three on Ukraine's energy reforms; the other two are on the

electricity and gas industries.

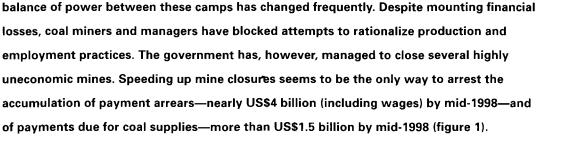
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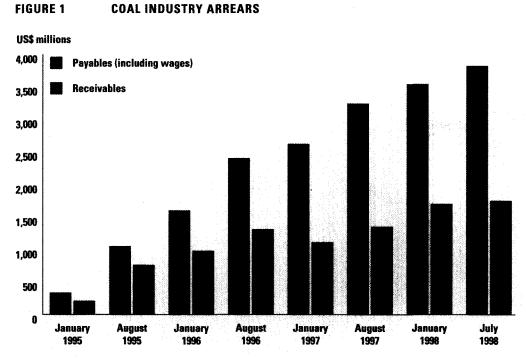
Laszlo Lovei

Coal Industry Restructuring in Ukraine

The politics of coal mining and budget crises

Restructuring Ukraine's coal industry has been even more difficult and politicized than reforming Many countries are struggling to liberalize its electricity and gas industries. Coal reform has divided Parliament and the government into their energy markets and to replace rigid two camps—one supporting populist policies and the other supporting fiscal realism—and the state controls with private initiative and ownership. Ukraine illustrates the extreme difficulties of this transformation when a country's macroeconomy is severely imbalanced, enterprise governance is poor, and political leadership is ineffective -shortcomings that also exist in several other countries of the former Soviet Union. This Note is the third of





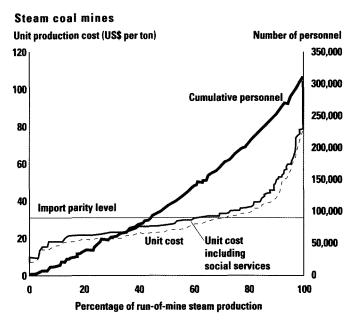
Source: Ukraine Ministry of Coal Industry.



FIGURE 2 COAL INDUSTRY VIABILITY, 1995

Coking coal mines Unit production cost (US\$ per ton) **Number of personnel** 250,000 70 **Cumulative personnel** 200,000 60 50 150,000 40 100,000 Import parity level 30 **Unit cost** 20 50,000 Unit cost including social services 60 RΩ 100 Percentage of run-of-mine coking production

Note: The figure shows, for example, that in 1995 about 30 percent of coking coal was produced in mines with a unit cost above import parity, and to produce this uneconomic coal the mines employed over 100,000 miners.



Source: Ukraine Ministry of Coal Industry.

In 1995, when reform in the power industry was well under way and the gas industry had embarked on the first steps toward reform, Ukraine's coal industry remained untouched by the changes happening in the country. In that year the coal industry employed 650,000 workers, who produced 66 million tons of coal in 276 mines and 64 washing plants. In addition, 200,000 people were employed in supporting functions such as mine construction, machine building, and social services (such as kindergartens).

Labor productivity was far lower than in other countries, and about one-third of the mines produced coal at a cost above the import parity level (figure 2). While a coal miner in Ukraine produced on average about 100 tons of (washed) coal in 1995, the comparable figures were 200 tons in Russia, 400 tons in Poland, 2,000 tons in the United Kingdom, and 4,000 tons in North America. High-cost mines received US\$400 million in cross-subsidies from low-cost mines. The coal industry as a whole received US\$240 million in budget subsidies, and US\$500 million more from the rest of the economy in the form of an increase in the stock of (net) accounts payable during that year. Labor costs were too high, with payroll and disability allowances making up more than 40 percent of operating costs in 1995 (figure 3). Additional labor-related expenses are included in the notional profit margin. (Little funding was available for capital investment. Depreciation charges were negligible as a result of undervaluation of assets, suggesting that true operating costs were even higher than the official figures show.)

