

Haute Ecole
Groupe ICHEC - ISC St-Louis - ISFSC



Enseignement supérieur de type long de niveau universitaire

The Influence of the Privatization on the Performance of the Companies in the Russian Diamond Industry: Risks and Consequences. ALROSA-Kristal Case.

Mémoire présenté par
Svetlana DLI

pour l'obtention du diplôme de
Master en Gestion de l'Entreprise- MIBM-120

Academic year 2018 - 2019

Promoter :
Madame Aminata Sissoko

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INTRODUCTION

Nowadays privatization remains a significant trend in the economic policies of many countries, including Russia. Revenues from it in the world show a steady upward trend. Privatization is an effective tool for creating a competitive environment, increasing the efficiency of companies and reducing the presence of the state as a direct participant in market relations. In Russia privatization has also become a way to build a market economy, at the same time, long years of the Soviet past formed a special attitude towards private property and state-owned companies, which is important to take into account.

The fact that a considerable degree of the state control in many areas of the economy in Russia makes it particularly important to study privatization processes in new conditions, when issues of sustainability and quality of economic growth have become more crucial. In turn, the financial and economic crisis of 2008–2009 raised the question of a necessity of regulatory measures that were taken by the state to mitigate the consequences, as well as the development of a format of interaction between private business and the state that would contribute to the modernization of the Russian economy. For this reason it is important to evaluate the privatization process and its influence on the efficiency of the companies.

The example of the diamond industry is particularly interesting, as this sector is one of the most competitive in Russia, as it provides output with high added value and has a significant impact on the formation of export items. Russia has the world's largest mineral resource base of diamonds: its explored reserves exceed 1 billion carats - and it remains the world leader in the production of diamonds in weight terms. At the same time, due to the specificity of the industry, which consists of a limited number of big players, such changes as privatization of a producer of polished diamonds with the participation of a leading diamond mining company will change the situation on the market and will influence the performance of the both enterprises. For these reasons, the case of ALROSA-Kristal is interesting for investigation in the framework of this thesis.

The goal of the research is to estimate the risks and consequences of the privatization in the diamond sector in Russia, to provide recommendations to ALROSA and Kristal about the deal and to forecast possible influence on their performance.

The topic chosen is of high relevance and importance for two reasons. First of all, the privatization in such scale is pretty rare, thus extra attention is needed while discussing the process and consequences. Also as the influence of the state is very strong in Russia, it is vital to investigate the case in details. Furthermore, due to the specificity of the industry, there is not enough information for reasonable decision making, which explains the necessity of the research, which would take into account all the special features of the sector.

For deep investigation of the topic the thesis was divided into four chapters.

The first chapter is dedicated to the theoretical concepts that are going to be used in this research, such as privatization and efficiency, including privatization models and processes.

The second chapter includes the practical approaches towards privatization with an accent on Russia. It describes the history of privatization in Russia, the current state of the ownership, plans and perspectives of possible changes. In this chapter, it is also possible to find practical research of the efficiency of state-owned Russian companies in comparison with the private ones.

The goal of the third chapter is to give an overview of the diamond business and its specificity, as well as to introduce the case study: the participating companies and the deal of privatization.

In the forth chapter, two hypotheses are proposed:

I. Changes in ownership structure influence the performance of the companies, at the same time the effect of the privatization can vary and a choice of the ownership structure depends on the industry.

II. In the diamond industry (in case of ALROSA and Kristal in particular) privatization with the participation of the strategic investor will be beneficial and will allow to increase efficiency.

The analysis was carried out based on the expert survey using both quantitative and qualitative approaches. More detailed methodology can be found in the chapter four of this thesis.

Furthermore, the forth chapter includes the research of possible risks and consequences of the privatization deal for the Russian diamond industry. In this chapter the recommendation for the companies are provided.

