The Reaction of Industrial Companies to Crisis: Changes in Business-Model and Strategic Sustainability

Keywords

Introduction

Nowadays changes in the geopolitical situation significantly affect the conditions for doing business in Russia. Amid such phenomena there is a decrease in the level of market capitalization and the appraised value of the assets of the companies, the fluctuation of prices for electricity and raw materials at the market level. Given that companies operating in Russia are constantly facing different market and economic changes, including those of negative nature, it is necessary to examine the links between previous crisis experience on the company reorganization in difficult economic conditions in terms of business model changes. In addition, it is important to determine the possibility of occurred crisis changes to help companies in surviving during the next economic downturn.

The research objective is to identify linkages between the restoration process of Russian and foreign companies in difficult economic conditions, changes in business model and the experience received by companies. We should note some limitations of the conducted research. Firstly, some changes in the business model characteristics are mutually reinforcing and cannot be considered in isolation. Secondly, the applied characteristics used to analyse the business model changes are only tentative. Thirdly, business model changes are only one of the innovation measures in the global level of strategic approach of the company.

Theoretical Aspects of the Research and Formulation of Hypotheses

Economic downturns represent cyclical developments in the world economy and significantly affect the business model (Srivivasan R., Lilien G. L., Sridhar S., 2011; Trachuk A.V., 2011). Since economic downturns cause permanent changes in the dynamics of the industry, in order to survive the companies should adapt their activity through substantial reconfiguration of a business model. (Kuratko D. F., Audretsch D. B., 2013; Basu S., Wadhwa A. A., 2013; Chindorooy et al., 2007).

Companies typically face multiple crises during their activity. It is therefore necessary to examine the effects of previous negative phenomena in order to cope with further shocks better.

In the literature the main characteristic of the business model allowing the company to survive in difficult economic conditions is called dynamic capacity, i.e. the abilities of companies to change a business model taking into account the environment [George G., Bock A. J., 2011; Trachuk A.V., 2014], and in another paper it is stressed that the research results of the business model dynamism could potentially constitute a particularly valuable source of information about how the core business characteristics and strategies of the company are interrelated in order to adapt to the environmental external changes. (Casadesus-Masrelle R., Ricart J. E., 2010). A study of business models and maps, which determines the interaction of their elements is one of the most promising directions to explain the sources of the company competitiveness. (Zott C., Amit R., 2007, 2008; Teece D. J., 2010). On the basis of empirical data the characteristics of dynamic business models are described that enable companies not only to survive in difficult economic conditions, but also to be leaders: entrepreneurial orientation, continuous process of searching the means to achieve the customer loyalty, organizational learning, continuous monitoring of trends and adapting to them, a wide range of ways to advance, rapid response to consumer demand, continuous process of the development of electronic services, optimization and automation of processes, development of a mobile application, innovative activity or innovations in a business model [Trachuk A.V., Linder N.V., Ubysoyov A. V., 2017]. At the same time, the innovations in a business model are identified as steps to change the company activity system, directed towards using new opportunities [Cucuelli M., Bettinelli C., 2015; Trachuk, Linder, 2016], creating a new value [Morris M., Schindelhutte M., Allen J., 2005; Trachuk A.V., Linder N.V., Antonov D.A., 2014] and searching for business opportunities (George G., Bock A. J., 2011; Schneider S., Spirtz P., 2013; Cucuelli M., Bettinelli C., 2016; Trachuk A.V., 2014).

Business model change has a positive effect on survival after the crisis [George G., Bock A. J., 2011; Grewal R., Tanusha P., 2003; Trachuk, 2012]. In this article it is noted that the transformation of a business model is defined as the process of modifying the existing business model, associated with innovation implementation, and aimed at reducing the long-term activity. As previously noted, business model changes may be the previous crisis result; therefore a two-stage analysis method is applied to study the question of whether the post-crisis survival of firms affected the change of a business model, and what extent such transformation was made by companies. (Kuratko D. F., Audretsch D. B., 2013). Even if the specific changes in business model are not innovative for the industry, they may be ready for innovations: “Innovations in building the business models are a key to the firm performance” [Zott C., Amit R., Massa A., 2011: 1033; Trachuk A.V., Linder N.V., 2015]. The reaction of companies to crisis with the benefit of the analysis of the transformation of business models and business opportunities becomes the subject of research quite rarely (Smith D., Elliott D., 2007; Latham S., 2009; Maren, 2014; Buylova T.V., Shmykova G.V., Guthrova V.I., 2017; Trachuk A.V., Linder N.V., 2015).