The 383 coal industry enterprises were managed by the coal ministry, which, following the tradition of central planning, appointed enterprise managers, set production targets and prices, and allocated physical and monetary flows. But this old industry model was under severe strain:

Profitable mines were reluctant to transfer revenues to unprofitable mines, bringing them to the brink of financial collapse. The accumulation of uncollected receivables by the

central coal marketing agency (Uglesbyt) created strong incentives for mines and mining associations to arrange their own sales (mostly through barter to minimize the risk of the coal ministry confiscating their revenues).

- Lower prices, better availability, and superior quality led imported coal to capture an increasing share of the domestic market, reaching 20 percent in 1995. The lower prices and better service would gradually erode public sympathy for coal miners.
- Miners were angered by delays in wage payments and by the deterioration in their wages relative to those of other industrial employees in Ukraine.

To prevent social unrest in the main coal regions, the government had to pump liquidity into mines using unplanned budget outlays and credit guarantees. The coal industry and the Cabinet realized that fundamental changes were needed in industry operations. The proposed reform program, adopted in a presidential decree in February 1996, was discussed at a conference in April 1996 attended by central and local government officials, parliamentary representatives, labor leaders, and mine managers. Many of the labor leaders expressed support for the reforms, including the closure of nonviable mines, subject to the availability of adequate social assistance. To cover part of the cost of the program, the World Bank approved a US\$300 million loan to be provided to the budget in two equal tranches. The first tranche was disbursed in December 1996.

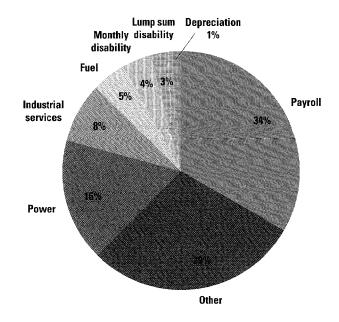
Initial achievements

Capitalizing on a rare consensus in government and temporarily muted opposition in Parliament, reformers pushed through several important measures in 1996–97:

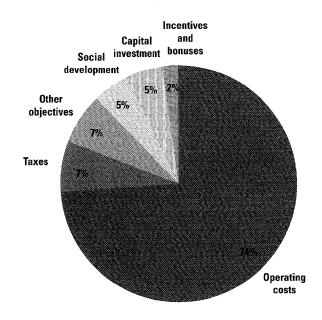
 The 276 coal mines were divided into four categories. In the first category were 76 profitable mines intended to be privatized in the medium term. The second category contained 105 mines that were given one year to regain profitability and graduate to the first category; otherwise they would be moved

FIGURE 3 HIGH LABOR COSTS

Composition of operating costs for all mines, 1995



Distribution of revenue from coal sales for all mines, 1995



Source: Ukraine Ministry of Coal Industry.

to the third category. In the third category were 75 mines, scheduled to be closed within three to five years. At the 20 mines in the fourth category production stopped in anticipation of immediate closure.

- Mines in the first and second categories were corporatized and placed under fifteen stateowned holding companies. (These holding companies also included washing plants and marketing organizations.) Mines in the third category were put under the direct supervision of the coal ministry. Mines in the fourth category were transferred to a newly created mine closure agency, the UDKR.
- The use of accounting prices to effect crosssubsidies from low-cost to high-cost mines was abolished. Corporatized mines became free to market their own coal domestically and abroad at liberalized prices. (Retail prices paid by households remained controlled by the Ministry of Economy, but the difference between wholesale and retail prices was covered from the budget.) Noncorporatized mines were required to report to and agree on their prices with the Ministry of Economy.
- Managers of mines in the second and third categories were prohibited from making investments or recruiting new staff. Average wage increases were limited to the level of inflation. Bonuses were to be tied to reductions in operating costs.
- Financing of new mines was cut from the budget, and investment projects that were not economically justified were canceled.
- Noncore activities were separated and privatized. A program to transfer mines' social assets to municipalities was drawn up (and implemented for fifteen mines), including temporary financial support from the central government to municipalities to cover operating costs.
- A target was adopted to close twenty mines a year. Mine closure procedures were developed with attention to social and environmental mitigation measures. Social mitigation measures included the payment of overdue wages, severance pay equal to three months' wages, free coal for the winter, and special assistance programs such as job search coun-

seling, reemployment support, microcredit for small businesses, and labor-intensive public works projects.