This work seems of a great interest for both academic community and business practitioners, as it includes the analysis of the influence on the efficiency of the Russian companies with a special attention to the diamond industry in general, as well as practical recommendation for a specific case of Kristal and ALROSA.

1 THE THEORY OF PRIVATIZATION AND EFFICIENCY

As the research deals with privatization and efficiency, it makes sense to start with analyzing the theoretical and practical approaches to these concepts to gain enough knowledge for understanding the background, history and ideas for the following practical research.

1.1 THEORETICAL CONCEPT OF PRIVATIZATION

Privatization, if narrowly defined, means a transfer of property from the state to the private sector (Shebeko, 2013). In this context privatization is expected to only rearrange the property with the zero result when the state loses its assets for the private sector, but together with this point of view, there is another wider approach, according to which to privatize means more use of the private institutes than of the state in order to fulfil the needs of the citizens. At the same time, privatization should not only redistribute the existing assets but also provide the conditions for establishing a reliable mechanism of private capital creation (Maggison, 2017). Thus, the wide meaning of privatization includes not only the transfer of property, but also a creation of the macro-economical environment, which is characterized by the good conditions for the private companies.

If not the term itself, then at least the process of privatization, which is understood in most narrow, formal and “out-of-system” way as a transfer of property or assets from the public to the private sector of economy has a long history comparable to the history of the property itself. Already in the Ancient Egypt the idea of private property was used in opposition with the state property (Radygin, Entov, Abramov, Chernova, & Malginov, 2019). Even the idea of “property” included state assets that a person could use or have, thanks to the work to the state. At the same time, the scientists noticed the non-linear nature of the decrease (growth) of the share of state ownership at the expense of private, depending on the weakening (strengthening) of the government.

Adam Smith more than two centuries ago analyzed the advantages of the privatization of the state lands:

“In every great monarchy in Europe the sale of the crown lands would produce a very large sum of money, which, if applied to the payment of the public debts, would deliver from mortgage a much greater revenue than any which those lands have ever afforded to the crown... When the crown lands had become private property, they would, in the course of a few years, become well improved and well cultivated” (Smith, 1776, p. 167).

Obviously, this is the most formal criterion that makes it possible to call any deal of sale (transfer) of state property to a private person or organization privatization. In practice, the idea of privatization became well-known only in the end of 1970s (Shebeko,

2013). Of course, a new idea of privatization has behind very different social and economic processes than in the examples of Ancient Egypt or England. It is much more important for the understanding of the modern privatization to see the presence of the similarities and differences in the processes and programs.

Nowadays it is possible to differentiate at least two types of the privatization, the difference between which is a presence or absence of the system transformations connected with the transition from one economic system to another.

First type of privatization is associated with shift in the reproduction mechanism which began in the second half of the 1970s with the restructuring of the economies of the developed countries of the West which required a significant revision of the system of state regulation of the economy established in the 1950s and 1960s (Berman & Filippov, 2011). In the context of these processes, almost all Western Countries reviewed the place and role of the state property and state entrepreneurship in the economy, which was reflected into the process of privatization in the 1980s-1990s. This phenomenon was wide-spread not only in the majority of the European countries where the state traditionally played an important role, but also in the USA, Japan, and Switzerland, where the public sector was relatively small. Changes in the ideology, general economic theory and policy of developed countries were later exported to developing countries through the dissemination of ideas in the scientific community and through direct pressure of the West through the conditions of assistance.

The radical changes in theories of economic development of the third world countries happened in the 1970s-1980s when the theory of “market failure” gave way to the idea of “state failure” (Maggison, 2017). Between 1980s-1990s more than 80 developed countries of Europe and developing countries of Asia, Africa and Latin America performed or were performing different programs of privatization of the state property.

Despite the huge variety of the level of development, reasons of privatization (budget revenues and improvement of public finances, increasing the efficiency of the economy, reviving competition, managements reforms, specialization and demonopolization, attracting foreign investment, ideological motives – development of “people’s capitalism”), legal and economic traditions, political and ideological doctrines, all these countries were united by the one key feature: privatization was introduced in the framework of already existing market competitive environment with the dominance of the private sector, supported by the progressive evolutionary development of the economy.