Another line of research is the creation of innovative strategies for companies in crisis. So, for example, there offered two contradictory hypotheses about the correlation between innovations and business cycles (Anichkov B., Filippova A., Frenz M., 2013). According to the cycle hypothesis the investments of companies in innovation are increasing in the periods of growth and declining during economic downturns. (Zott C., Amit R., 2007; Trachuk A.V., Linder N.V., 2015). A hypothesis of the environmental external changes. (Casadesus-Masrelle R., Ricart J. E., 2010). A study of business models and maps, which determines the interaction of their elements is one of the most promising directions to explain the sources of the company competitiveness. (Zott C., Amit R., 2007, 2008; Teece D. J., 2010). On the basis of empirical data the characteristics of dynamic business models are described that enable companies not only to survive in difficult economic conditions, but also to be leaders: entrepreneurial orientation, continuous process of searching the means to achieve the customer loyalty, organizational learning, continuous monitoring of trends and adapting to them, a wide range of ways to advance, rapid response to consumer demand, continuous process of the development of electronic services, optimization and automation of processes, development of a mobile application, innovative activity or innovations in a business model [Trachuk A.V., Linder N.V., Ubysoyov A. V., 2017]. At the same time, the innovations in a business model are identified as steps to change the company activity system, directed towards using new opportunities [Cucuelli M., Bettinelli C., 2015; Trachuk, Linder, 2016], creating a new value [Morris M., Schindelhutte M., Allen J., 2005; Trachuk A.V., Linder N.V., Antonov D.A., 2014] and searching for business opportunities (George G., Bock A. J., 2011; Schneider S., Spirtz P., 2013; Cucuelli M., Bettinelli C., 2016; Trachuk A.V., 2014). Business model change has a positive effect on survival after the crisis [George G., Bock A. J., 2011; Grewal R., Tanusha P., 2003; Trachuk, 2012]. In this article it is noted that the transformation of a business model is defined as the process of modifying the existing business model, associated with innovation implementation, and aimed at achieving a competitive position in the market. There are two possible guidelines that should be considered when there is a change in business model of a company: a competitive advantage over the previous one, and to what extent the transformation was made by companies. (Kuratko D. F., Audretsch D. B., 2013). Even if the specific changes in business model are not innovative for the industry, they may be ready for innovations: “Innovations in building the business models are a key to the firm performance” [Zott C., Amit R., Massa A., 2011: 1033; Trachuk A.V., Linder N.V., 2015]. However, the CEDs are not always able to identify hidden opportunities for...
changes of business models [Boschikhi H., Kimberly J. R., 2003; Chesbrough H., 2010]. It’s empirically demonstrated that business models are closely interrelated with the strategies for the company in terms of their survival, as well as they are a source of a long-term strategic sustainability of the company by themselves. [Acs Z. J., Amory J. E., 2008; Zott C., Amit R., 2008]. Changes in business model increase the survival rate of new companies and new low-tech industries, but they are not relevant to companies operating in more stable low-technology industries [Andrade P, Debake K., 2007]. This trend is typical for large Russian companies [Novy-Dur, N.].

Changes in business model are also considered as a way to take advantage of the new opportunities and adapt to changes in the company life cycle [Franklin, Gruber M., Harhoff D., et al., 2008; Gruber M., 2010]. Changes in the industry sector, in particular, during times of crisis, and difficult economic conditions, in connection with the situation in the Russian economy, liable to the regression of foreign investors. For example, it is shown in the work that firms located in the industrial districts, where there is a lot of micro- and small enterprises, which competitiveness is determined also by intercompany relationships, are more likely to adapt to changes in the market conjuncture [Arregle J. L., Hirt M. A., Simon D. G. et al., 2007]. This is due to their similarity, common behavior, optimal exchange of necessary information [Baffigi A., 2000]. In the industrial districts the implicit knowledge and values are accumulated for a long time and spread in a wider community among small enterprises, which greatly contributes to the adaptation within the framework of government import regulation. Similarly, during economic downturns the firms operating in the industrial districts may be more prone to survival and training in crisis due to their ability to emulate more efficient companies [Zott C., Amit R., 2008].

