UDC [334.76:631.151.61]:303.4 (477)

A.O. Gutorov, PhD in Economics, senior Lecturer
of Economy of Enterprise and Management Department
Simon Kuznets Kharkiv National University of Economics

CONCEPTUAL FRAMEWORK OF STRATEGIES FOR VERTICAL INTEGRATION IN AGRARIAN SECTOR OF THE ECONOMY

Problem statement. According to the "State special-purpose programme of Ukrainian agriculture development for the period up-to 2015 year" [1] and "Main research schools and major problems of fundamental research in the field of natural, technical and humanities sciences of National Academies of Sciences of Ukraine for 2014-2018 years" (item No. 3.1.28 "Integration factors of Ukraine's development") [2] integration relations at the agrarian sector of the economy are one of the basic and efficient factors of its development. That's why researching of conceptual framework of strategies for integration in agrarian sector of the economy is very actual and premature problem.

Analysis of recent research and publications. To designing strategies for vertical integration problem research have devoted the works such scientists as A. Chandler, R. Rumelt, M. Lubatkin, K. Harrigan, D. Besanko, F. Lavington, M. Adelman, L. Frank, M. Porter, A. Maticin, A. Pilipenko, N. Kizim and others, according to agrarian sector of the economy – Yu. Lupenko, I. Ushachev, M. Kropivko, N. Malik, E. Borodina, V. Shijan, A. Dankevich, I. Zelisko, Yu. Umanciv, A. Sadovnik, S. Laguta and other scientists. In spite of considerable scientific contribution, the questions about conceptual framework of strategies for integration in agrarian sector of the economy of Ukraine require generalization and formation the methodological platform.

Research aims setting. The goal of the research is to summarize the conceptual framework of strategies for vertical integration in agrarian sector of the economy.

Basic material statement. Basically economic integration means an economic arrangement between different firms, regions marked by the reduction or elimination of trade barriers and the coordination of monetary and fiscal policies. The aim of economic integration is to reduce costs for both consumers and producers, as well as to increase trade between the countries taking part in the agreement.

Progressive development of agriculture is impossible without deepening of specialization and intensification of concentration of agricultural production, and its industrialization and innovative growth are defining preconditions for establishment inter-economic co-operative relations and integration. Under conditions of the further specialization and concentration of agricultural production there is a requirement for an accurate regulation of economic mutual relations between agricultural, overworking, transport enterprises and a network of finished commodities' sale. At initial stages it settles by means of an establishment inter-economic contractual relations (*horizontal integration*), for further – by creation of the uniform integrated structure, which provides the closed cycle of production (*vertical integration*) [3].

Horizontal integration is a strategy where a company creates or acquires production units for outputs which are alike – either complementary or competitive. One example would be when a company acquires competitors in the same industry doing the same stage of production for the creation of a monopoly. Another example is the management of a group of products which are alike, yet at different price points, complexities, and qualities. This strategy may reduce competition and increase market share by using economies of scale.

Vertical integration is the degree to which a firm owns its upstream suppliers and its downstream buyers. Vertical integration is typified by one firm engaged in different parts of production. There are three varieties: backward (*upstream*) vertical integration, forward (*downstream*) vertical integration, and balanced (*circular,* upstream and downstream) vertical integration. A company exhibits backward vertical integration when it controls subsidiaries that produce some of the inputs used in the production of its products. A company tends toward forward vertical integration when it controls distribution centers and retailers where its products are sold.

As vertical agro-industrial integration understands development of interbranch relationship, cooperation of agricultural, industrial and other enterprises of agrarian and industrial complex which are technologically connected among themselves by uniform process of production agricultural raw materials, its industrial processing and finished goods realization.

The generalized integration typology is present in the tab. 1.

The property rights theory of the firm, developed by S. Grossman, O. Hart, and Jh. Moore, explains how integration affects performance in the vertical chain. The main proposition of property rights theory is as follows. Integration determines the ownership and control of assets, and it is through ownership and control that firms are able to exploit contractual incompleteness. In other words, integration matters because it determines who gets to control resources, make decisions, and allocate profits when contracts are incomplete and trading partners disagree [6]. When the wrong firm has ownership rights, efficiency suffers. The theory implies that vertical integration is desirable when one firm's investment in relationship-specific assets has a significantly greater impact on the value created in the vertical chain than does the other firm's investment. When the investments of both firms are of comparable importance, non-integration is the best arrangement, as both firms' managers will have sufficient incentives to invest while remaining independent.

