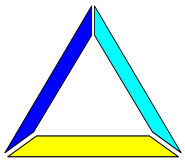
INSTITUTE FOR ECONOMIC RESEARCH AND POLICY CONSULTING IN UKRAINE

GERMAN ADVISORY GROUP ON ECONOMIC REFORM

Reytarska 8/5-A, 01034 Kyiv, Tel. (+38044) 228-6342, 228-6360, Fax 228-6336
E-mail: institute@ier.kiev.ua, http://www.ier.kiev.ua



Q14

Fostering Vertical Integration in Ukraine: Advantages and Dangers

1 Resume

Competitive environment is an important factor of a sustainable economic growth. In countries like Ukraine the industrial structure had not undergone substantial changes before liberalization and privatization processes started. As a result, Ukraine initiated market reforms having serious structural problems in the manufacturing sector. Reducing horizontal and vertical dominance of incumbent firms in the industrial markets as well as reducing barriers to entry for new competitors remains an important issue of the competition policy in Ukraine. So far antitrust policy in Ukraine has been mainly focused on preventing and reducing horizontal integration among firms, while the problem of vertical integration has attracted less attention.

In a transitional economy**,** weak institutional environment and soft budget constraints **magnify firms' incentives to integrate vertically,** while potential negative effects of vertical integration on regulatory policy, privatization process and imposition of hard budget constraints are still in place.

Taking into account that transitional countries in general, and CIS countries in particular, started their movement towards market economy with a heavy burden of vertical and horizontal dominance, which still remains high, the ***considerations of costs and dangers*** of vertical integration should gain a ***heavier weight*** in the discussions of the cases for potential mergers than the arguments in its favor. New vertical mergers in the industries with a high level of market concentration should be considered with a special caution in order to prevent increase in structural dominance.

Clear and comprehensive merger guidelines need to include the policy parameters (criteria) that distinguish between pro-competitive and anti-competitive mergers considering **both horizontal and vertical structural dominance**. ***It is highly recommended to use similar EU experience*** in preparation of such guidelines. The prospects of integration into EU make it reasonable to maximize the compliance of the Ukrainian merger guidelines with those of EU.

A wide ***public access*** should be provided to ***merger guidelines***. This will help to make competition policy more transparent, credible and predictable contributing to anti-corruption campaign at the same time.

Design of a ***reliable methodology*** for ***measuring the level of vertical integration*** as well as its potential benefits/costs is important for a successful monitoring and decision-making with respect to competition policy. The measurement methodology should take into account a wide spread of cross-shareholding forms of vertical integration in Ukraine. Value-added-to-sales ratio can be used as one of the indicators for measuring and monitoring vertical integration on the firm level.

Approval of the vertical integration should imply an immediate ***stop of direct and indirect subsidization***. Effective application of bankruptcy procedures to the loss-making vertically integrated companies (as well as use of split-offs in restructuring schemes) would contribute to the reduction of exit barriers and lower incentives for vertical integration to become too big to fail. Potential mergers of profitable firms with the loss-makers should be carefully investigated in order to prevent ***conservation of inefficient firms*** and creating tax-evading schemes.

Favoring export-oriented industries with respect to vertical mergers has no economic justification. The only economic reason for vertical integration is an increase in efficiency (resulting in an increase of firm competitiveness) irrespectively of the geography of the market where it occurs.

2 Introduction

Since its establishment in 1994, Antimonopoly Committee (AMC) has invested a lot of efforts in the reduction of market concentration that has been inherited from the highly monopolized Soviet economy. So far antitrust policy in Ukraine has been mainly focused on preventing and reducing horizontal integration among firms, while the problem of vertical integration has attracted less attention. Moreover, there is a tendency to foster vertical integration in the export-oriented industries.

