

## ARMENIA

*By Interfax-M&CN*

The economic growth observed in Armenia last year was very encouraging. GDP expanded by 6% and industrial production rose by 6.4%. Foreign trade increased as well and average monthly wages were higher. As a result, the Caucasus country continues to lead CIS countries in the duration of its growth cycle, which has ranged from 3% to 7% over the past seven years. Armenia still has a trade deficit, however, which was nearly a third of GDP last year, and unemployment remains one of the highest in the CIS.

Industrial production in Armenia traditionally contributes about a quarter of GDP. The biggest increase in production by industry was seen in the mining industry, where production was up 24.8%. The big increase was due to strong demand by foreign buyers for copper and molybdenum concentrates, the country's main resource. This made it possible for the government to introduce tenders to sell this product. Besides, fast growth was observed in the production of blister copper and aluminium.

Foreign investment in Armenia totaled US\$190.1 million in 2000, up 29% year-on-year. Direct foreign investment totaled US\$120.1 million, up 7.9%, or 63.2% of overall investment. Direct investment totaled US\$43.1 million from Russia, up 0.7%, US\$38.8 million from Greece, up 230%, US\$7.5 million from the US, up 33.9%, and US\$10.8 million from Canada, down 0.9%. The energy, water and gas supply industries received US\$42 million in direct foreign investment, US\$37.4 million went into telecommunications, US\$10.8 million into wholesale trade, US\$7.8 million into the processing and production of food products and drinks and US\$4.6 million was invested in the hotel and restaurant business.

Armenia produces copper, molybdenum and its alloys, zinc, lead, gold, silver and non-metallic raw materials. There are also a few diamond-cutting plants in the country. Armenia does not extract natural gas or oil (and mines coal in only very small quantities), importing gas and petroleum products from other CIS countries. Historically, the Armenian mineral industry has been represented mainly by mining and milling capacities, with ore concentrates being the end product, as production of finished metal products has been poorly developed.

There are twenty mineral deposits in Armenia listed by the government. They include three copper, six copper-molybdenum, five 'complex' metal operations, four gold and two iron deposits. Six mineral deposits are currently being worked. These are Kadzharan (copper-molybdenum), Agarak (copper-molybdenum), Kapan (copper), Shaumyan (polymetallic-gold), Zod (gold) and Meghradzor (gold).

Armenia's foreign trade deficit was US\$587.6 million in 2000. The trade turnover grew 13.4% from 1999 to US\$1.2 billion, as exports increased 28.4% to US\$297.5 million and imports rose 9.1% to US\$885.1 million. Around 40.8% of Armenia's exports consist of processed diamonds and jewelry made from precious metals and stones, 14.9% - non-precious metals and items made from these metals, and 11.5% - mineral products.

Since cut diamonds are key exports, Armenia pays much attention to the development of its diamond-cutting industry. Armenia currently has three major diamond cutters that are partly British and Belgian owned, and about 20 small firms. In 1999, Aik Arslanian, a Belgian businessman of Armenian origin, began building another major cutting factory 20 km outside Yerevan. Armenia planned to increase production of cut diamonds to

US\$100-110 million in 2000 from US\$85 million in 1999. The sale of the country's largest diamond-cutting factory, Shogakn, to Israel's Lev Leviev Diamond (LLD) will make it possible for Armenia to increase output of cut diamonds to US\$200 million in 2001 and to US\$500 million by 2005 if current trends continue.

In December 2000, Russia's State Duma ratified an agreement between the governments of Russia and Armenia on supplies of rough diamonds to Armenia in 1999-2001. Armenia used to buy rough diamonds, Russian diamonds included, in the West. The agreement would enable Russia to sell the diamonds for hard currency direct to Armenia and so increase budget revenues. The agreement states that Armenia was to have received up to 30,000 ct of rough gem-quality diamonds and up to 1 Mct of industrial diamonds exempt from VAT in 1999. Alrosa, Russia's diamond monopoly, would supply the gem diamonds and the state-owned Almazjuvelirexport - the industrial diamonds, from stockpiles in the Russian republic of Yakutia. Annual supply volumes would be reviewed on an annual basis after the Russian Government sets its export quotas for rough diamonds for a certain year. Armenia is not permitted to re-export the gem diamonds, which do not include diamonds with unusual size or properties.

In January 2001, the Armenian Ministry of Industry and Trade summed up the results of the country's first ever tender for the right to buy large quantities of copper and molybdenum produced by the state-owned Zangezur and Agarak copper-molybdenum plants. A total of 13,000 t of copper in copper concentrate, (26%-28% Cu), 5,600 t of molybdenum concentrate, (48%-53% Mo), and 800 t of molybdenum oxide, (57% Mo), were tendered. There were eight bidders: Pure Metals Factory of Armenia, the Armenian-Liechtenstein Manes & Vallex joint venture, Switzerland's Glencore International, Mika Ltd (UK), Comsup Commodities Inc. (US), Greensard Trading Ltd. (Cyprus), a

Swiss-registered Iranian firm Armconcentrates and Comtrade Investment of Greece. All bidders except Comtrade Investment received the right to buy Armenian concentrates. However none of the bids was met in full.

