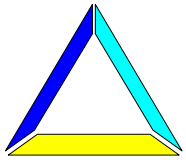
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The Future of Ferrous-Metal Industry in Ukraine

-An alternative strategy-

Summary

This paper discusses the current situation of Ukraine's ferrous-metal industry and suggests a future strategy for state-support policies.

Domestic production in recent years has been distorted by e.g. import regulations for inputs or cross subsidization of households and low-performing industries. On the other hand, the state has supported the industry through granting reduced profit-tax rates. In part as result of such policies, but mainly due to recovery of export markets following the end of financial crises in Asia, the industry has switched from making losses in the late 1990 towards earning large profits (before and after taxes) in subsequent years. However, tax privileges have also given rise to anti-dumping investigations against Ukrainian firms abroad and thus, are serious threats for future export possibilities.

Currently, the future design of support policies is on the political agenda. Most Ukrainian policy makers opt for continuation of tax privileges. In contrast, we propose an **alternative strategy** in which both, distortions as well as privileges, are fully abolished. Therefore, we propose the following **objectives** and **measures**:

Objective 1: Create **transparent** and **competitive markets**:

We suggest the following **measures**:

- Eliminate **tax privileges**, **cross-subsidization/taxation schemes** and **trade restrictions** on imports of inputs.
- Impose **hard budget constraints** (improving **effectiveness** of **rule of law** and **bankruptcy procedures**)
- Speed up **privatization**.

Objective 2: Maintain **social stability** and **acceptance** of the reform:

We suggest the following **measures**:

- Social policies targeted to dismissed workers through **severance payments**, **re-training** and **early-retirement programs**.
- Create **alternative employment** through stimulating **entrepreneurship** (e.g. provide start-up finance) and **small and medium-size enterprises** (e.g. deregulation, improved infrastructure, transparent tax code).

Outline:

I. Introduction

II. Industry Structure and Problems

III. Current Support Policy

IV. Alternative Future Policy

V. Conclusions

I. Introduction

The ferrous-metal industry is an important sector for the Ukrainian economy. It employs more than 500 thousand workers (around 6.5% of total labor force), produces almost 30% of total industry output and accounts for shares of 15-20% or so in total industry value added and 5% in GDP. Even more important, it accounts for the by far highest share of foreign currency revenues from exports (around 40% in recent years). These indicators, together with the traditionally high importance of the steel industry during the communist era, explain the high public attention that the sector receives. In particular, in response to structural problems, distortions on domestic markets and—to a lesser extent—over-regulated world markets, several direct supporting schemes have been introduced during the transition period. In response, Ukrainian producers have been targeted by anti-dumping investigations on foreign markets, leading to new problems for domestic producers and thus, new discussion on the need of public support for the industry.

Recently, two events have again stimulated this debate. First, the expiration of a comprehensive supporting scheme—the "Economic Experiment at Ore-Mining and Metallurgical Enterprises of Ukraine"—earlier this year, which has given policy makers some scope to re-determine Ukrainian steel policy, and second, a draft on a future program for the ferrous-metal industry presented by the Ministry of Industrial Policy—the only program that has been explicitly formulated thus far. Against this background, we intend to present an alternative proposal for a market-based development plan for the industry, based on competition and efficiency grounds. We start with describing structure and problems of the industry and discuss previous support policies as well as those suggested by the Cabinet of Ministers. Then, we evaluate pros and cons of such instruments and finally, present our own ideas, which—to our belief—are more suitable to ensure sustainable and efficient performance.

II. Industry Structure and Problems

Ferrous-metal industry in Ukraine is highly concentrated. For example, the 5 largest firms (out of about 14) account for 70% to 75% of the sector's revenue and employ about 60% of the sector's labor force. Due to low domestic demand the industry mainly relies on sales on foreign markets with an export share of 75% to 85% of final output. While the sector accumulated losses in 1998 (during the financial crises in Asia and Russia), financial performance has strongly improved in the following years (Table 1). Nevertheless, economic performance across firms is quite different. In 2000, 2 out of the 12 biggest firms (in terms of output) still made losses, and accounted for only 9% of total profits in 2001. On the contrary, 4

firms made positive profits even in 1998 and the share of the two best-performing firms in total profits was about 53% in 2000 and almost 60% in 2001.[1]

Table 1 Profits in ferrous-metal industry* (in UAH m).