Is it always economically justified? What are the incentives for the enterprises to integrate vertically? What influence has it on the development of the competition policy in a transition economy like the Ukrainian one? Since detailed information on particular cases of vertical integration in Ukraine is presently unavailable, our analysis is limited to discussion of possible benefits and related costs of vertical integration in a transition context and comment on several issues of the relevant AMC's policy, namely criteria of assessment, measuring and monitoring problem, and priorities and arguments in favor of vertical integration. The driving forces of vertical integration (measured as value-added-to-sales ratio) and its efficiency results were studied using the data on financial results of 10 000 Ukrainian firms in 1996 and 1998. The findings suggest that the increase in vertical integration in late 90s was driven by the severe liquidity constraints during the crisis of payments. The strengthening of vertical links helped the firms with a relatively low initial level of vertical integration to overcome the disorganization effect of mid 1990s. At the same time, the firms with a relatively high initial level of vertical integration showed less flexibility in adjusting to the changing market environment, which resulted in the lower efficiency results. Increasing level of vertical integration was associated with increasing market concentration, which underlines the need of careful monitoring of the process of vertical integration, in particular, in the industries where the level of market concentration is already high.

3 Vertical integration: advantages and drawbacks

Vertical integration is a tightening of vertical relationships between a buyer (downstream firm) and a seller (upstream firm) via merger or internal growth. Contrary to the other types of vertical relationships like networks and markets structures, vertical integration represents an exclusive type of relationship between the manufacture and its supplier.

Different degrees of vertical relationships can be achieved using several organizational structures like direct merger/acquisition, continuous contracts, and cross-shareholdings.

3.1 Incentives & Benefits of vertical integration

The main incentive for the firms to integrate vertically is the possibility to curtail their transaction costs and increase their profits. From this point of view, benefits of vertical integration are the following:

- it reduces the costs of establishing and enforcing commercial contracts and minimizes the losses caused by opportunistic behavior of the contractors[1];
- it assures steady a supply of inputs;
- it is a powerful instrument to avoid price and tax regulations by performing transactions between the subsidiaries of a single company. A vertically integrated firm may shift profits from one stage to another via transfer pricing mechanisms, thus managing disposable income of the whole corporation;
- vertical integration provides a possibility to increase market power of the firm in the related markets, which positively influences price mark-up and increases firm's profit[2].

In a transitional economy, weak institutional environment and soft budget constraints **magnify firms' incentives to integrate vertically**:

- **poor enforcement of contracts** by legal system increases uncertainty concerning the timely delivery of inputs as well as payment for the final goods, and raises costs of having an unreliable trading partners which are difficult to punish for the losses. The firms try to minimize the costs of poor contract enforcement by strengthening vertical links[3];
- the problem of unsteady supply of inputs might be especially severe at the early stage of reforms due to a **"disorganization" effect** when old production links are, to a large extent, broken and costs of establishing new production links are

---

[1] In addition, asset's specificity provides economic justification of establishing an internally subordinated unit that produces custom-designed inputs instead of negotiating with an independent supplier. Quality considerations, information exchange, extensive coordination also might be examples of transaction costs that can be reduced.

[2] However, for the economy as a whole the sum of dead-weight losses might be prohibitively high.

[3] The problem of contract enforcement concerns not only transactions between private agents, but also the relationship between a firm and the state if the latter does not fulfill its obligations. VAT reimbursement (where government arrears presently exceed 3bn UAH) is a good example. When a downstream exporter buys inputs from the independent suppliers its payments include VAT, which is lost for the firm if reimbursement obligations are not fulfilled. Internal production of inputs is no longer to be treated as an external resource. Expected loses resulting from non-fulfillment of government's obligations are reduced.

high. This situation occurred in Ukraine in early 1990s after the breakdown of Soviet Union and CMEA, and was not overcome till late 1990s. The firms' response to the "disorganization" effect was an increase in vertical integration by widening the internal production of inputs;

- when financial markets are underdeveloped, **liquidity constraints** represent an additional incentive for vertical integration. The firms that suffer liquidity problems might benefit from vertical integration since within one integrated company the transactions with the intermediary goods (e.g. delivery of inputs by the supplier to a producer of final goods) become internal ones and do not need to be served by scarce liquidity resources. Therefore in response to the crisis of payments (a well known phenomenon since mid 1990s), the tightening of vertical links might be a successful strategy of firms' survival;

- in transition economies, large enterprises (in particular, those where the state holds significant stakes) often enjoy tremendous **soft budget constraints**. Increases in scale via vertical integration might be used to ensure inflow of subsidies using "too-big-to-fail" arguments. In this case, integration is caused rather by "moral hazard problems" and "hunting" for direct and indirect subsidies than efficiency considerations;

- weak institutional environment (which is typically associated with a considerable "shadow" activity and **low tax discipline**) provides an incentive to use vertical integration between profitable and non-profitable firms for a reduction of the effective profit tax burden.