In late 1996 and in 1997 budget support to the coal industry was refocused on restructuring. Of the US\$800 million budgeted for the coal industry in 1997, US\$300 million was earmarked to cover the physical cost of mine closures, statutory benefits to dismissed miners, the cost of maintaining and rehabilitating social assets transferred to municipalities, and special assistance programs for the unemployed. Production subsidies were to be concentrated on mines in the second and third categories and delinked from the volume of raw coal produced.

Relative to coal industry reform in other countries (Belgium, France, Germany, Hungary, Poland, Russia, the United Kingdom), Ukraine's program was notable for combining a market-driven approach to select the surviving mines with a centrally controlled process to close mines that did not make it. Especially innovative was the establishment of a single agency to implement mine closures and manage most of the associated social mitigation programs.

Emerging reform difficulties

Actual implementation of the 1997 coal budget was skewed in favor of production subsidies, while a major shortfall appeared in funding the closure of loss-making mines and associated social mitigation measures. Although closure of the first twenty mines commenced on schedule, there were delays in payments of statutory benefits to laid-off miners and in payments to contractors implementing the physical closures. Several additional mines applied for transfer to the agency responsible for mine closures, but it could not accept them for lack of funds. After the social assets of fifteen mines were transferred to municipalities, the social asset transfer program also came to a halt for lack of funds, and special assistance programs for unemployed miners encountered major delays. The closure of three mines was funded directly by the World Bank in the context of a

pilot project, and these mines were less affected by the problems mentioned above.

The activities of mine managers remained focused on lobbying for production subsidies. Employment was not rationalized, and the expected concentration of mining activities on better mines did not emerge. The accumulation of payables, including wage arrears, continued unabated, increasing by US\$1 billion between August 1996 and August 1997 (see figure 1). Actions designed to contain cost increases were not implemented, and budget constraints on the coal industry remained soft. Most mines in the first category continued to receive production subsidies that remained tied to the volume of coal produced. The coal ministry argued that providing production subsidies to the low-cost mines was the only way to ensure the timely payment of wages, since these subsidies were virtually the only source of cash for the mines as a result of the widespread use of barter. Few employment reductions took place in operating mines. Neither a bankruptcy framework nor a debt restructuring mechanism was put in place. And no effective supervision mechanism was established for mines in the third category. Given these deviations from the agreed reform program, the World Bank could not release the second tranche of the US\$300 million loan in 1997.

Pressures to reverse reform

Arranging barter trades and bombarding the finance ministry and Cabinet with requests for additional investment funds and production subsidies became the main occupation of the coal ministry. Seven new mines were under construction when the budget stopped providing investment grants. The coal ministry strongly argued for the completion of these projects despite clear indications that several of the new mines would not have been able to cover even recurrent costs. If funded through a loan, the additional capital cost of the best of these mines would have implied a debt service obligation of US\$50 per ton of coal produced while the estimated market value of the coal was US\$28 per ton. The minis-

try also developed new "reform" proposals, including centralizing all coal sales under the ministry (that is, reestablishing Uglesbyt), transferring mines in the third category to holding companies (that is, reestablishing previous coal associations), and transferring responsibility for mine closures from the UDKR to these companies. At the end of 1997 the ministry submitted a budget request of US\$2.6 billion for 1998. When the Cabinet denied the request and proposed

Arranging barter trades and bombarding the finance ministry and Cabinet with requests for additional investment funds and production subsidies became the main occupation of the coal ministry.

the same coal budget as in 1997 (US\$800 million), senior ministry officials began soliciting additional funds from Parliament. This effort, however, was cut short by upcoming elections.

As soon as the new Parliament was formed, about forty mines went on strike, demanding the payment of overdue wages, additional wage increases, restrictions on coal imports, and a new system of coal purchases to be operated by the state. In one of its first resolutions, Parliament asked the Cabinet to develop a proposal for increasing budget support for the coal industry, reviving state orders for coal, developing the 1999 budget for the coal industry based on the estimates provided by the coal ministry, and preparing—without the help of foreign consultants—a new law on the long-term development of the coal industry.