The purpose of our analysis is to empirically prove that the experience of the previous crisis (2008) affects the company’s strategic decision-making process in terms of business model changes, to determine how the transformation of a business model enabled companies to survive during the economic downturn (after 2014), which strategies are used by the companies to reduce the risk of default.

**Hypothesis 1.** With the changes in the level and structure of consumption, as well as in connection with the declining business activity in the companies related to the Russian economy, are likely to withdraw from the market, while domestic companies will remain and try to conquer the vacant niche.

**Hypothesis 2.** The survival rate of companies under sanctions (difficult economic conditions) was affected by the transformation of the business model of companies, occurring during the crisis of 2008. Those companies that had optimized their business models have better adapted to business under sanctions.

**Hypothesis 3.** The management adoption of the strategies to reduce default risk depends on the previous crisis experience, at that gaining of the experience (learning) during the crisis depends on various corporate characteristics.

**Empirical two-stage analysis**

Empirical research is conducted on a sample of 31 manufacturing companies, operating in various industries and regions of Russia. The initial sampling represents 100% of population (table 1). For a more detailed comparative analysis of the behavior of foreign and Russian companies the authors selected 18 enterprises of oil-and-gas and pharmaceutical industries from the initial sampling (table 2). The given industries are of a great national and international importance for the company, which competitiveness is determined also by intercompany relationships, to determine how the transformation of a business model enabled companies to survive during the economic downturn (after 2014), which strategies are used by the companies to reduce the risk of default.

**CHANGE IN BUSINESS MODEL IN TIMES OF CRISIS AND DIFFICULT ECONOMIC CONDITIONS**

Since the economic crisis of 2008 there appeared many studies about how the previous crises affect the survival rate of companies in the new crisis conditions. Whether the knowledge, stock, capabilities, strategies affect the survival of the company, if the next economic recession happens? For example, it is showed how public announcements about business failures affect the organizational learning of companies in terms of a new experience of failures [Desai V. M., 2014]. New information sources (forums and networks of small and medium-sized businesses) have a significant effect on business failure process [Herbane B., 2014]. It is studied how the organizational learning and the characteristics of the executive affect the firm’s reaction to the economic downturn [Cucucelli M., Bettinelli C., 2009; Montes D. et al., 2015].

The purpose of our analysis is to empirically prove that the experience of the previous crisis (2008) affects the company’s strategic decision-making process in terms of business model changes, to determine how the transformation of a business model enabled companies to survive during the economic downturn (after 2014), which strategies are used by the companies to reduce the risk of default.

In the conditions of imposition of sanctions the pharmaceutical industry companies considered the possibility of their potential adaptation within the framework of government import substitution in the framework of the strategy of export orientation. Russia has implemented the localization of production in Russia yet before the imposition of sanctions, which allowed taking more stable stance while facing economic sanctions [Avtandiramidze G., Orenburg, 2015].

**LLC Weatherford (Weatherford Worldwide Holdings GmbH, Switzerland).** In August 2007 the company purchased the allotment (Mergers) in the 8% in the Russian group “Burevestnik” (producer of equipment of 90% of production of oil-and-gas production equipment), has branches in Russia (Moscow, St. Petersburg, Astrakhan, Izhevsk, Noyabrsk, Usinsk, Samara, Orenburg, Zhivnovskoy, Khanty-Mansiysk, Nefteyugansk, Burulik, Krasnoyarsk, Irkutsk, Nyagan, Pyr-Yakh, Bugulma, Ufa). Amid the coolness of relationships between Russia and the West in 2014 PSC «Rosneft» bought back the Russian and Ukrainian assets of Weatherford International, Inc. in the field of well boring and repair. Weatherford International, Inc. is one of five largest oil-and-service companies in the world, the annual income exceeds $ 2 billion [Weatherford, 2016].