To summarize, in transitional economies, the firms receive strong incentives to use increasing vertical integration as an adjustment to the inefficiencies of institutional environment. Is it always beneficial for the firm and for the society as a whole?

3.2 Drawbacks of vertical integration

The main drawback of vertical integration is related to the **restrictions it imposes on competition**. On the firm level, it causes dangers of:

a) decrease in efficiency in the medium and long run due to a lack of incentives for reduction of operating costs[4];

b) decrease in strategic flexibility of the firm facing significant changes in technology or demand for final products;

Technological shocks might lead to the appearance of new input substitutes or significant changes in market prices for inputs that are close substitutes. In both cases, it might be costly for an integrated structure to change the supplier and the sunk costs of the vertical integration become a burden for the firm.

Demand shocks in the markets for final (composite) products require a rapid adjustment in the volume of inputs. Thus, fixed costs of maintaining integrated unit may become a source of inefficiency, which transforms into lower competitiveness of the firm.

c) increase in costs of monitoring and multiple problems of incentives and control within the firm.

[4] While the degree of this cost-inefficiency remains an open question, it should be considered as a real threat, which is difficult to estimate and embody into business plans before the merger occurs.

The negative effects of vertical integration **for the economy as a whole** are connected with the decrease of competition in the related markets and increase in entry barriers:

- decrease of competition in the related markets occurs if vertical integration leads to a contraction of supply/demand for the rest of market participants;

- increase in entry barriers is a two-fold result of vertical integration. On the one hand, a new entrant into the market for final products may face insufficient supply of inputs. On the other, a new entrant into the market for inputs may find it difficult to distribute or deliver its production downstream. In both cases a newcomer has to invest heavily to establish its own vertically integrated structure to eliminate market power of a rival.

In a transition economy with weak institutions there are additional reasons for a cautious treatment of vertical integration:

- under conditions of soft budget constraints, vertical integration might **increase exit barriers** for the firms, which are "too-big-to fail". It is difficult for the government to close a large vertically integrated loss-maker, since the social costs of closure are prohibitively high. Such a structure cannot cease to exist overnight and therefore will require subsidization, which may prolong inefficiency by generating difficulties in imposition of hard budget constraints in the economy. It is especially dangerous for a country like Ukraine with a high share of loss-making firms and weak application of bankruptcy procedure;

- large vertically integrated companies are likely to have enough political power to influence the formation of legislation according to their interests, i.e. shaping regulatory environment in a way which is far from being optimal. Thus, the development of the new vertically integrated structures that concentrate significant economic and political power is usually correlated with an increase in the level **of state capture and state influence** which has a negative impact on economic growth;

- **privatization** of the large vertical structures is difficult since they might contain loss-making subsidiaries, which are unattractive for potential investors. East-European transition countries evidence suggests that successful privatization results are reached rather by splitting off vertical structures into independent units, what allows to distinguish between attractive and less attractive objects;

- the possibilities of tax avoidance associated with vertical integration have a negative impact on budget revenues.

To summarize, restrictions which vertical integration imposes on competition make it a subject for careful monitoring by competition authorities (Anti-Monopoly Committee). Potential negative effects of vertical integration on regulatory policy, privatization process and imposition of hard budget constraints should be considered by policy-makers while designing competition policies in transitional economies.

4 Problems of vertical integration in Ukraine: implications for the competition policy

According to the law "On the Antimonopoly Committee of Ukraine (AMC)", provision of the states protection of competition in entrepreneurial activity is an ultimate goal of the AMC. Since its establishment in 1994, the AMC has made steps forward in

reduction of market concentration in different industrial markets; however, the problem of structural dominance is far from being solved. So far antitrust policy in Ukraine has been mainly focused on preventing and reducing horizontal integration between the firms, while the problem of vertical integration has attracted less attention. There are several reasons for underestimation of vertical integration:

- its measurement and monitoring is difficult;
- there are no clear guidelines for vertical mergers/acquisitions;
- vertical integration is considered by policy-makers to be less harmful for the competition policy and economic growth than horizontal one, and is viewed as an instrument of improving international competitiveness of Ukrainian producers.