Integration and its strategies typology

Criteria	**Integration Type**
Level	At local level
	At micro-level
	At meso-level
	At meso-regional level
	At macro-level
	At mega-level
Character of relationship	Horizontal
	Vertical
	Diversity
	Quasi-vertical
Association direction	Progressive ("forward", "upstream")
	Regressive ("back", "downstream")
	Circular
Interaction principles	Associative
	Agglomerative
Method of capitals' movement	Cartel
	Syndicate
	Trust
	Concern
	Conglomerate (holding)
Cooperation purpose	Cooperative
	Non-cooperative
Breads of integration	Broadly integrated
	Narrowly integrated
Stages of integrated activity	Many stages
	Few stages

Source: designed by author.

There are a variety of alternatives between strategies for vertical integration in general and in agrarian sector of the economy particularly (fig. 1).

Fully-integrated agriculture enterprises buy or sell all of their requirements for a particular material or service internally. They have the highest degree of internal integration, and the sequent units are frequently fully owned by subsidiaries. Such integrated companies are market-share leaders, particularly in minimum-efficient-scale plants are large. They capture more value-added, should capture more of the profit, that would be built into each transfer price were the stages of production separate (fig. 2).

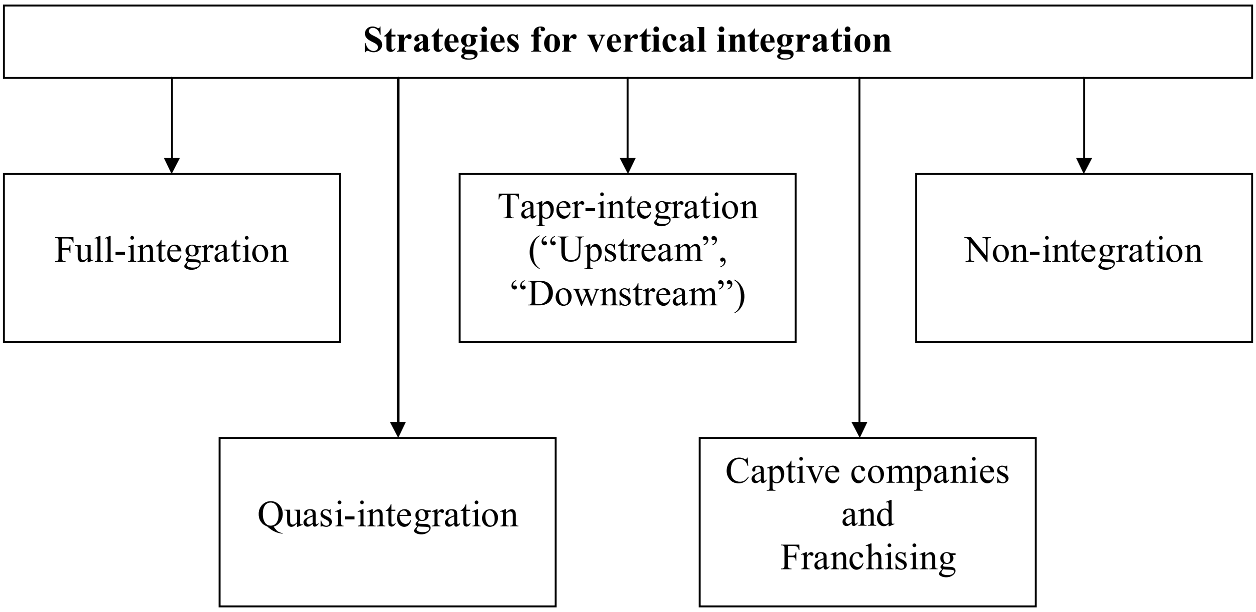

Figure 1. Strategies for vertical integration in agrarian sector of the economy

Source: designed by author.