**LLC «Technological company Schlumberger» (Schlumberger B.V., Netherlands).** The company has been working in all the oil-production regions in Russia, Azerbaijan, Kazakhstan, Nigeria, and Tunisia for more than 20 years. The company offers the services mix and quality and is well-time service. Corporate standards of Schlumberger B.V. management in unique economic and geographic specific characteristic. Development strategy is based primarily on investing in local personnel, infrastructure and technology to create optimal proposals for the market. [Schlumberger, 2016; Bilal, 2017].

**LLC «Step Oiltools» (Step Oiltools B.V., Netherlands).** As an independent company with great experience both on official and illegal markets, it develops and improves the product line, operates in 14 countries and is planning a further active growth. In 2018 the company entered into a contract with PSC «Bashneft» to work on well-completion service [Step Oiltools, 2016].

**LLC «BURSeRVIS» (Halliburton Company, USA).** In Russia and the Caspian region approximately 2500 specialists are employed in the company. Since the 1960s the company has been a leader in oil and gas industry of Russia. The company continues to invest in new equipment, power and infrastructure to provide world-class services. In November 2009 the special purpose entity of Sperry Drilling opened a new shop for repair and maintenance in Zhivnovskoy. The largest company base in Russia is situated in the Kaspiysky district. The company offers the services mix and quality and is well-time service. The location of maintenance bases as close as possible to conducting the works allows Sperry more promptly and efficiently to deliver equipment and services. Among the customers of all major oil-field engineering companies in Russia are: OJSC “Gazprom Neft”, OJSC “Lukoil”, OJSC “NC "Rosneft”", Exxon Mobil, Shell, Total, etc. The company actively cooperates with small and medium-sized oil-and-gas production enterprises [Halliburton in Russia, 2016]; sized businesses amounting to 30% of the total turnover of the company (bolshaya). One of the largest oil and gas companies in the world carries out extensive works on identifying oil and gas deposits, develops cutting-edge technology for their production. Total number of personnel is 167. In 2016 the company has increased its activities, has developed the equipment and technology. The division delivers equipment for drilling and development not only to the parent company, but also to partners in more than 120 countries operating in the areas of the Middle East and Russia, Moscow, Zhivnovskoy, Noyabrsk [Baker Hughes, s. a.].

**JSC «Siberian service company» (JSC «SNSCO», Russia).** The main activities are: prospecting and exploratory and production drilling of oil and gas wells, directional drilling, well maintenance and workover, selection of formulas, drilling- mud development and maintenance, technological maintenance services of directional drilling. Combination of application of hi-tech equipment, latest technology and experienced personnel are the competitive advantage of the company. The teams and specialists are multiple winners of competitions of professional skills at various levels, branch-wise and government awards.

**CJSC JV “MEKMINENET” (OJSC “SN-MNG”, Russia).** Among the service companies in the West Siberian region of Russia, providing services to oil and gas companies, it is the area of recoverable oil enhancing, one of the leading places is taken by CJSC JV “MekaMinef”. Powerful production and technical base, highly skilled personnel, modern methods, technology, company manages to copes with assortment-wide tasks, sets out a wide range of works on secondary effects on a layer in order to improve its productivity [MekaMinef, 2016].

**JSC «Gazprom Neft» (OJSC “Gazprom Neft”, Russia).** As a service company, one of the main bodies of OJSC “Gazprom Neft”, the largest company in Russia (in terms of a new experience of failures [Desai V. M., 2014]. New business failures affect the organizational learning of companies
JSC «Bayer» (Bayer AG, Germany). Innovative company occupies key positions in health care and agriculture worldwide. The company has offices in 35 cities of Russia. The division «Pharmaceuticals» is engaged in sales of medications used in oncology, hematology, cardiology, women's health, ophthalmology and radiology. A wide range of organic compounds is offered. Bayer pays particular attention to research; innovation is a key factor in the growth of the company [Names, [б.г.]].

**JLL «Lilly Pharma» (Eli Lilly and Company, USA).** The company conducts clinical research in 55 countries around the world, has research laboratories in 8 countries, manufacturing facilities in 13 countries. The products of corporation are sold in 120 countries. In Russia the international innovative pharmaceutical company offers more than 20 products for the treatment of diabetes, cancer, osteoporosis and mental disorders. The company directs investment in research and scientific development, educational programs for health professionals and patients, transferring of production technologies. [Basic facts [б.г.]].