This chapter discusses the problem of measurement of vertical integration providing a rough estimation of its effects and driving forces on the basis of the firm level data from 1996/1998, vertical mergers guidelines, and analyses "priorities" for vertical integration across the industries as well as the most popular arguments used for its justification.

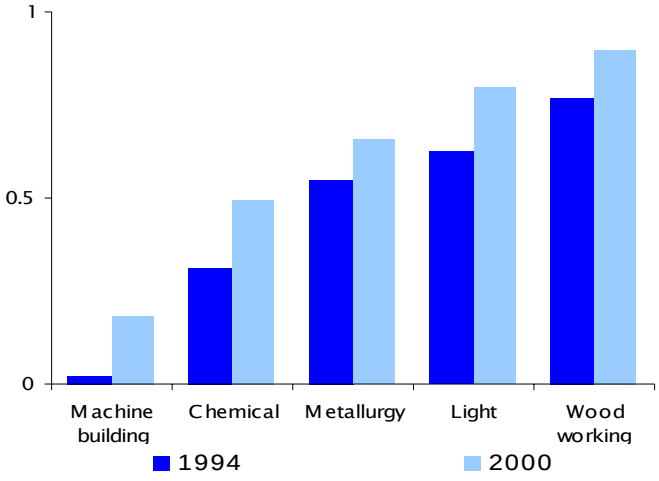
4.1 Measurement and monitoring of vertical integration.

a) Value added to sales ratio

The firm-level evidence concerning the process of vertical integration/disintegration in Ukrainian markets is unavailable for our analysis, since it represents commercial information and cannot be disclosed by the AMC. The development of vertical integration can be viewed while following the record of the affirmative decisions of AMC concerning mergers/acquisitions. However, it has failed to provide both a reliable estimation of the vertical integration level across industries and its dynamics.

One conventional measure of vertical integration is the value-added-to-sales ratio, which evaluates the share of products produced solely by the firm. It varies from 0 to 1, with 1 representing the maximum level of vertical integration. Value added to sales ratio as an indicator has its own drawbacks and limitations. It can be used for estimating dynamics in vertical integration within industry, but is irrelevant for direct cross-industry comparisons due to significant technological differences across industries, which vary greatly in input intensity. Notwithstanding the limitations, this indicator produces a plausible picture of the level of vertical integration and its changes when controlled for industry specificities.

Figure 1. Competition level in selected industries in 1994-2000



Source: AMC annual reports, own calculations

Since the main danger of the increase in vertical integration is connected with the restrictions imposed on competition, it is especially undesirable in the industries where the level of monopolization is already high. Figure 1 presents the data on the level of competition (measured as percent of non-monopolistic product groups) in selected industries in 1994 and 2000. Having information on vertical integration in 1996/98 it is possible to relate these indicators to each other assuming similar trends for

vertical integration development in the rest of the years. The correlation coefficient between an increase in competition in these selected industries and the average change in vertical integration (weighted by market shares) is -0.69. This shows that increase in **vertical integration had a negative correlation with the development of competition** across the sectors. This empirical evidence suggests that vertical integration is not neutral with respect to competition and should be carefully monitored by the competition authorities.

b) Rough estimates of causes and effects of vertical integration in 1996 and 1998

The value-added-to sales ratio was used as a measure of vertical integration to make a simple quantitative estimation of its driving forces and its impact on the firm's efficiency and performance results. The quantitative analysis is based on the OLS econometric method and uses the data on the performance results of 10 000 Ukrainian firms in 1996/98. The results of the linear regressions are presented in Table 1. Each specification included 3-digit industries dummy variables to control for cross-industry differences in technology (the coefficients for industry dummies are not reported in this paper).

