accessed August 23, 1998, at URL <http://europa.eu.int/en/comm/eurostat/compres/en/5997/6605997a.htm>).

In 1998, the Asian and FSU financial crises and the social unrest and political uncertainties in the Balkans had a dampening effect on the Eastern European region as a whole. Mineral exports from this region, especially steel and steel products, which had found good markets in the far Asian regions in previous years, were reduced and often redirected to Western European countries. This resulted in investigatory actions by the EU's European Commission concerning allegations of steel and other mineral commodity dumping on the Western European market by many Eastern European countries.

