	Before-tax Profits**	After-tax Profits***
2001	2,284	1,941
2000	3,884	3,279
1999	561	470
1998	-822	-959

* Aggregate of 12 largest firms in terms of output.
** Calculated at tax rates of 30% in 1998, 9% in 1999 and 15% in 2000 and 2001.
*** Source: Investgazeta Top 100 Rating (various issues).

On a sector level, there are large capacity overhangs,[2] in particular for labor.[3] The latter corresponds to an also exceptionally high share of steel production in open-hearth furnaces.[4] This technology is outdated, very energy intensive and produces low-quality steel. In the future, substantial investments are due since about 80% of domestic production is sold abroad where quality is increasingly important and competition—e.g. from Asian producers—is expected to become more intense.

In addition, several distortions affect the production process:

First, there are various cross-taxation/subsidization schemes. For example, supplier of energy (gas and electricity) and transportation are—for reasons of social support—obliged to charge below-cost prices to final consumers and make up for their losses through charging higher tariffs to industries.[5] With energy use accounting

[1] Investgazeta Top 100 Rating (various issues).

[2] On average, only about 60-65% of available production capacities have been utilized during the last 5 years. As a rule of thumb, an efficient utilization rate should be around 75% on average.

[3] Labor productivity of crude steel production in Ukraine is lower than for all other major steel-producing countries. While crude steel production per worker equals 590 metric tons in the EU, 430 metric tons in Brazil or 350 metric tons in South Africa, the corresponding figure for Ukraine is only about 75 metric tons.

[4] According to the International Iron and Steel Institute, only the former-USSR states account for shares of open-hearth furnaces greater than 10% in total steel production, but even within the region, Ukraine's share is among the highest.

[5] In addition, structural problems in energy supply—e.g. restrictions for gas use during winter—further contribute to such distortions.

for more than 30% of total production costs, and industry tariffs about twice as high as for private household, corresponding distortions are substantially large. Similarly, there are also cases of cross-subsidization among industries. E.g., firms of several sectors—including ferrous metal—are required to contribute to a fund that covers expenditures from accidents at work at a pre-determined percentage of wage expenditure that is not only related to the actual risk in the industry but also to its financial performance. Since most of the claims to this fund are from employees of coal extracting firms—an industry with low financial performance—other industries are essentially obliged to co-finance the consequences of frequent accidents in coalmines. According to estimates by Ilyich Iron & Steel Works—one of the top-5 firms—these additional costs amount to approximately UAH 9.1 m per year (around 5% of the firm's wage bill).

Second, until 1998 steel producing firms have accumulated arrears of about UAH 5 bn.[6] In subsequent years, payables have declined with rising exports and profits. By 2000, steel-producing firms even became net creditors to the state budget, mainly because of unpaid VAT refunds.[7] As a consequence, firms were allowed to conduct mutual settlements with e.g. energy providers, which has further reduced transparency in the market.

Third, markets for raw materials—iron ore and scrap—are regulated as well. For example, in March 2002 the government restricted imports of iron-ore—which accounted for 7.4 m t. in 2000—to 4 m t. This measure is likely to hurt the industry since in particular iron-ore from Russia usually is available for lower prices than Ukrainian ore and has been used before by steel mills in response to uncompetitive domestic prices. Moreover, some steel-producing firms even expect that the quota will cause supply shortages by the end of 2002. For scrap, the situation is more complicated. Due to high levels of criminal activities in scrap trade, a special law was imposed,[8] which—among other measures such as licensing schemes—also enables the government to reduce exports through quantity restrictions. Although no quota has been set so far, the Cabinet of Ministers might do so in the near future since licensing

[6] Source: State Statistics Committee of Ukraine, company accounting balance sheet (form 1b). The biggest part of total arrears of the ferrous-metal industry in 1998 was unpaid bills for purchased goods and services (57%), followed by payables to the state (18%). The share of wage arrears was fairly small (2.3%).

[7] Net total receivables accounted for UAH 800 m in 2000.

[8] Criminal activities are theft of machinery and installations by organized gangs with the purpose of selling it as scrap if (world market) prices are relatively high. The government perceives this as important enough to justify a law that regulates scrap trade in order to reduce incentives for such activities.

schemes and other measures have failed to reduce crime rates thus far and the ferrous-metal industry is lobbying for such export restrictions in order to reduce domestic prices.