Table 1
Results of linear regression (OLS method)

INDEPENDENT VARIABLES	DEPENDENT VARIABLES							
	Labor productivity (1998)	Capital productivity (1998)	Vertical integration (1998)	Vertical integration (1998)	Market share (1998)	Market share change	Profit per unit of output	Total sales to total costs
Labor productivity (1996)	0.4515*	-	-	-	-	-	-	-
Capital productivity (1996)	-	0.2317*	-	-	-	-	-	-
Vertical integration (1996)	-1.9077*	-0.1795***	0.1681*	0.1656*	-0.0009	-	0.1958**	0.4825**
Vertical integration change	0.0065**	0.0001	-	-	-	0.0319*	-	-
Barter transactions (1996), %	-	-	0.0771*	-	-	-	-	-
Cash payments (1996), %	-	-	-	-0.0941*	-	-	-	-
Market share (1996)	-	-	-	-	0.9139*	-97.21*	3.118**	1.617**

* - significant at 1% level
** - significant at 5% level
*** - significant at 10% level

- There is a strong **positive correlation** between the level of **barter** transactions across the industries in 1996 and the level of **vertical integration** in 1998, and at the same time, there is a strong **negative correlation** between the initial level of **cash payments** in the industry and the level of **vertical integration**. This shows that in the mid 1990s increase in vertical integration was used as a mechanism to alleviate **liquidity** problems.

- The degree of **vertical integration** in preceding year revealed strong **negative correlation** with the **efficiency** indicators measured both by labor and capital productivity. In other words, the higher was vertical integration the lower would be labor and capital productivity in the next period. In years of overall economic contraction a high level of vertical integration resulted in a low adjustment flexibility of the firms and efficiency losses. At the same time, **positive correlation** between **changes in** the degree of **vertical integration,** on one hand**,** and **efficiency level** measured by labor productivity, on the other hand, implies that vertical integration was likely to be used as an efficiency-enhancing tool. The data show that an increase in the level of vertical integration in 1996-98

was more pronounced at the firms with a lower initial level of vertical integration in 1996. This means that the firms with a relatively low initial vertical integration succeeded in using the strengthening of vertical links for efficiency improvements. Very likely, increase in vertical integration helped the firms to overcome the disorganization effect of mid 90s via substitution of broken links with the suppliers by internal production of inputs.

- The empirical estimation did not find a significant relationship between the level of **vertical integration** in 1996 and the firm's **market share** in 1998. At the same time, there was a significant **positive correlation** between the **change in vertical integration** and the **change in market share** in 1996-98. This shows that increase in vertical integration during 1996-98 was associated with an increase in market power of the enterprises.

- **A positive correlation** between the **price/cost margin measured** as profit per unit of output in 1998 and the level of **vertical integration in 1996 was found.** Similar relationship is observed between the total sales-to-total cost ratio and the degree of vertical integration. It might show that enterprises with a higher level of vertical integration had better opportunities to leverage transfer pricing and avoid taxes and excessive government regulation than their counterparts with a lower level of vertical integration. However, **an immediate effect** of vertical integration on the performance indicators **was not found**.

So, the findings suggest that the increase in vertical integration in late 1990s was driven by the severe liquidity constraints during the crisis of payments. The strengthening of vertical links helped the firms with a relatively low initial level of vertical integration to overcome the disorganization effect of mid 90s and preserve or even slightly improve their performance. At the same time, the firms with a relatively high initial level of vertical integration showed less flexibility in adjusting to the changing market environment, which resulted in the lower efficiency results. However, these firms were successfully exploiting the advantages of vertical integration for increasing their price-cost margins. Increasing level of vertical integration was associated with increasing market concentration. Though this tendency as such cannot be interpreted as purely negative, it underlines the need of careful monitoring of the process of vertical integration, in particularly, in the industries where the level of market concentration is already high.

c) Cross-shareholdings

Measuring and monitoring of the level of vertical integration in Ukraine should take into account the wide spread of ***cross-shareholdings*** which often represent *de facto* integration. Though Ukrainian competition legislation has some provisions for partial ownership control[5], this form of tightening vertical links between the firms does not necessarily attract the attention of AMC despite it might increase the level of structural dominance in the nearest future. For example, buying the shares of the company will not fall under investigation of AMC if the size of the stake does not reach the legal cutoffs. However, the control stake that allows to influence strategic decisions of a firm (including design of joint anti-competitive steps) might be smaller that the legal cutoff, especially in case when ownership is not highly concentrated. This means that the real level of vertical integration can be **highly underestimated**, since cross-ownership cases might not be viewed as an increase in vertical integration even if de facto they are.

