Reorienting Hungary’s Fine Chemical Industry

The Hungarian Fine Chemicals Project, recently audited by OED,* helped reorient the Hungarian chemical industry toward the development of fine and specialty chemicals. The overall goal was to make Hungarian companies more competitive in world markets and increase Hungary’s convertible currency earnings. An OED audit notes that despite very difficult circumstances, the project was an outstanding success. Not only did it improve the global standing of the Hungarian chemical industry, it also helped cushion the fall in Hungary’s export earnings that followed the 1990-92 collapse of the Council for Mutual Economic Assistance (CMEA) market. Flexibility and local “ownership” were important elements in the project’s success. Hungarian firms took the lead in both initiating and implementing the project.

Goals and design

During the 1980s, Hungary struggled to decentralize its economy and introduce more market-oriented policies. By 1985, external trade—nearly evenly split between convertible currency and CMEA countries—accounted for about 40 percent of GDP. Though Hungarian companies still had to comply with the CMEA’s central plans for major strategic decisions, the more progressive companies tried to overcome these limitations by increasing their business with market economies. The Fine Chemicals Project, supported by a $73 million World Bank loan, resulted from such an effort.

The project was neither a complete industrial restructuring project nor was it part of any deliberate privatization program. Rather, it applied varying strategies to different sections of the chemical industry, depending on their capabilities and requirements.

The project targeted three main areas: pharmaceuticals, pesticides, and other fine chemicals. Five companies and one research institute comprised the pharmaceutical portion of the project. These companies were to shift production toward higher-value products and to focus their research on developing original drugs. Three firms were to develop the production of other promising fine chemical products. Two companies also were to contribute to the pesticide component, whose aim was to provide efficient import substitutes. Another research institute would conduct toxicological tests of the related products in accordance with internationally accepted standards for good laboratory practice. Two of the pharmaceutical companies also participated in the Pre-marketing Pilot Operation, which aimed to help Hungarian producers penetrate the markets of countries with products sold under their own or jointly owned brand names.

The project took account of potential environmental hazards and included financing for one organic waste incinerator. Project facilities were designed and operated in accordance with the Bank’s environmental safety standards.

Implementation and results

Project implementation was hampered by delays and related cost overruns. Delays resulted from the inexperience of the participants and the project coordination office with World Bank procedures; changes in the scope of some subprojects and in plant designs; slow performance of local suppliers; and difficulties with foreign suppliers and licensors. Unfavorable exchange rate trends and domestic factors as well as inadequate estimates of capital costs pushed the final project cost (in local currency) 34.7 percent higher than planned. Despite these slippages, most of the companies installed equipment as planned and put it into operation.

Most of the subprojects came into production during a very uncertain
and critical period—in 1990, the CMEA trading bloc collapsed and its system of barter agreements and trade settlements in rubles practically ceased to exist. A substantial market for chemical products rapidly disappeared. In addition, the liberalization of the domestic market brought in foreign companies to compete with Hungarian ones.

During 1990-91, chemical industry output as a whole declined in real terms by about 24 percent compared with 1989. Though efforts to redirect exports toward convertible currency countries were not universally effective, the fine chemical industry reacted quickly. It succeeded in redirecting its export focus and in 1991 recorded a 23 percent increase in exports. This was largely due to the performance of the companies involved in the Bank project, particularly pharmaceuticals. Modernized production methods and better managerial ability also helped the companies respond to market changes.

The 15 surveyed subprojects earned an overall financial rate of return (FRR) of 19 percent, and an economic rate of return (ERR) of 25 percent—satisfactory though lower than anticipated at appraisal. The pharmaceutical subprojects performed particularly well. The performance of 12 combined showed a 25 percent FRR and a 32 percent ERR—very good results considering the adverse economic conditions at the time. The other fine chemical subprojects, however, did not perform as well. With the exception of a monochloracetic acid production line, which performed strongly (FRR: 32 percent and ERR: 42 percent), the subprojects, especially those most closely integrated into the CMEA, had rates of return below the opportunity cost of capital.

The Pre-marketing Pilot Operation stands out as the most innovative and successful component of the project. The operation had a substantial commercial impact. Pharmaceutical products, based on two newly discovered molecules, were distributed in several foreign markets. Through these achievements, the pharmaceutical companies have been able to realize quickly how profitable clinical trials can be. They became familiar with the details of related procedures, and adjusted their research work in accordance with international standards for good laboratory and clinical practice.

Assessment and sustainability

The subprojects' uneven performance suggests that project design may have been too complex and may have paid too little attention to the differences among the three areas of chemical production targeted and their distinct marketing needs. The marketing strategy used seems to have benefited pharmaceuticals much more than the other chemical products.

The project achieved its major goals, however, despite unevenness among the sectors and drastically changing economic circumstances. The changes were a test of the companies' ability to adapt to new circumstances; flexibility proved critical to the project's success.

Most of the companies fulfilled the quality assurance criteria required by international standards and adjusted their range of production. They achieved their efficient import substitution objectives and increased sales on promising foreign markets. Clinical trials proved to be an asset to the product portfolios of participating companies and enhanced their image as efficient research and development-oriented companies.

Several pharmaceutical companies have developed more sophisticated marketing systems. For example, one company has set up its own marketing team to better compete with foreign companies now operating in Hungary and is actively seeking partners to develop and sell its bulk products on foreign markets. Another firm now has marketing arrangements with a European company, while a third company has established networks of medical representatives in Hungarian hospitals, diversified its trade relations with wholesale companies, and set up consignment stores to facilitate exports.

The other fine chemical companies showed mixed results. The financial position of these firms has been uneven over the past three years, and the sustainability of some subprojects remains uncertain.

Overall, the project placed most of the companies in a good position to face future challenges, with the most market-oriented companies having the best prospects for sustainability.

Lessons

Pragmatism and flexibility in adapting to changing market conditions by both the Bank and the Hungarian participants ensured the project's success, as did local ownership and the generally successful implementation. Even better results could have been achieved, however, had it been recognized earlier on that different marketing strategies were needed for the various chemical products selected for the project. Dividing the project into two separate lending operations and setting up a more specific and appropriate design for marketing non-pharmaceutical products at the beginning might have yielded an even better outcome.