Fourth, public involvement into the industry through direct ownership is still quite strong. The state holds large shares in at least 3 of the 10 top-profit-making firms, and even 100% of the most profitable one (Krivoroshstahl). This is likely to diminish incentives, to reduce management potential and to have negative effects on investment perspectives.

In summary, the list demonstrates how ferrous-metal industry has to cross-subsidize households and other industries of weaker performance.[9] As compensation, the industry has lobbied for state support. In the next section we will sketch the most recent supporting schemes that were implemented.

III. Current Support Policy

State support to ferrous-metal industry during recent years has been granted through tax privileges as follows:

- The law on "Conducting an Economic Experiment at Ore-Mining and Metallurgical Enterprises of Ukraine" was in place from July 1999 to January 2002. Main intention was to temporarily support the industry by increasing their working capital as many firms reported losses in the late 1990. Firms participating in this "Economic Experiment"—effectively all firms in ferrous-metal industry—mainly benefited from reduced profit tax rates (9% in 1999 and 15% as of 2000, respectively, instead of 30%) conditional on reinvesting profit tax savings into their working capital.[10]
- In 2002, profit-tax privileges are continued for participating firms. However, to prevent the possibility of misuse by not-reinvesting tax savings (e.g. the Accounting Chamber presented such reports), the current regulation taxes firms at the full rate of 30%. Then, state treasury transfers half of this revenue to special accounts from which it is supposed to be send back to the firm in order to finance specific investment projects (thus, the firms essentially faces a profit-tax rate of 15% but with high administrative costs).

[9] Although a reliable quantification of such contributions is not possible mainly due to data limitations, most of the distortions strongly suggest that on average, ferrous metal is taxed rather than subsidized.

[10] Additionally, other tax obligations (Roads Fund Fee, State Innovation Fund Fee and Environmental Pollution Fee) were reduced. However, most of these taxes were cancelled in 2000.

Government Suggestions for Future Policies

The Cabinet of Ministers has submitted a draft law to Verkhovna Rada to secure industry development till 2010. It determines firm-specific investment projects financed through further continuation of profit tax privileges as well as by other sources (including direct contribution from public funds). These projects intend to provide a production structure capable to effectively supply a projected level of demand by 2010. In addition, the program suggests several labor-market regulations to support wages, regulate labor shedding and reorganize labor force in the industry. Finally, it intends to continue privatization and grants further tax exemptions for e.g. use of environmental-friendly or energy-saving technologies.

Assessment

The practice of supporting the metallurgical industry by granting tax privileges has been controversially discussed in recent years. For example, in its assessment of the "Economic Experiment" the Ministry of Economy and European Integration reports that firm profits as well as tax revenue and payments to pension funds increased in 2000 (compared to 1999) while barter operations, wage arrears and deficit of working capital declined. However, it is unclear to what extent these positive results are due to tax privileges rather than to more favorable general conditions for steel exporters in 2000. In particular, world market prices for steel increased substantially from 1999 to 2000[11] and following the end of the Asian crises also demand for steel exports increased again.

The discussion on tax privileges also stressed clearly negative effects. First, there is the general argument that tax privileges are an unjustified preference to ferrous metallurgy vis-à-vis other sectors and thus, imply another form of cross-subsidization. Second, in particular the Accounting Chamber reported on misuse of tax savings that were not reinvested properly. Finally, tax privileges also gave raise to several anti-dumping investigations against Ukrainian firms on export markets. Since profit-tax refunds through the State Treasury have not always taken place as scheduled (thus, firms did not fully benefit from lower taxes), several firms—among them the two major players in the industry—requested their exclusion from current supporting schemes during this year.