The second type of privatization was developed a bit later (around 1989) during the system transformations (institutional changes) in the former socialist countries, first of all, in the Soviet Union and in the countries of East and Central Europe. In parallel with the development of the system reform process in these countries, the theory of transitional economy has become one of the most rapidly developing branches of economic theory. In the context of the transition from a command-administrative

(socialist, planned, centrally planned) economy to the system based (at least according to the economic theory) on market-competitive principles, privatization plays an important role.

This makes sense as despite all the variety of theoretical approaches and interpretations of the role of property for the economic and legal organization and functioning of the economic system in any society, the overwhelming majority of researches recognize – in fact, as an axiom – the thesis that property (property rights) is the basis of any modern economic system. That is why privatization in a transitional economy is crucial. This, in particular, is a fundamental difference between the privatization process as the quintessence of property reforms in post-socialist countries and any privatization measures carried out in Western and in developing countries.

In Russia this process did not begin immediately, it was preceded by a complex of preparatory measures of an ideological and legal nature. Similarly, with the completion of privatization programs, property reform in a transition economy does not end, but gains a powerful start as only after privatization, as a set of technical measures, does a gradual formation of a sustainable and efficient system of property rights begin.

In particular, the experience of Russia in the 1990s shows how difficult and long this path is: from the administrative economy in which property rights actually are not defined, through essentially “director” privatization and the implementation of a mass privatization model, through the initial formal consolidation of property rights, through the redistribution of these rights, through the first conflicts on the basis of such a redistribution, to a certain stabilization of the ownership structure, to a difficult search for further ways of establishing long-term efficient owners.

The definition of privatization as the process of selling (transferring) to the private sector (physical and non-state legal entities) in whole or in part of the property (assets) of state-owned enterprises is well-known. In a sense, the notion of “denationalization” is synonymous to this interpretation of privatization. This meaning is more in line with the ideology embedded in the Russian model (Radygin, Entov, & Malginov, 2014). Some researchers also include in this definition the process of modifying the management model of a state enterprise without alienating property rights – that is on the basis of contracting, leasing, contracts, or completely or partially changing the legal or financial status of a state enterprise. Such a broader interpretation is usually not accepted by the Russian ideologists. At the same time, it is possible with a certain degree of conditionality to talk about such denationalization in Russia as a part of the Soviet Union already from 1987-1988, bearing in mind spontaneous privatization as a kind of preparatory stage of systemic transformation in this area.

If to consider privatization as the most important element of systemic transformation in a transitional economy, then such a definition is not enough, as it is necessary to introduce a systemic approach to privatization as a relatively long (comparable with the entire period of the post-socialist transition) system-building phenomenon, which includes two parallel processes.

On the one hand, there is a gradual withdrawal of the state from those functions of the subject (regulator) of property relations that are not typical in the system of market competitive economy, in other words there is a process of correction of imbalances in this area, which are typical for the transition economy. Accordingly, there is a narrowing of the capacity of the state as a subject of property relations for the economic realization of the relevant rights. This process could be called destatization within the framework of the system transition (Radygin, et al., *Large-scale Reluctant Privatization: Contradictions and Challenges under Sanctions*, 2018).

On the other hand, this is a creative process of the formation of new economic and legal mechanisms and institutional structures, without which the economic realization of the institution of private property is impossible to the full. First of all, these include the private and corporate sectors of the economy, well-established corporate control (management) system directly associated with the existing and stable ownership structure, the securities market as the most important mechanism for redistribution of property rights and investment resources mobilization and the system of institutional non-state investors.