The information on cross-shareholdings, which represents an example of vertical integration, is difficult to obtain. But one indicator of this phenomenon is appearance

[5] For example, purchase of 50% stake of monopolist requires an approval from AMC.

of the large new companies with vertically linked spheres of their activity. Currently, these new companies occupy nearly 25% of positions in the top-100 rating list with respect to income and export volumes (see Table 2). These intermediary companies normally are trading in products of the firms with which they maintain the cross-shareholding structures. A wide usage of cross-shareholding type of vertical integration in Ukraine[6] is related to a low level of protection of minority shareholders' rights; underdeveloped financial system that limits the possibilities for a complete acquisition; and the opportunities for tax avoidance (and evasion) that are provided by this scheme of business organization.

Table 2
Top intermediary companies in 2001

COMPANY	INDUSTRY	REGION
Industrial Union of Donbass	Coal, Power, Gas, Metallurgy	Donbass, Lugansk, Dnepropetrovsk, Zaporozhye regions
Interpipe	Pipes, Metallurgy, Coal	Dnepropetrovsk and Lugansk regions
Donbass Industrial Union	Coal, Power, Gas, Metallurgy	Donbass, Lugansk, Dnepropetrovsk, Zaporozhye regions
Prodintorg	Import and processing of oil	Eastern and Central regions
ARS	Coal and Metallurgy	Donetsk and Lugansk regions
Sentoza LTD	Oil-processing and oil-products trade	Western regions, Dnepropetrovsk
Energo	Coal and Metallurgy	Donetsk region, Russia
Danko	Coal and Metallurgy	Donetsk region
Alfa-Nafta	Import and processing of oil and oil products	Eastern and Central regions
SAVI	Coal and Metall	Donetsk region

Source: Investgazeta #22, May 2001

Such indicator of vertical integration as value added to sales ratio does not catch the effect of cross-shareholdings. Therefore, a design of a *reliable methodology* for *measuring the level of vertical integration* which can take into account a wide spread use of cross-shareholding as a form of vertical integration in Ukraine constitute an urgent problem. So far it can be assumed that direct vertical integration has an identical effect on key enterprise indicators (discussed above) as integration via cross-shareholdings.

4.2 Vertical integration guidelines

Economic concentration[7] including vertical integration of two or more economic agents falls under investigation of the AMC in case[8] when (1) joint assets or joint sales volume of these agents exceeds $12m and at least two of them have an asset value or sales volume that exceeds $1m each, or (2) the joint market share of the agents in the market exceeds 35% or if at least one of them has monopolistic power[9]. The competition legislation has no explicit criteria for vertical integration;

[6] International experience revealed similar model in Japan, where vertical integration is performed mostly via cross-shareholdings. Contrary to Japan, in U.S vertical integration usually ends up in complete purchase of the former contractor. Primary reason for this is better protection of minority shareholders rights in U.S. then in Japan.

[7] Either via direct merger/acquisition or via purchase of shares in amount greater than 25%

[8] As in the "Decree on control of economic concentration" approved by the AMC as of April 6, 2001 #48-p

[9] Monopolistic power is defined as having more than 35% of market share

thus, such cases fall under general provisions. An affirmative decision for merger/acquisition/share purchase is more likely to be reached in case of vertical integration than horizontal one because the former is believed not to lead directly to a substantial increase in market power. This reveals that the AMC tends to underestimate possible negative consequences of vertical integration, which might lead to an increase in market power not immediately, but in the medium and long run.