A further discussion of current policies, in particular the "Economic Experiment"—including analysis of costs and benefits—can be found

[11] For example, the Worldbank's price index for steel products (1990=100) rose from 68.4 in 1999 to 76.4 in 2000.

in Working Paper No. 16 of the Institute of Economic Research and Policy Consulting (IER).[12]

IV. Alternative Future Policy

After several years of controversial policies of simultaneous subsidization and taxation, it is time to re-organize efforts and to design a consistent scheme of future policies. As general strategy we urge to create a competitive environment in which the most efficient firms can use their resources at minimal costs in order to achieve the highest possible growth rates. Therefore, we suggest as first objective:

1. **Create transparent and competitive markets.**

At the same time, firms that find themselves unable to compete in such an environment should exit the market. In order to ease social tensions associated with closures of large enterprises and to maintain social acceptance of the reform, we also suggest social policies targeted directly to those in need (e.g. dismissed workers) and to create alternative employment opportunities by stimulating development of other sectors. Therefore, a second objective must be:

2. **Maintain social stability and acceptance of the reform.**

In order to lead to sufficient results, both objectives can be realized through a combination of several measures that we will discuss now. Both objectives should receive similar priorities. Nevertheless, different priorities can be applied for the measures suitable to achieve each of the objectives.

Measures to achieve objective 1:

The following **measures**, sorted by priority, need to be implemented:

- **Elimination of** all existing **tax privileges** to the ferrous-metal industry. In particular, setting **profit tax rates** for all firms back to the national level (currently at 30%, but this tax burden should soon be lowered for all firms).
- **Eliminate trade restrictions** such as the current import quota for iron ore and do not impose new ones (e.g., export quota for scrap).

[12] Legeida, N. (2002): The Economic Implications of Government Support for the Steel Industry: The Case of Ukraine. Working Paper No. 16. IER, Kyiv (www.ier.kiev.ua).

- Impose **hard budget constraints** at the **firm level**. In particular, the **state** should **never** act as a **"lender of last resort"**. Instead, key measures are to **strengthen courts** (so that e.g. receivables can be successfully reclaimed) and **bankruptcy procedures**. In both cases, substantial progress can already be achieved by **improving effectiveness of existing legal systems**, and does not require reforms of legal texts in all cases.[13] Furthermore, **refunding public obligations**, in particular **VAT revenue**, will induce strong and necessary support to firms.

- **Complete privatization**. Establishment and protection of private property are key requirements for a market economy to work. Without them, no economy can unfold its full potential. This also holds true for the transition process in Central and Eastern Europe, as several empirical studies have demonstrated.[14] The general finding of such studies is that private firms perform better than state-owned ones, mainly because of more efficient and market-oriented management and investment planning. Hence, privatization should be continued without delay and efforts should in particular focus on profit-making state-owned firms. In addition, it also helps to attract badly needed foreign investments in the industry (as e.g. the case of Ispat Karmet Steel Works in Kazachstan demonstrates). As a result, **firm performance will improve** and **additional revenue to the public budget** will be created and can be used for e.g. repayment of debts so that e.g. no further interest has to be paid. Otherwise, as long as ownership, decision-making and responsibility are not essentially unified, there will always be possibilities for misuse of public money, setting of wrong incentives, soft budget constraints etc.

  Concrete tasks for Ukrainian policy makers are to further **reduce shares of public ownership** (e.g. for Azovstal) and to **immediately start privatization of Krivoroshstahl**, the largest firm of the ferrous-metal industry.

- **Elimination of** all **cross subsidies and cross taxations** listed above. This focuses in particular on provision of **gas**, **electricity**, and **railway transportation**. Tariffs need to be set on cost-covering levels for all consumers while social obligations must be covered by social compensation schemes, which in turn target

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[13] Vincentz, V. and B. Dodonov (2001). Does Ukraine need more bankruptcies? Issues of market exit in a distressed economy. German Advisory Group for Economic Reforms with the Ukrainian Government. Policy Paper Q13.

[14] E.g. see the discussion in Pivovarsky, A. (2001). How does Privatization Work? Ownership Concentration and Enterprise Performance in Ukraine. IMF Working Paper WP/01/42. Washington, D.C.

these efforts exclusively on low-income households.[15] Furthermore, employer-contributions to social insurances have to be allocated according to reasonable criteria. While in principle economy-wide, salary-based contributions are justified for e.g. unemployment insurances or pension schemes this is definitely not the case for insurances against costs of industrial accidents. In this case, industry-specific risks need to be considered whereas economic performance must not. Otherwise, such a scheme not only implies an unjustified taxation of firms where risks are low and/or performance is high, but it also distorts incentives to sufficiently invest into prevention and safety measures at high-risk firms/sectors and thus, also reduces the extent to which accidents will be avoided in the future.