It is important to bear in mind that this creative process in the conditions of a transition economy (in the early stages of its development) can only develop as a secondary phenomenon after the self-elimination of the state from this sphere (Radygin, et al., *Large-scale Reluctant Privatization: Contradictions and Challenges under Sanctions*, 2018). The institutions being established at first can only passively fill the niches left by the state. As a practical example, one can cite at least the majority of the Russian corporations that were newly created in the course of privatization, which in fact had little difference from their predecessors (Boyco, Shleifer, & Vishny, 1993). Because of this, it is difficult to overestimate the role of a conscious and competent policy of stimulation and regulation of the process by the state.

In context of this definition, the key steps if the system transformation in property relations become clearer:

The first step is a non-economic volitional act – technical privatization, the success of which fully depends on the conditions of social compromise (taking into account the balance of interests) (Radygin, Entov, Abramov, Chernova, & Malginov, 2019). Extra-economic nature of this step is due to the two circumstances. Firstly, before the start of the official technical privatization and during its course there is a spontaneous process of privatization, both in legal and semi-legal forms, but sometimes even criminal (Mikhailov, 2011). Primary privatization because of this only legalizes the former informal property rights that already existed, for example, within the framework of relations between the state and the management of the state companies. Secondly, the stimulus for the start of this step is the political will of the state. In case of use of mass privatization models, this is expressed in the formal dispersion of property rights across society in addition to the legalization of already existing informal property rights.

For this stage the most important part is an organization of a critical mass of private and quasi-private enterprises, as well as the intensive quantitative formation of new institutions. In this regard, a certain criterion for the end of this step can be the slowing down of the process of quantitative transformations and the appearance of the first symptoms of qualitative changes in the already formed institutions and their relations (Radygin, Entov, & Malginov, 2014).

At the second step, an intensive redistribution of property rights takes place after the initial technical privatization and putting in order of so far rather chaotic state intervention in the redistribution process at the micro level. The criterion for the completion of this step is a certain stabilization of the system of new property rights and relations, as well as qualitative and quantitative stabilization of the new system of economic mechanisms and types of institutional structures as a prerequisite for the subsequent economic realization of new property relations (Radygin, Entov, & Malginov, 2014).

During the third step a sustainable system of property rights needs to be established, thus it requires a complete set of other elements of systemic reforms.

Finally, it is crucial to clearly understand the goals of privatization at different stages of this process and the criteria for its effectiveness. In the most general definition, the goal of privatization is to provide the basic conditions for the normal functioning of the future market system. In the context of the approach outlined above, the ultimate goal of privatization as an element of systemic transformation is primarily:

- To ensure the stability of the new system of property relations (which is manifested in the formation of a stable structure of property rights and all related infrastructure and mechanisms).
- To create conditions (mechanisms, institutions) for the self-reproduction of this system.
- To increase economic efficiency at micro and macro levels.

From these final goals, the main criterion of the efficiency of privatization is its systemic understanding: the creation of the condition for the economic implementation of the system of property rights, focused in the performance at the micro level and the economic system as a whole (Shebeko, 2013). It is vital to take into account that privatization (interpreted narrowly or widely, technically or systematically) is a process that has a certain time frame, so any criterion for the efficiency cannot be considered in dynamic (such as the efficiency of a company or national economy as a whole), but only in a fixed form at certain stages of system transformation.

The positive impact of any privatization program, as well as a relatively successful solution to its problems, are achievable only in a set of measures for financial stabilization, price liberation, demonopolization of production, development of financial markets and active antitrust and structural policies, opening up the economy for importing goods and capitals.

Privatization in a transition economy does not automatically provide the emergence of sustainable and viable enterprises, it only creates the necessary economic and legal prerequisites for this. At the same time, not only the nature of ownership, but the market environment itself, the organization of the company's work and the intensity of management determine its performance, and economic efficiency depends much more on competition than on the nature of the right of ownership. The absence (presence) of an adequate economic environment, thus, determines in one way or another the effectiveness of privatization and its scope. In turn, large-scale privatization is an inevitable prerequisite for the transformation of a transition economy into a market one.