Decision-making process lacks well-defined quantitative and qualitative criteria. According to the AMC officials, decisions concerning vertical integration are made after considering several aspects, like export/import volumes, revenues of the enterprise, current level of monopolistic power in the internal market, potential possibility to use price discrimination, etc. However, AMC admits that careful cost-benefit analyses are extremely difficult if possible. Therefore, investigations are performed on a case-study basis, which, on one hand, requires high proficiency level of the executives, and on the other, leaves room for corruption and discretionary decision-making. The right to appeal the AMC decision in court adds flexibility to the system, though it is unclear how the validity of the decision can be evaluated in the absence of clear guidelines and parameters to distinguish between pro- and anti-competitive integrations. The absence of the comprehensive and clear guidelines makes impossible its public announcement. This negatively impacts the credibility and predictability of merger/acquisitions transactions.

Development of the comprehensive merger/acquisition guidelines for vertical integration and providing public access to them should be considered as a very important task.

4.3 Vertical integration across the industries

AMC uses a very careful approach in investigating the cases that might change the level of vertical integration in the sectors with natural monopolies. For example, in 2000, AMC prohibited vertical integration in the electric energy markets where there was an attempt to integrate distribution and transmission companies with vertically adjacent more competitive markets for generation and supply.

With respect to the sectors that do not contain natural monopolies, the position of AMC is not that tough. AMC supports vertical integration during the process of restructuring of oil-and-gas services (e.g. restructuring of the National joint stock company Naftogas Ukraine). The argument for this support is a reference to Russian experience, where almost all companies of the oil-and-gas complex are vertically integrated, and provide full range services starting from geological exploration, extraction of the mineral resource, its processing and distribution of final products. The plausibility of this argument is doubtful. In fact, if one needs a proof of how bad is vertical integration for the level of efficiency, Gasprom can be considered almost as a classical example of mismanagement resulting in low share value.

Since 1996, the vertically integrated structures are also supported in agriculture where producers, processors and distributors of the agricultural products can cooperate. Integration of agriculture product producers, processors and distributors was implemented in structures like concern Ros', corporations East, Chernivtsymiasoprom, Ukragrokvity, etc.. In 1997 the trend remained and with the purpose to decrease costs of production several corporations were established: Zlatokraj, Hibryd, Ecorambus Agro and Ecoprod. In 1998 several more vertically integrated structures were supported: Poltavakorm, and national associations Ukroliyaprom, Ukrsilgosphimia, Ukrzernoproduct, etc. Primary reason for the affirmative decisions concerning economic concentration in agriculture sector in 1999

was a belief that vertically integrated companies could increase the efficiency of the production process and competitiveness at the international level.

The AMC generally supports the tightening of the vertical links between the producers, if it might lead to an increase in competitiveness of Ukrainian producers at the external markets. Therefore it is not surprising that, according to the records of the AMC decisions, the most cases of affirmative decisions with respect to vertical integration concern ***export-oriented*** firms, namely those working in metallurgy, machine-building, mineral resources exploiting, chemical and petrochemical industry. The argument about international competitiveness was used to pass affirmative decisions concerning vertical integration via development of concerns or corporations like Spivdruzhnist' and Vazhmashimpex. Concentration of management and control functions was allowed via approval of the establishment of three holding companies in 1997. In 1999, AMC approved vertical integration of the agents in manganese markets considering world manganese markets as oligopolistic ones and, thus, allowing to develop a competitive "complex that can capture a correspondent niche in the international markets without loosing the domestic markets to importers" (see AMC annual report, 1999, p.185). During 1999-2000 the AMC approved several cases of vertical integration in metallurgy markets in order to make a positive influence on the structure of Ukrainian export with respect to pushing high degree composite goods[10] to the external markets. The primary reason for this policy is the argument that foreign competitors represent vertically integrated companies.

Certainly, vertical integration is not always bad. However, ***"export" orientation*** of the policy concerning vertical integration raises some ***concerns.***

- The argument of highly vertically integrated foreign competitors is not always true. Many large foreign companies that were highly integrated after the Second World War until late 1970s later on faced efficiency problems and switched to network relationships with their suppliers. This concerns, for example the large Austrian steel producers. Recent experience of DaimlerChrysler AG is another example. The company, which previously produced most of the crucial inputs by itself, increasingly relies on the external contracts. If currently external purchases account for 60% of the total amount, the target for the forthcoming years is 70%.