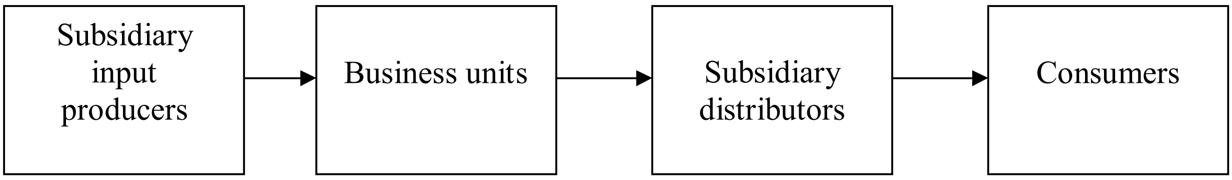

Figure 2. Conceptual scheme of the full-integration strategy

Source: designed by author.

This strategy is used when there are contract difficulties, when enterprises believe they must protect non-patented proprietary processes, when companies desire to supervise all stages of quality control tightly, and when interconnections gives integration cost advantages.

Taper integration means that agro-integrated enterprises produce or distribute a portion of their requirements internally, but purchase or sell the remainder through specialized suppliers, distributors or competitors that are not so integrated to this alliance (fig. 3).

Tapered integration refers to a mix of vertical integration and market exchange. "Upstream", a producer might manufacture some of the input itself and buy the remaining portion independent firms. “Downstream”, the manufacturer might sell a portion of its output through an in-house sales force and use independent sales forces to sell the remainder [4].

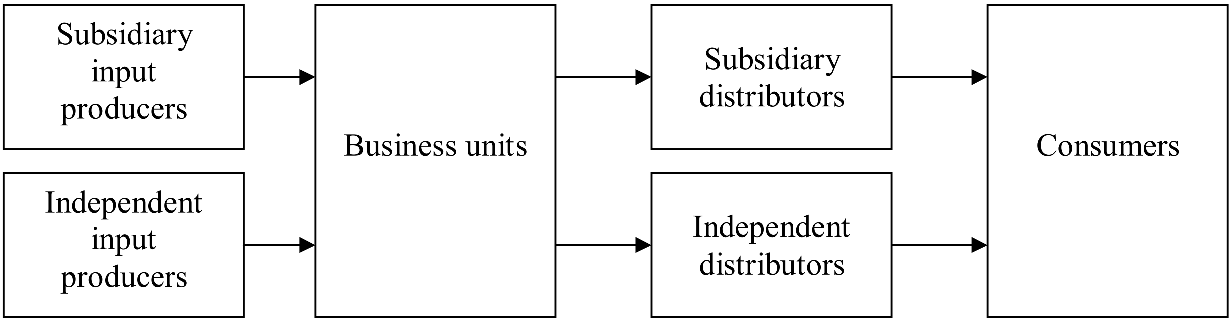

Figure 3. Conceptual scheme of the taper-integration strategy

---

Source: designed by author.

Tapered integration creates bargaining power because enterprises can use information about suppliers’ and/or distributors’ cost structures to extract lower prices from them. This kind of integration is easier to manage by alliance than full-integration strategy and is used when farms’ activity levels are large enough to justify one plant of efficient scale but not two plants of non-efficient scale.

Quasi-integration differs from full agro-integration in that the downstream enterprise still contracts with a supplier for the actual manufacture of the component, whereas with full vertical integration the production process itself is internalized [7]. Quasi-integrated enterprises need not own 100 percent of the adjacent business units in the vertical chain to enjoy the benefits of bonding their interests to other farms’ interests. The bond between enterprises could take the form of cooperative ventures, minority equity agreements, loans or loan guarantees, repurchase credits, specialized logistical facilities or “understandings” concerning customary arrangements [5]. Downstream quasi-integration arrangements enable enterprises to retain a network of qualified distributors to maintain quality images. Upstream “take-or-pay contracts” and “kanban” arrangements enable enterprises to enjoy the advantages of vertical integration without assuming the risks of it.

The practice of quasi integration – whereby assemblers own the specialized and dedicated equipment (such as tooling) used by suppliers – appears to be explained, in part, by the desire of suppliers to avoid the possibility of opportunistic reconstructing by downstream customers. Accordingly, quasi integration can be viewed as an adaptive response to anticipated opportunistic behaviour. It may very often suffice to protect trading relationships where full-blown vertical integration might otherwise be necessary.