1.2 MODELS OF PRIVATIZATION

As the effect of the privatization depends a lot on the model of privatization, it is vital to see all the alternatives with their advantages and drawbacks, so it would be possible to have all the information needed for the decision-making in each particular case.

1. Mass privatization model

This model was wide spread in 1991 in Czechoslovakia (later in Czech Republic), Russia, Lithuania, Mongolia. In several other countries mass privatization was realized later: in Armenia, Belorussia, Georgia, Kyrgyzstan, Kazakhstan, Poland, Romania, Uzbekistan and Ukraine. Mass privatization means the transfer of the state property to the population through the distribution of shares of the state companies. The citizens receive the shares for free or for low price, usually it is organized through the use of vouchers, coupons, or privatization certificates (Radygin, 1998). The process of mass privatization requires at least seven steps:

- Preliminary shareholding of enterprises that are included in the program.
- Merging or grouping of enterprises to be privatized.
- Adaptation of simplified methods of evaluation of tangible assets (usually the use of book value).
- Preparation of simplified financial information for the participants of the program.
- Distribution of vouchers, coupons or privatization certificates among citizens;
- Active use of the intermediary financial institutions.
- Conducting auctions for share distribution among the holders of vouchers, coupons or privatization certificates.

Mass privatization, in contrast with the fund privatization, is a form of “equity privatization”, when the object of distribution or sale is the shares of corporations, thus state companies must first be incorporated, to have a form of a corporation that has a right to issue shares with well-defined property rights. The shares then are exchanged to money

or privatization documents. In case of fund privatization, the object of privatization is real estate, such as building, land or equipment.

Methods of equity privatization can be divided into the methods of “socialization” and of “transfer to private owners” (Berman & Filippov, 2011). Mass privatization is one of the methods of “socialization”, as in the framework of this process shares of the privatized companies are distributed among the big number of investors; thus companies become public corporations listed in the stock exchange with easily exchangeable liquid securities. The property rights on the company, thus are transferred from one shareholder – the state – to many private investors. In this meaning, it is possible to compare mass privatization with IPO¹ and privatization through the unequal distribution of shares among employees of the company.

In practice, mass privatization includes unequal shares distribution among the citizens of the country. The principles of such programs are targeted at the acceleration of the process of the state property, which becomes possible because of the several issues:

- Possibility to avoid long and expensive process of the evaluation of the company.
- Possibility to bypass the barrier of the limited effective demand of the population, whose savings amount to no more than 4-7% of the value of net tangible assets held for sale (Boyco, Shleifer, & Vishny, 1993).
- Chance to avoid the resistance to the privatization process from the citizens. Due to the fact that the period of indoctrination on the former communist countries was quite long, the citizens are convinced that they are the owners of the state property. Thus, they see privatization as depriving them of the property they originally owned (Berman & Filippov, 2011). Mass privatization through free distribution of shares partially removes this obstacle.

2. Insiders model

For many countries with transitional economies in determining the way of conducting a corporate strategy internal control becomes more important. Mass privatization that was introduced in the majority of countries led to the fact that a large part of the state assets were transferred to the population which became so-called investor, but they did not have neither experience at managing property nor financial resources.

Assets and resources of the high quality, as a rule, got concentrated at the hands of experienced and prepared managers, who were able to navigate freely in the economic and political situation in the country. For example, in Russia there were cases when the managers merged big number of shares making minority shareholders sell their shares using threats (Radygin, 1998). Therefore, in some companies after the process of privatization so-called insiders model of management and control was introduced.

¹ IPO - initial public offering, the first sale of a company's stock to the public (Merriam-Webster, 2019)

Insiders model is based on the purchase of the majority stake of shares of the company or of all the shares and then the managers and employees usually divide the stakes into small shares with the formal right of sale and purchase. This model was widely used in Croatia, Slovenia, Poland and Romania (Maggison, 2017).

