

4.5 SYNERGIES IN FORMING VIRTUAL CAPITAL OF THE ENTERPRISE

In modern enterprise business the role of not only physical (reversible and irreversible capital), but also intangible or virtual capital is increasing. It may include securities of businesses, trademarks, patents, human capital (knowledge of the workers), databases and more. Modern scholars offer many methods for assessing intangible achievements of enterprise (market capitalization methods, techniques of determining return on assets, precision measuring systems, turning manager values, methods of direct assessment of intellectual capital, methods of scores [1]), but the main distinction of virtual capital from other forms of capital is that a certain set of virtual components of capital may be worth more than a simple mathematical sum of the value of each element on separately. That is the main feature of virtual capital its synergy the property system, which is that the collaborative interaction elements (subsystems) provides an increase in their The overall effect to the value greater than the sum of the effects of these same elements (subsystem) operating independently of each other [2].

In the scientific sources and cyclopedias there are usually cited examples of "synergy" that arise in biology, chemistry or physics (common and uniform functioning of organs and systems, combined effect of drugs on the body, in which the total effect than action, provided each component separately) [3]. In economic terms there is more correct another definition of the waking synergy as a joint action to achieve a common goal, based on the principle that the whole is more than the sum of its parts. Also for use in relation to the virtual capital more urgent is the use of a concept of "synergy", proposed by German physicist H. Haken because it focuses on the interaction of harmony parts with formation of the structure as a whole [4].

Thus, in the case of virtual capital gains from the joint use of such resources exceeds the income from the use of the same resources of separately. For example:

1. Potential synergy manifested in sharing brands, while conducting advertising campaigns and more.
2. Mergers capital of several companies for joint decision - in scientific, technical, commercial, social, industrial and other applications. The joint operation of these enterprises makes efficient use of investments for large-scale

events are equally beneficial to all the enterprises, but unbearable each of them separately.

3. Sharing of labor (including intangible) of economic entities within the production system in which they enter. This makes it possible to significantly reduce forced downtime, and thus improve their efficiency [2].

According to G. Roos [1] synergy capital: "may be defined as the interaction of two or more resources belonging formerly independent organizations, and result in a more severe actions combined impact on value creation and competitiveness than the sum of their separate effects" . That is, with a business combination is the key to a synergistic effect. Indeed, the emergence of new intangible asset (element virtual capital) in the enterprise may occur due to deliberate or acquisition of such asset (for example, buying well-known brand), or by merging with another company, which owns the asset, or by purchasing companies with intangible assets on its balance sheet. In the sources of the last two methods of controlling assets often combined into one kind of agreements - agreements of Mergers and Acquisitions, which is often also referred to by their English acronym - deals M & A.

However, this research has remained unclear how to calculate from a financial point of view, "added" value of assets that it causes a synergistic effect. Because unlike physical systems, for which there are units of energy and methods of assessment energy potential for business economics is still no way ob'-subjective evaluation of internal energy. In addition, it would be that by itself synergistic effect of capital is not homogeneous, so to keep the pro-classification of these effects and to determine the factors that cause them. Also it's quite unknown in domestic economic Sources, issues of anti-synergy, i.e. reducing the real cost of capital with a combination of different types.

The aim of the research is the choice method for growth rates more "cost virtual enterprise capital obtained through" synergistic "or lost due to" anti-synergistic "effect, determine the types and synergistic anti-synergistic effect, which can also be obtained with a combination of incompatible or revalued to the virtual capital.

Currently expanding its business through mergers and acquisitions around the world is very important. These processes are often adopted to combine among themselves, and their activation of explain the globalization and freer access to new markets in other countries, as well as fostering an increase in the share of fixed costs (marketing, research and drafting, patents and licenses), and proximity variables costs in certain types of business to zero (microeconomic aspect).

However, between these agreements there is a substantial difference. After merger there's a unity of two or more business entities, which formed as a result of new economic unit (the new entity). Absorption is an agreement made in order to establish control over an economic entity means of a traveling power purchase more than 30% of its share capital (stocks, shares). It can store its legal independence [5]. As merger, absorption targeted synergies, that benefit from

the association. But absorption always implies redemption of one company by another company, and mergers - not always, that only absorption can be caused real synergies in all markets in all areas of activity. While in the case of a merger while maintaining legal independence economic subjective real mix of capital does not occur, and therefore there is no effect, and formed a "value added" virtual capital.

Goals pursued by firms that together can be greater. For example, the consulting firm KPMG conducted a survey of about 700 international agreements with M & A [6]. And increase the value companies (including through a combination of capital they) took this for granted second place ranking among the targets of mergers and acquisitions.

However, the main advantage of such a superior enterprise is just synergy. Hence, we can assume that mergers and acquisitions - a set of actions aimed at increasing total assets by the synergy that benefits work together.

Synergetic theory is often mentioned by experts and scientists who study the causes that induce companies to merge. The main provisions of this theory were formulated by M. Bradley, A. Desai and E. Kim [7] and developed by E. Berkovitch and M. Narayan. [8] The essence of this theory is that emerging at the confluence of the new company may use a wide range of benefits (synergies) result from business combinations. Synergy theory is based on the fact that managers as a company-initiated, and the companies that bought acting in the interests of its shareholders. Additionally, in terms of virtual capital, merging firms may serve to improve the management of assets of an enterprise, diversification in other businesses complement its range of products then anything. Such agreements may be three types of synergy using virtual capital. Types of these effects, their manifestations and farming examples of their use are given in Table. 1.