A window of opportunity reopens

Attempts to reverse reform backfired, however. Popular support for miners weakened when,

starting in mid-1998, representatives of other professions that were also suffering from unpaid wages (such as teachers and nurses) argued publicly against giving special treatment to miners. Recognizing an opportunity, the government decided to revitalize the process of

In the long run rationalization of the Ukrainian coal industry is an economic imperative, and will likely include the closure of at least half the mines and an even larger reduction in the labor force.

coal industry restructuring. A new coal minister was appointed in early June, and agreement was reached with the World Bank about a revised reform program—including the closure of twenty-four additional mines by the UDKR in the second half of 1998 and early 1999 (bringing to fifty-two the number of mines closed or under closure).

In addition, the government asked the Bank to prepare a project that would support further restructuring of the coal industry, including additional mine closures and rationalization of the operations of potentially profitable mines. Despite pressure to use all available funds to settle overdue wage bills, the budget provided enough money to the UDKR to commence the closure of ten mines (of the agreed twentyfour), and the Bank approved the release of part of the remaining US\$300 million loan.

Implications for the future

Although the depreciation of the hryvnia in August and September 1998 is expected to reduce the losses of operating mines, coal industry managers and labor unions will likely continue their efforts to increase budget support for the coal industry, to reduce coal imports from Poland and Russia, to remonopolize

the trading of coal, and to restore the privileged status of coal miners. These efforts will probably meet with sympathy in Parliament, but they will be opposed by the Ministry of Finance, Cabinet of Ministers, and presidential administration, because Ukraine simply cannot afford the associated costs. Large coal consumers such as the power and steel industries will also oppose the rollback of reforms.

It is difficult to predict the outcome of the conflict between those supporting reform and those opposing it. Reversing reform would place a severe burden on the budget and prolong the depression in the regions where most mines are located. In the long run, however, rationalization of the Ukrainian coal industry is an economic imperative, and will likely include the closure of at least half the mines and an even larger reduction in the labor force.

Lessons

Although far from complete, coal industry restructuring in Ukraine offers several lessons that can be of use for reformers in that country as well as in others:

- A looming financial crisis was a necessary but insufficient condition for starting reform in 1996. Traditionally, coal miners were the best-organized group of workers and enjoyed widespread political support. The launch of reform was made possible by the split of the former "official" union into several competing groups advocating different solutions to the crisis and accepting the need to close the costliest mines.
- Liberalization of coal imports and prices helped dispel the myth that maintaining a large coal industry is essential for the security of Ukraine's energy supply. The favorable price, quality, and reliability of steam coal from Poland and Russia made it increasingly clear that coal industry subsidies simply redistribute income in favor of an extremely vocal group of workers and managers.
- Reforms need national champions with strong line authority over branch ministers and industry managers. The weak position of the

Ministry of Finance within the Cabinet negatively affected coal reform. The ministry failed to protect fiscal interests by controlling the coal industry's use of budget resources. The lack of a powerful player demanding results on the ground in return for every hryvnia spent increased the coal industry's appetite for production and investment subsidies.

- Assigning the sector ministry to implement reform was a costly mistake. The coal ministry's desire to maintain operational authority over mines and to stop (or at least slow) the shrinking of the industry has proven stronger than the vision of a reformed, healthy mining sector. In the long run this ministry should be dismantled and its legitimate functions entrusted to a new Ministry of Trade and Industry. In the interim a streamlined Ministry of Fuel and Energy should be established based on the coal and power ministries, Ministry of Power and Electrification, and State Oil and Gas Committee.
- The closing of uneconomic mines proved less controversial and progressed better than the rationalization of the activities of potentially economic mines. Possible explanations include the ease of selecting mines for closure given the hopeless situation of many of them; the attractiveness of the severance package, which includes the payment of several months of overdue wages to workers in closing mines; and the lack of incentives for managers of state-owned mines to initiate layoffs.
- A quick-disbursing loan with one or two tranches is not the right instrument for World Bank support to a long and unpredictable reform process. The Bank's new adjustable program loans might be better suited to achieving a balance between signaling long-term commitment and maintaining the flexibility needed to respond to implementation problems.

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