Nevertheless, not in all the countries that used this method, insiders received benefits from the state. The biggest ones were provided in Russia: there were three types of them, one of which provided 51% of shares distributed to the employees of the company. According to rector of the Russian School of Economy Sergei Guriev, the weakness of the authority which needed allies, made it chose the insiders – companies' management and employees (Guriev, 2018).

Another exception was Slovenia, where the employees of the privatized enterprise could become the owners of the 20% of shares for free and 40% for the half-price during the closed subscription (Radygin, Entov, Abramov, Chernova, & Malginov, 2019).

In the other countries the benefits for the insiders were much lower. For example, in Poland the management and employees could buy up to 20% of share for half-price.

The influence of such model on the corporate governance, as a rule, was negative, but it is crucial to take into account that insiders had better opportunities to control the work of managers.

3. Model of one-time majority control

This model is the simplest from the point of view of the company's management, nevertheless, it was wide-spread only in Estonia and Hungary. In Czech Republic the model became popular after the mass privatization, in Poland during the 5 years of the privatization process there were only 200 deals using this model (Radygin, 1998).

This model is based on establishing one-time majority control over the company by the external owner, which has more than 50% of ordinary shares. Although it is the slowest way of privatization, there are evident advantages for the efficient corporate governance. An example of such model is a method "case by case" which was used in the United Kingdom and Chile (Afonso & Furceri, 2010).

As a rule, the investor himself could decide the future direction of the company's development. The sale of the company was made through the auction, contest or direct sale, where as a rule an external investor, who already had relationships with the company, had preferences. One of the features of this method is a public offering of shares on the stock exchange.

It is important to notice that as a rule direct sales of companies to foreign investors were based on several conditions, which determined the future strategy of the enterprises. The most important conditions were:

- Maintaining a minimum level of workload in the enterprise.
- Investment realization.

- Export growth resulting from the sale of share to the foreign investor.
- Partial payment for the purchase of modern equipment (Gaidar, 2003).

As it was said that the change in the ownership structure influences the efficiency, it seems important to research different approaches toward the definition and ways to measure it.

1.3 WAYS OF MEASURING THE PERFORMANCE OF THE COMPANIES

The concept of enterprise efficiency is among the most important issues of the management. In the scientific literature the efficiency is described as a comprehensive assessment of the final results of its activity over a certain period of time. The question of the improving the efficiency of an enterprise was investigated in the works of many scientists, such as F. Taylor, D. Drucker, R. Kaplan, D. Norton, I. Ansoff, etc. Their approaches toward defining efficiency and the ways to measure it are considered to be traditional and, as the present research is mostly aimed at investigating privatization, it seems enough to have a short review of the ways of measurement the performance of the companies without deep research of the more innovative approaches.

Nowadays there is a big number of the definitions of the efficiency. Peter Drucker in his book “The Practice of Management” defines the efficiency of an enterprise as the most beneficial ratio between total cost and economic results (Drucker, 2006). R. Kaplan and D. Norton adhere a similar point of view, stressing that efficiency is “relative effect, process effectiveness, defined as the ration of effect, result to costs and expenses that led to its production” (Kaplan & Norton, 1996, p. 56). F. Taylor noted that the maximum result for a commercial structure and for its employees as well as for shareholders, investors, the state, consumers – all the stakeholders, is derived from the performance of the enterprise. However, at the same time, the resulting indicator for the enterprise and the team is different. The best option is when the management sets new goals of the development of the enterprise for the team and creates conditions for possible organizational changes (Drucker, 2006). In this regard, I. Ansoff in his book “Strategic Management” stressed that the process of preparation of the employees for the changes should go ahead of the process of changes (Ansoff, 2007).