**JLL «Novartis Pharma» (Novartis AG, Switzerland).** The group of companies «Novartis» in Russia offers solutions in healthcare to meet the new needs of society and patients. The company occupies a leading position in the Russian market in the production of innovative drugs, high-quality generics and O&T medicines, surgical equipment and drugs to protect eyesight. In December 2010 «Novartis» group of companies announced a strategic investment programme with a volume of 500 million dollars in order to provide the organization of the local production, the approval of technology. The company, which is composed of three major domestic plant producers of medicines of OJSC «Biokhimik» (Saransk), OJSC «Yugopharm» (Tyumenskaya Oblast') and OJSC «Timber mill №3» (Arkhangel'skaya Oblast') was created, which is composed of three major domestic plant producers of medicines of OJSC «Biokhimik» (Saransk), OJSC «Sinter» (Kurgan), OJSC «Biokom» (Stavropol). The company is actively embracing new ways for development, relying on its huge accumulated experience. The relations are settled with more than 60 suppliers, the restructuring of debts to creditor banks is complete, the accounts receivable of the company are reduced, and the payments from clients-non-payers are resumed. The financing of Bank VTB is received in the amount of 5.4 billion rub. [About the company [б.г.]].

**JSC «e-RPHARM» (Augment Investments Ltd, Cyprus).** This company is a vertically integrated pharmaceutical company. Main activities: research, development and production of drugs of different therapeutic groups. On October 1, 2014 “R-PHARM” acquired a large industrial technology center (Ikert, Germany). The company is one of the founders of the modern pharmaceutical complex “Hayat Pharm” (Azerbaijan). [The company's history, [б.г.]].

**JSC «Pharmstandart» (Augment Investments Ltd, Cyprus).** The company develops and produces modem, high quality, affordable drugs. Five modern factories produce more than 1.7 billion packages of medicines per year [Pharmstandart, [б.г.]]. The company produces medicines to treat the majority of the state program of import substitution; automation of the processes of production planning with a view to the efficient management of processes and increase in control of costs; development and introduction of new products, expanding the range of dosage forms and dosages of medications produced: increase in the percentage of high margin medicinal drugs in the company's portfolio.

**CJSC «Biocad» (Biocad Holding Ltd, Cyprus).** The innovative company is a research-and-development center of the world level, state of the art pharmaceutical and biotechnological manufacturing, where pre-clinical and international clinical studies are taken, corresponding to modern standards. Full production cycle of medicines is provided: from molecule search to mass production and marketing support. Drugs are intended for the treatment of complex diseases. The company employs over 1,400 people, more than 650 scientists and researchers. Offices and representative offices of the company are located in the United States, Brazil, China, India, and other countries. The company is heading the national ranking of the fastest growing high-tech companies [Names, [б.г.]].

**JSC «Baker Hughes» (Baker Hughes, USA).** The company is a research-and-development center of the United States, Brazil, China, India, and other countries. The company employs over 1,400 people, more than 650 scientists and researchers. Offices and representative offices of the company are located in the United States, Brazil, China, India, and other countries. The company is heading the national ranking of the fastest growing high-tech companies [Names, [б.г.]].

**JLL «Burservis» (Komi Republic) [б.г.].** The company offers more than 20 products for the treatment of diabetes, cancer, osteoporosis and mental disorders. The company directs investment in research and scientific development, educational programs for health professionals and patients, transferring of production technologies. [Basic facts [б.г.]].

**JLL «Step Oiltools» (Moscow) [б.г.].** The company is a research-and-development center of the United States, Brazil, China, India, and other countries. The company employs over 1,400 people, more than 650 scientists and researchers. Offices and representative offices of the company are located in the United States, Brazil, China, India, and other countries. The company is heading the national ranking of the fastest growing high-tech companies [Names, [б.г.]].
The legal status of the companies is mentioned as «Active», «In the process of disposition», «Declared as bankrupt». This categorization was introduced to identify the companies that have not survived the recession in 2014. The frequency of such companies in the sample is quite low (table 1).