Obviously, this agenda demonstrates that effective support to the metallurgical industry is not only an isolated and industry-specific task. Rather, it amounts to eliminate imperfections at various stages of the production chain that also address other sectors (transportation, energy, banks) as well as the public budget. Measures on top of the list should receive higher priority than those given at the end.

Measures to achieve objective 2:

Expected structural changes within the industry will have strong social consequences—in particular labor shedding. Thus, in order to maintain social acceptance of the reform, an immediate obligation for the state is to **provide social support**, e.g. through severance pay, retraining and early-retirement programs to laid-off workers.[16] As second step, in order to maintain living-conditions for people in affected regions, public efforts also have to focus on creation of **economic alternatives**. All these measures should be directly **targeted to those in need**—laid off workers—rather than to the industry in order to prevent a **structural change** that is **unavoidable** anyway. Indeed, it is simply the necessary—and so far postponed thanks to soft budget constraints and expensive state support—innovation of production processes and sector restructuring that will cause dramatic layoffs. Even if we consider that Ukrainian steel producer will always preserve their competitive advantage of low wages through high shares of labor use, the necessary reduction of labor force might still be in the range of 25-

[15] In effect, a scheme that provides energy and transportation at generally cheap tariffs tends to support medium- and high- rather than low-income households since the former use such services more intensively. Thus, reforming those schemes in the proposed way is not only more efficient, but also provides more social justice!

[16] By this we mean a special program designed for newly unemployed steel workers, in addition to general social-support policies.

50% of current employment (about 100 to 200 thousand workers).[17] Budget implications will be significant. However, expenditures for social support and regional development can be financed through different sources. An obvious one is increased profit tax revenue from ferrous-metal industry, roughly estimated at UAH 250-350 m per year.[18] Furthermore, revenue from privatization of state-owned firms should be used and Ukraine can also apply for funding of regional development projects by international donors.

While we see provision of social security measures as an urgent task of high priority, economic alternatives cannot be created immediately. This however does not imply that the task is unimportant. Rather, public efforts need to be well planned and coordinated in advance. Following the positive experiences of restructuring regions dominated by heavy industry in Western Europe in the 1970s, we propose to establish **public agencies** dedicated to the industry and/or regions with the purpose to administer obsolete assets and redundant workforce of firms after bankruptcy procedures are finally closed. Therefore, these agencies have to be endowed with public funds in order to offer severance pay to laid-off workers (preferably distributed over time to ensure a continuous income), to offer early-retirement programs for those above a certain age, to organize re-training and education programs, to foster alternative regional development (e.g. through improved infrastructure and governance quality) to attract new (foreign) investors, and to stimulate entrepreneurship and the development of small and medium size businesses (e.g. through deregulation, a simple and transparent tax system or by providing start-up finance). As general rule for such efforts to be successful, newly created jobs must be market- rather than subsidy-led, and agencies must provide transparent procedures. This includes appointing of agency staff (preferably outsiders) and continuous evaluation by non-government organizations (e.g. accounting firms) in order to prevent corrupt practices and misuse of public funds.

V. Conclusions

We propose an alternative strategy for ferrous-metal industry in Ukraine. In particular, we suggest providing the conditions for **efficiency-led restructuring**. The enforcement of hard budget constraints will, together with an effective bankruptcy law, induce exits of those firms that lack efficient production capabilities without that the government has to specify an explicit—and possibly biased—selection program. In turn, exits of low-performing firms

[17] Even with half of its current work force, Ukrainian steel production would still account for one of the lowest rates of labor productivity in the world.

[18] Additional 15% of firms' profits where net-profits are calculated as average over several years of different world-market conditions.

will enable the remaining, privatized ones to better utilize their capacities thereby raising productivity and efficiency levels and taking full advantage of scale economies. Thus, **production levels and foreign exchange earnings do not have to decline**. In addition, the objective to create a sound industry structure based on competitive grounds will not cause a problem for Ukraine in international trade negotiations (as e.g. an export restriction on scrap will do since it lowers scrap prices in Ukraine). On the contrary, it will make Ukraine's efforts for WTO membership easier and will give a strong argument for international trade negotiations.

Nevertheless, this strategy will also bring upon substantial structural changes, in particular lay offs. This is the area where future public support will be called for. But, the by-then sound industry can be taxed in an equal way—consistent with tax rates for the rest of the economy—to raise the budget revenue necessary for financing measures to foster regional development and alternative job creation.

F.P., Lector R.G.

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