The problem of determining the efficiency of organizations has always been a crucial point for both managers and owners. The simplest definition of efficiency can be expressed as a ratio of resources expended to the results obtained. Thus, the more an enterprise has income and the less the costs are, the more efficient it is. For a long time this understanding prevailed, and, accordingly all the efforts of enterprises were aimed at increasing revenues and reducing costs. However, gradually this point of view has ceased to meet the requirements of the time. A holistic approach has become more popular, as it was based on the assessment of an enterprise by a whole set of criteria (Kaplan & Norton,

1996). The main reason for this is that the financial indicators underlying the performance criteria in the paradigm of the ratio of income and expenses reflect only the current state of the company. And if today an enterprise is efficient (that is, it has the maximum income at the lowest cost), then tomorrow the situation may change, which proves that one indicator is not enough to assess the efficiency of an enterprise's performance in the long term. In addition, the cost indicator (or capitalization) of the company, which has recently become very wide-spread, is not taken into account. All the written above motivated the creation of the Balanced Scorecard methodology.

Balance scorecard

The Balanced Scorecard System was proposed by D. Norton and R. Kaplan in 1992 to widen the limited ideas of the efficiency of an enterprise based only on financial indicators. The idea includes assessment of performance in three additional spheres, except financial (customers, internal business processes, learning and growth perspectives), thus, it is possible to have more balanced impression about the efficiency.

Quality assessment in these spheres gives more perspectives to have a broader picture. The Balanced Scorecards add some extra to the financial indicators, which are described as past, and also they show:

- Where the growth in revenues comes from and which clients provide it.
- Which the key business processes are, for the company to concentrate on them to reach the clients with their unique value proposition.
- What the directions of investments are, thus it is possible to concentrate on this direction together with the employees, to develop internal systems, corporate culture and climate (Kaplan & Norton, 1996).

Creation of the Balanced Scorecards includes the formulation of strategy in several perspectives, definition of strategic goals and checking their reach with the indicators. The Balanced Scorecards are projected on a company as a whole through the creation of individual goals in framework of already established corporate strategies and it motivates the understanding by the employees of their place in company.

Using the Balanced Scorecards it is possible to make a realization of strategy a regular activity of all the departments, which will be managed by planning, assessment, control and analysis of balanced indicators, and motivation of the employees to reach them.

While planning the Balanced Scorecards the developers mentally model the situations of possible realization of strategic goals in the strategic maps though describing scenarios as a set of strategic goals and connections between them. Nevertheless, in the majority of instruments of the concept of Business Process Management (BPM) there is no possibility for modeling the Balanced Scorecards for the assessment of the dynamic of the possible development of processes at the company, which would make it possible to choose the most efficient scenario and to concentrate on the accurate strategic goals (Efinov, 2016).

Maisel model

Model of Lawrence S. Maisel was introduced in 1992, it has the same title as the model of Kaplan-Norton. Maisel also differentiated four perspectives for assessment of the performance of the company. Instead of the sphere of learning and growth he used the sphere of human resources, where he assess innovations, education, learning, development of products and services, competence and corporate culture (Maisel & Cokins, 2013). Thus, the difference between two models is not significant. The reason why Maisel used human resources perspective as it is crucial for the management to be more attentive to the employees and to assess the performance not only the processes and systems, but also of the personnel.

Pyramid of efficiency

C.J. McNair, Richard L. Lunch and Kelvin F. Cross in 1990 introduced a model that they called the Pyramid of Efficiency. Like in a lot of other models, the basis of this approach is a concept of the connection of the customer-oriented corporate strategy with financial indicators, supplemented with several key qualitative (non-financial) indicators. Traditional management information should only come from the top level. The Pyramid of Efficiency is based on the concepts of global quality management, industrial engineering and accounting based on actions, which are referred to everything, that us performed by the people or equipment (including machinery and software) to satisfy the consumers (Kuznetsova & Kuznetsov, 2015).