Below there are the empirical results obtained by a two-stage model described above. In particular, there are the results related to the impact of changes in business model on post-crisis survival of firms (hypothesis 2) by defining strategies that reduce the risk of default. Further the results of the experience obtaining hypothesis are described, showing whether the business model changes resistant to crisis were adopted as a result of the previous crisis experience, and the regional affiliation role in the process of experience obtaining (hypothesis 3).

According to the analysis it is revealed that the very fact of companies' withdrawal from the market is not necessarily a negative phenomenon. "Cycle" of companies (economic subjects) is an integral part of the restructuring process in the context of a competitive economy and leads to "creative destruction" (Schumpeter I.A., 1936).

It should be noted that in respect of nine companies the decision was made on the recognition of being insolvent (bankrupt) (see table 1). In doing so, there was a gradual deterioration in the key financial indicators in the companies' activity during 2012-2015 (unprofitable activity, revenue decrease, disposal of fixed assets), the financial condition worsening was observed in the companies, employed in oil and gas industry. At the end of 2013 the Russian gas servicing industry companies experienced economic difficulties due to the high competition of foreign companies with more modern equipment and offering services at lower prices. The dynamics of financial indicators of companies is represented in table 2 and fig. 1-4.

The consequence of the imposed restrictions for Russian companies was a deficit of available funds. Russian companies experience financing difficulties and consequently pay more attention to financial performance. Optimization of the supply chain and increase of the effectiveness of operational activities are conducted considering the importance of reducing the costs. At that the subsidiarities of foreign companies are able to receive intercompany loans, including from the parent companies, which receive revenue on the foreign markets.

Orientartion of Russian companies toward the financial restrictions is also reflected in the approach to innovation. The main mechanisms of innovative development of a company are increasing the volume of investment in R&D and the search for an optimal balance between costs and benefit. This approach, due to the financial aspects, fundamentally distinguishes the Russian business from the foreign players, who believe they first and foremost need creative employees for development. Unlike foreign competitors for the managers of Russian companies the supply chain optimization, the efficiency improving of operating activities and the introduction of new technologies are relatively more important than bringing the qualified staff.

Recently the current geopolitical situation had a major impact on the business climate in Russia, in this regard, both domestic and foreign companies present on the Russian market have to act more cautiously and carefully treat the investment programmes and development strategies.

Russia remains one of the most attractive and profitable markets in terms of sales and profit, most foreign companies retain their willingness to work in Russia and demonstrate the stabilized or positive dynamics of financial results, thus, hypothesis 1 is confirmed in part only. Russian companies are Subsidiaries of foreign companies