### Gold

Armenia's gold resource potential is considerable: overall gold reserves are now estimated at around 200 t. The Zod and Meghradzor gold lodes are the largest gold deposits in Armenia. The joint venture Ararat Gold Recovery Co., formed by Armenia and Canada's First Dynasty Mines (FDM), has the right to mine the deposits. According to FDM, Zod has reserves of 6 Mt of gold ore, as appraised by Australia's Snowden, and possible reserves of 20 Mt. According to Armenian sources, net reserves at Zod, surveyed in Soviet times, amount to 24 Mt of ore with gold content of 6.2 g/t. According to Snowden, Meghradzor has 838,000 t of ore averaging 9.6 g/t Au. (Proven reserves, confirmed in Soviet times, totalled 1.45 Mt at 16 g/t Au.)

Ararat Gold Recovery Co. has at its disposal the fixed assets of Armzoloto, the Armenian state-owned mining company, valued at US\$22.1 million. For its part, FDM has pledged to invest US\$80 million in the development of the Zod and Meghradzor deposits. During the first three years of joint activity, FDM is to take 70% of the profits and Armenia 30%. After that, the profits will be split fifty-fifty. The agreement is valid for 20 years and can be extended for a further 10 years.

### Non-Ferrous Metals

Armenia's non-ferrous industry showed an impressive performance in 2000. One year earlier, in 1999, the Zangezursk copper-molybdenum combine that produces 18% copper concentrate was practically the only enterprise of its kind operating. But by the start of 2000 new technology was introduced that enabled the plant to produce 29% concentrate. The Agarak combine was

rehabilitated last year and received orders from European companies. The Kapansky plant worked more intensively, treating ore from the central Kapansky and the unique Shaumyansky polymetallic mines. The latter can produce ore with a high concentration not only of copper but also of zinc, lead, and gold. For 2000 as a whole, the Zangezur combine planned to produce 6.8 Mt and Agarak 1 Mt of ore. In 1999, these enterprises together produced 8,788 t of copper in concentrate and 5,405 t of molybdenum concentrate.

The Zangezur copper-molybdenum combine operates an open pit in the Kadzharan copper-molybdenum field. The Agarak copper-molybdenum combine exploits the eponymous copper-molybdenum deposit. Capacity at the Zangezur and Agarak plants is respectively 8.9 Mt and 3.2 Mt of ore.

In October 2000, officials from Norilsk Nickel and Russian Aluminum (RusAl) visited the Zangezur ore province of southern Armenia which hosts all the above operations, to assess the prospects for doing business there. In the past, China's MCC and Arbed, a Luxembourg firm, have both stated they are prepared to contribute to the Zangezur mining industry's development. Several other companies have offered the Armenian Government projects to develop selected enterprises in the district. One of them, Romania's Metal Prince, has suggested a joint project at the Kapan plant and the Agarak copper-molybdenum combine. Another, Mercury Alliance of the US, is in talks with the government concerning the Agarak combine, which is close to Armenia's border with Iran. In October 2000, Germany's Lurgi and Manes-Vallex studied geological information on the Zangezur ore fields.

In 2000, aluminium production increased by an impressive 240%. The industry grew so fast because the Kanakersky aluminium plant (Kanaz), which had stood practically idle for a long time, acquired a strategic investor - Russia's Siberian Aluminum, and began increasing production. A year earlier, a small Russian-Armenian joint venture, Folkan, which produces about 80 t of foil, was the only producer of aluminium foil in Armenia.

The even more dramatic increase in blister copper production (by 13.5 times from 1999) was due to the restart of one of the biggest copper producers, the Manes & Vallex non-ferrous metals plant owned by the Liechtenstein and Swiss companies Vallex F.M. Establishment (53.7%) and Elecom (46.3%). The partners plan to produce 12,000 t of blister copper in 2001, compared with 7,122 t in 2000. Manes&Vallex has the capacity to smelt 15,000 t/y of blister copper. Its raw materials are concentrates produced by the Zangezur and Agarak copper-molybdenum plants and Kapan mining complex, and copper scrap.

Plans are being drawn up to expand capacity to 20,000-25,000 t of copper refining capacity in 2004, rising to 50,000-60,000 t of copper and 20,000 t of zinc annually by 2010. The first stage will cost US\$60 million, a quarter of which will be provided by Manes & Vallex shareholders. The rest of the funding will be provided by investment and commercial credits. The company's managers have said that the International Finance Corp. (IFC) and the European Investment Bank are interested in the project. The refined copper project partner is Germany's Lurgi Metallurgie, and project consultants are International Business Consult of Berlin and GINTSVETMET of Russia.