However, it is important to understand that not every merger or acquisition is accompanied by the positive synergy and often contrary synergistic effect. Of course, much depends on subjective preferences and views of the buyer. However, the undeniable fact is that the mergers and acquisitions Synergy is often overestimated.

This effect is called "Theory of pride" (Hybrid theory) is seen in the works of R. Roll [10], M. Jensen and R. Ruback [11]. In their opinion, "mergers and acquisitions do not carry synergies, and if they are, these synergies preferably are overvalued," ie, "increase the value of shares of corporations - acquisitions goals wholly or partly due to the simple random funds from corporations the buyer to the corporation - the goal absorption (a premium merger), instead of the expected synergies from the merger "[7].

Table 4.2

Effect of different types of synergies arising from mergers, acquisitions, capital to a virtual enterprise

Type of effect	Manifestations	Consequences	example	Explanation of Example
Automated benefits	There by reducing transaction costs	Increasing the amount of virtual capital and is diversifying markets and the risks	Creating integrated automotive corporation Daimler Chrysler	The corporation owns the brands: Smart, Maybach, Mercedes-Benz (through Mercedes-Benz: Mitsubishi, Hyundai, Kia, Lotus, Proton), Chrysler (through Chrysler: Jeep, Dodge)
The effect of agglomeration (compatibility)	Arise when combining capital, which complement each other	Concomitant use of different types of virtual capital	Joint venture companies laptops Fujitsu and Siemens	Combining only the laptop market electronics maker Siemens and Fujitsu hard drive manufacturer
The effect of similarity	Resulting from the accumulation of such capital	Virtual assets of one company increases the virtual capital of another	Joint production of mobile phone company Sony and Ericsson	Combining only the mobile phone market companies, both of which had their own operating time in this area

* Created by the author of publications [1, 7, 8, 9].

Thus, D. Marchand emphasizes that the agreement M & A, which "fit all of it for financial reasons, the most at risk" [9]. After all, they do not include "no value or as intangible factors such as practical ways to use information and knowledge, patterns of behavior, etc". It often happens that the new (merged) company starts w-cue decline is a combination of improper accounting virtual gain of age. For example, there are conflicts due to differences in corporate culture or rules of conduct, the rejection of a new style of management, shareholders and others.

Types of anti-synergy effects, their manifestations and global examples are given in the table 4.3.

Most of the time when evaluation of mergers, acquisitions executed only approximate, hastily made analysis of future value of cash flow, based on the pessimistic predictions [12]. However, it can manifest the use only in determining cases when the merger is successful, given the many nuances associated with synergy, and the relationship between the future order profit and stock price in the relevant sector. That is required for the use of more complex, but also more efficient mathematical apparatus, which would take into account these nuances. The most accurate for these conditions may be the approach of chaos theory, because it is defined as extreme unpredictability continuous nonlinear and non-regular complex motion that occurs in a dynamic system [13]. The case of combination of virtual capital is just such a movement.

Table 4.3

Effect of anti-synergy effects arising from the Hugo-roof merger-absorption, the virtual capital of the company

Type of effect	Manifestations	Consequences	Example	Explanation of Example
Revaluation	Arise from the inflated value of IA, rooted in the financial statements	The real cost of capital of the combined company in fact is less than expected	Buying foreign banks Ukrainian to create your own network in Ukraine	Most Ukrainian subsidiary banks are willing to sell to another investor
Excessive expectations	Firm-author places great efforts on intangible achievement firms absorbed, the real value of which is unclear	Willing to put big money for an illusory "good"	Buying Russian company "VimpelCom" Ukrainian mobile operator Mobi	Exit market loss on investment, the closure operator license
Incompatibility combination	Merging firms with different corporate culture (values, traditions), hostile takeovers	Failure to use the virtual capital firms absorbed through contradiction with existing capital firms initiator	Getting GAB license to manufacture cars Mercedes under the supervision of German concern Daimler-Benz	Withdrawal of license due to poor quality of

By virtual chaos cost of capital can move through bifurcation. Bifurcation is the process had the transition from equilibrium to chaos through consistent very small magnitude. From a mathematical point of view, this process is described as a dependency where an object (the value of virtual capital) on the parameter λ (not necessarily scalar) and any terms of a parameter λ° (bifurcation value, or bifurcation point) studied qualitative properties of object is not the same for all λ [14].

According to this theory, the key concept is the bifurcation point is a point in time during which decided the fate of joint ventures. However, in terms of capital value problems are not determining a point of time (as it is known - mergers, acquisitions), and the likelihood of further development of a situation. After all, this device can examine how it will effect synergies-energy cost on account of all the factors combining capital: of positive or negative.

Thus, we can conclude that the combination of virtual capital firms that combine through mergers, acquisitions, not always produces a positive synergistic effect, which by the way is not the same with his essence. In economics, there are many examples of reducing the cost of capital through anti-synergistic effect. However, the probability of these events is difficult to

calculate and predict future total cost of capital. For this purpose the use of math-based theory of chaos in physics describes the dynamics is complicated processes which can be attributed to a combination of economic processes of capital.

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