### Table 2

| Company                          | 2012    | 2013    | 2014    | 2015    | 2016    | 2012    | 2013    | 2014    | 2015    | 2016    |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Oil-and-gas (oil-and-service)    |         |         |         |         |         |         |         |         |         |         |
| Subsidiaries of foreign companies|         |         |         |         |         |         |         |         |         |         |
| LLC «Weatherford»                | 8229.28 | 8877.83 | 10855.08| 17019.83| 15524.37| 208.478 | (351.837)|        | 463.000 | 296.864 |
| LLC «Technological company       |         |         |         |         |         |         |         |         |         |         |
| Schlumbergers                    | 7574.76 | 13277.27| 22512.16 | 25628.810| 21671.333| 224.190 | 599.448 | 4555.108 | 1847.244 | 3677444. |
| LLC «Step Oiltos»                | 939.94  | 600.116 | 433.556  | 491.11   | 39.225  | 5.534   | (242.684)| (125.981)| (25.590) |
| LLC «Bureviris»                  | 46.79   | 11.502  | 66.656   | 1965.415 | 1186.217 | (90.388)| 30.422  | 54.463   | 9.799    | (19.183) |
| JSC «Baker Hughes»               | 11.777  | 54.954  | 873.747  | 5808.056 | 8158.796 | (5.529) | 7.510   | (15.140) | 147515   | 112034   |
| Russian companies                |         |         |         |         |         |         |         |         |         |         |
| LLC «SSK»                        | 21982.29| 22737.72| 26740.91 | 28517.110| 28670.319| 899.984 | 819.931 | 1522.884 | 1609.292 | 1126996  |
| CJSC JV «MEKAMINENFT»            | 13765.67| 1829.872| 9015.254 | 11712.293| 10758.799| 44.932  | 504.158 | (30.449) | 528.921  | 64115    |
| LLC «NPP BURENEKTIK»             | 43321.48| 5199.725| 5591.181 | 6556.436 | 6735.036 | 575.053 | 763.454 | 607.868  | 399.814  | 291442   |
| OJSC «U-Energy Groups»           | 3826.29 | 3952.207| 1120.477 |         |         |         |         |         |         |         |
| JSC «AK Corvette»                | 3710.97 | 4250.714| 4468.493 | 4322.060| 3970.072 | 196.647 | 307.238 | 172.499  | 108256   | 15072    |
| Russian companies                |         |         |         |         |         |         |         |         |         |         |
| LLC «BAYER»                      | 24806.85| 28216.49| 33181.90 | 46807.241| (174.222)| (102.126)| 616.408 | 507.950  | 1626768  |         |
| LLC «Lilly Pharma»               | 4824.23 | 4619.364| 5706.275 | 5982.143 | 6354.182 | 237.901 | 80.9901 | 190.181  | (37.994) | 119774   |
| LLC «Novartis Pharma»            | 0/0     | 0/0     | 13631.166| 15097.403| 13700.640| 0/0     | 0/0     | (96.605) | 97.040   | (545.255) |
| Russian companies                |         |         |         |         |         |         |         |         |         |         |
| LLC «SEA International Ltd.»     | 8153.64 | 75098.748| 98495.963| 59438.184| 46619.351| 240.386 | 248.344 | 143.950  | (311114) | (282089) |
| LLC «R-PHARM»                    | 4186.155| 46123.221| 55918.779| 62240.904| 62964.433| 4435.578| 6467.174| 7680.624| 8608.010| 6711880  |
| JSC «Pharmstandard»              | 20109.09| 22537.04| 152156.586| 152122.255| 25980.744| 6788.736| 7360.650| 3307.143| 6045.168| 6065626  |
| CJSC «Bischo»                    | 2945.304| 2992.625| 8378.819 | 8914.174 | 11477.324| 938.522 | 927.591 | 4820.406| 4349.471| 5050.906 |
| OJSC «YUGAPHARM»                 | 199.502 | 147.290 | 124.997 |         |         |         |         |         |         |         |

**Fig. 1.** Dynamics of the revenues of the subsidiaries of foreign companies in oil and gas industry, thous. rub.

**Fig. 2.** Dynamics of the revenues of the Russian companies in oil and gas sector, thous. rub.

**Fig. 3.** The dynamics of the net profit (negative profit) of the subsidiaries of foreign companies in pharmaceutical industry, thous. rub.

**Fig. 4.** The dynamics of the net profit (negative profit) of the subsidiaries of Russian companies in pharmaceutical industry, thous. rub.
The analysis of 31 industrial companies suggests that the changes in business model influenced the post-crisis sustainable survival. As it showed by the process of the study of the company's experience on its crisis and its role in the company's ability to adapt its business model to the new competitive landscape, the changes in business model were not directly related to the experience of the previous crisis. The strategies, previously used by the companies, appeared less effective in reducing the probability of default in the changed economic conditions. 

In case the companies do not profit from the crisis experience, the impact of economic downturns on the subsequent recovery of the economy may be exacerbated. Even counterbalance mechanism that restores stability after the crisis might not be sufficient, since companies must adjust their business strategies to environmental changes: the role of e-business tools in reducing the default risk only slightly depends on the limited effect on change in strategic approach. Since the strategy systems can be only partly effective [Thomsen S., 1999].

Even counterbalance mechanism that restores stability after the crisis experience, the impact of economic downturns on the subsequent recovery of the economy may be exacerbated. Even counterbalance mechanism that restores stability after the crisis might not be sufficient, since companies must adjust their business strategies to environmental changes: the role of e-business tools in reducing the default risk only slightly depends on the limited effect on change in strategic approach. Since the strategy systems can be only partly effective [Thomsen S., 1999].
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