- The level of market concentration in many export-oriented industries is still very high (higher than the average in the economy). An increase of vertical integration in the industries with high monopolization level might help incumbents to preserve their monopolistic power and, probably, extend it further into related markets. This may contradict to the policy goal expressed in the presidential decree where targeted share of monopolized sectors in the economy is set to be not higher than 10-12% of GDP[11].

- Export orientation of the policy towards vertical integration is mercantilistic in its nature to the extent it tends to exaggerate the importance of a positive trade balance for the country's development. However, the only economic reason for vertical integration is an increase in efficiency (resulting in an increase of firm competitiveness) irrespectively of the geography of the market where it occurs: increase in competitiveness of Ukrainian products in the domestic markets could be as good argument for vertical integration as a concern for the respectful position in the international markets.

---

[10] To export final products, but not row materials.

[11] Current level of monopolies' contribution is close to 40%.

- Efficiency argument in favor of vertical integration raises questions of plausibility to subsidize the vertically integrated firms. If an affirmative decision of vertical merger is based on sound proof of potential efficiency gains, the resulting vertically integrated structure should not be subsidized either directly (e.g. in agriculture) or implicitly (e.g. via tax privileges in steel industry). Otherwise, even in case of success the society has to cope with the potential negative consequences of vertical integration (which might appear in the medium- or long-run), while it is not clear what has induced the efficiency increase – subsidies or vertical integration as such. In case of failure society receives a double problem: increase in market concentration and creation of a large inefficient monster, which is too big to fail and therefore requires even larger subsidies.

- The idea of highly efficient export-oriented vertically integrated structures refers to the model of industrial development used some time ago by Asian Tigers countries. The model definitely provides some positive short-term results in terms of increase in key economic indicators. However, it also shows that the vertically integrated and export-oriented industries become highly exposed to external shocks. In addition, recent empirical evidence revealed that in medium-run total factor productivity growth becomes significantly lower and long-term growth is hampered.

- Another popular argument for allowing vertical integration in the export-oriented industries concerns its possible positive impact on the value added creation in the economy and on the very structure of export. The logic is the following. Exporters of the raw materials and intermediate products experience significant inflows of financial resources, which constitute potential investments. In order to create an incentive to reinvest profits into domestic industries vertical integration should be encouraged. Increase in domestic production of final goods leads to the increase in value added and has a positive effect on the economy. This argument is often discussed with respect to the integration processes in Russia, and it is in the background of some affirmative decisions of the AMC concerning vertical integration in Ukrainian metallurgy. While there is no doubt about the necessity to create incentives for profit reinvestment in the domestic industries, it is rather an overall quality of the investment climate in the country than a possibility of vertical integration as such, that determines investment decisions of the economic agents.

5 Conclusions

Despite several potential advantages vertical integration also constitutes a serious danger to the successful development of competitive environment. Taking into account that transitional countries in general, and CIS countries in particular, started their movement towards market economy with a heavy burden of vertical and horizontal dominance, which still remains high, the ***considerations of costs and dangers*** of vertical integration should gain a ***heavier weight*** in discussions of the cases for potential mergers than the arguments in its favor.

Clear and comprehensive merger guidelines need to include the policy parameters (criteria) that distinguish between pro-competitive and anti-competitive mergers considering **both horizontal and vertical structural dominance**.

A wide ***public access*** to ***merger guidelines*** will help to make competition policy more transparent, credible and predictable.

The methodology for ***measuring the level of vertical integration*** as well as its potential benefits/costs should take into account the wide spread of cross-

shareholding form of vertical integration in Ukraine. Value-added-to-sales ratio can be used as one of the indicators for measuring and monitoring vertical integration on the firm level.

Approval of the vertical integration should imply immediate ***stop of direct and indirect subsidization***. Effective application of the bankruptcy procedure to the loss-making vertically integrated companies (as well as the use of split-offs in restructuring schemes) would contribute to the reduction of exit barriers and lower incentives for vertical integration to become too big to fail.

Favoring export-oriented industries with respect to vertical mergers has no economic justification. The only economic reason for vertical integration is the increase in efficiency (resulting in an increase of firm competitiveness) irrespectively of the geography of the market where it occurs.

A.S., I.A., Lector: V.V.

Kiev, December 2001