Non-integration is the strategies for attaining materials and markets with no internal transfers and no ownership are like contracts. They are especially attractive when enterprises are reluctant to buy specialized assets, need to lower breakeven points because of underdeveloped demand, or can arrange delivery schedules with suppliers (or distributors) as though they were extensions of the enterprise's assets. Enterprises risk the lowest proportion of their assets in vertical arrangements involving non-integrated controls [4]. Non-integration strategy generally is seen by us as the active choice of not engaging in integration. Non-integration can be an active and deliberate political choice of controlling, limiting and shaping the process of international industry consolidation. Non-integration does not refer to disintegration – to reverse the process of integration – nor is this occurring to any apparent extent.

Captive companies' strategy means giving up independence in exchange for security of captive customer. The world practice indicates that captive companies' strategy of vertical integration in agrarian sector of the economy most efficiency to use for minimizing agricultural and market risks by the way of creation general insurance fund or establishing the strategic alliance of farms.

Generalization the routine of agro-business in Ukraine, world's experience for selection the most effective strategy of vertical integration in the agrarian sector of the economy made it possible to summarize the strategy framework for vertical integration (fig. 4).

Competition conditions

Market power	*Volatile*	*Stable*
High	Quasi-integration Taper-integration	Taper-integration Quasi-, Non-integration
Low	Quasi-integration Full-integration	Taper-integration Captive companies

Strategy objectives

Firm processes relative market power	*Leadership*	*Focus*
High	Quasi-integration	Taper-integration Quasi-integration
Low	Taper-integration Full-integration	Captive companies Full-integration

ns for i

Source: designed by author.

Conclusions and suggestions. As a result of this research is generalized conceptual framework of strategies for vertical integration in agrarian sector of the economy, which includes thesaurus, classification of integration types and their strategies, suggestions for preconditions of integration strategy choosing. Tapered integration offers a safety valve in that both stages of the vertical chain need not be perfectly in balance. Farms, which are in strong market position, could use quasi-integration to control external enterprises' activities as if they were owned by company. A strategy of non-integration is for volatile competition conditions and stable high market power, requires little financial stake in adjacent branches of agro-industrial complex. As concerns captive companies' strategy, that it can uses when enterprises want to focus on target market or commodity by low processes relative market power. Such as alternative for integration are the effective forms of private-state partnership.

References: 1. Pro zatverdzhennia Derzhavnoi tsilovoi programy rozvytku ukrainskogo sela na period do 2015 roku: Postanova Kabinetu Ministriv Ukrainy № 1158 vid 19.09.2007 r. [Elektronnyi resurs]. – Rezhym dostupu: http://zakon4.rada.gov.ua/laws/show/1158-2007-%D0%BF. 2. Osnovni naukovi napriamy ta naivazhlyvishi problemy fundamentalnykh doslidzhen u haluzi pryrodnykh, tekhnichnykh i gumanitarnykh nauk natsionalnykh akademii nauk Ukrainy na 2014-2018 roki / Rishennia Rady prezydentiv Natsionalnykh akademii nauk Ukrainy vid 11.07.2014 r. – K.: NAN Ukrainy, 2014. – 38 p. 3. Gutorov A.O. Korporatyzatsiia silskoho hospodarstva v Ukraini / A.O. Gutorov // Ekonomika i prognozuvannia. – 2012. – № 4. – S. 82-92. 4. Harrigan K.R. Strategies for vertical integration / K.R. Harrigan. – Toronto: LexingtonBooks, 373 p. 5. Blois K.J. Vertical quasi-integration / K.J. Blois // Journal of Industrial Economics. – 1972. – Vol. 20. – Pp. 253-272. 6. Economics of strategy / D. Besanko, D. Dranove, M. Shanley, S. Shaefer. – Danver: Willey, 2013. – 563 p. 7. Teece D. J. Economic performance and the theory of the firm / D.J. Teece. – Nothampton: Edward Elgar Publishing, 1998. –Vol. 1. – 646 p.

Гуторов А.О. Концептуальні засади стратегій вертикальної інтеграції в аграрному секторі економіки. Наведено тезаурус та типологію інтеграційної взаємодії, види стратегій вертикальної інтеграції в АПК. Окреслено основні передумови та обґрунтовано вибір стратегії вертикальної інтеграції.

Гуторов А.А. Концептуальные положения стратегий вертикальной интеграции в аграрном секторе экономики. Приведен тезаурус и типология интеграционного взаимодействия, виды стратегий вертикальной интеграции в АПК. Очерчены основные предпосылки и обоснован выбор стратегии вертикальной интеграции.