The Pyramid of Efficiency at four different levels shows the structure of an enterprise which provides two-way communications and is necessary for decision-making at various levels of management. Objectives and indicators link the strategy of an enterprise with its operation activities. In other words, goals pass down through the organization, while the indicators are collected from the bottom up. At the top level, the management of an enterprise formulates a corporate vision, at the second level, the goals of the departments become more precise in relation to a specific market and financial indicators. Customers and shareholders determine what and how should be evaluated. The third level in reality does not belong to an organization, as it consists of a number of areas within the company, which are cross functional and go through several structural units. At this level goals and functions are focused on customer satisfaction and flexibility of production and they connect the upper and the lower levels of the Pyramid. Three targets at this level show the drivers of efficiency in relation to two market targets and one financial target. In addition, at this level operational objectives such as quality, delivery time, duration of the production cycle and loss from defects are defined. Quality and delivery time are directly related to external actions, while the duration of the production cycle and losses from defects are the indicators of the internal actions of the company (Kuznetsova & Kuznetsov, 2015).

At the very bottom of the pyramid (in the area of operations) the actions are evaluated daily, weekly or monthly. The top of the pyramid is dominated with financial assessments, the period of which is significantly longer. The system of indicators should be integrated in such a way that operational evaluation at lower levels is related to financial ones at the upper level. Thus, this model of corporate governance is able to show what lies at the heart of financial assessment and what controls them.

To make a conclusion, in this chapter the idea and definition of privatization was researched, as well as its models, which was necessary to do to see how different the process of privatization may change the capital structure of the companies. Some classical approaches to the measuring efficiency were described to use them for the following research.

2. PRIVATIZATION IN RUSSIA: PRACTICAL APPROACH

Theoretical aspects of privatization, including the discussion about the fundamental theories of privatization, models of effectiveness of private and public goods and the effectiveness of privatization processes as a whole have been researched in the scientific community for more than 50 years. The periodic growth of interest in this sphere is mostly connected with the large-scale projects and their results, but the influence has a bilateral nature. On the level of government and management who make economic decisions, privatization in a global sense is a crucial element of the market economy, interaction of competition and private property, market adjustments and the state, economic growth and performance efficiency. At the same time, practical researches show that private companies, as a rule, show better microeconomic efficiency.

In reality the process of privatization has a cyclical pattern, as it reflects the interests and preferences of ruling elites and solves the problem of different scale: from the system transformations to fulfilling budget and fiscal needs. It would be wrong to say that all the national programs of privatization of the second half of XX century to the beginning of XXI century were a success. Even if nowadays the relapses of state capitalism happen in some countries, it is possible to distinguish a clear trend towards the decrease of state property and the state participation in business, even if sometimes the rate can slow down.

The question of the revival of the ideology of “state capitalism”, which includes the state control over the vital national assets, support of the development of “national champions” on the global market and investment through the state-controlled entities, remains open to discussions and the answer rather depends of expert approach. Nevertheless, there are a number of factors that support the movement: rapid development of China and its transformation into the largest economy of the world, attractiveness of some elements of the state capitalism models of China and Singapore, high prices for oil in 2005-2014 that made possible to finance the investment funds of the exporting countries, the global crisis that made the governments to act in order to manage problematic banks and companies, militarization of external politics after 2011, which includes also changes in economy (Radygin, Entov, Abramov, Chernova, & Malginov, 2019).

After the increase of state support to the private sector to stabilize companies and banks during the financial crisis of 2008-2009, the money generated from the privatization in the world in 2013-2016 almost reached \$1 trillion, which is much more, than the result of any period since the times of Margaret Thatcher, who started the modern privatization in 1979 (Privatization Barometer, 2016). Nowadays the modern privatization programs annually generate around \$0.25 trillion for the states, which can be considered as a beginning of the new wave of privatization that may remain for a long time (Figure 1). New plans of privatization exist in the countries of almost all regions of

the world, even if their goals may vary greatly: strategical structural transformations, tactical steps (ideology, fiscal needs), increase of economic efficiency, etc.

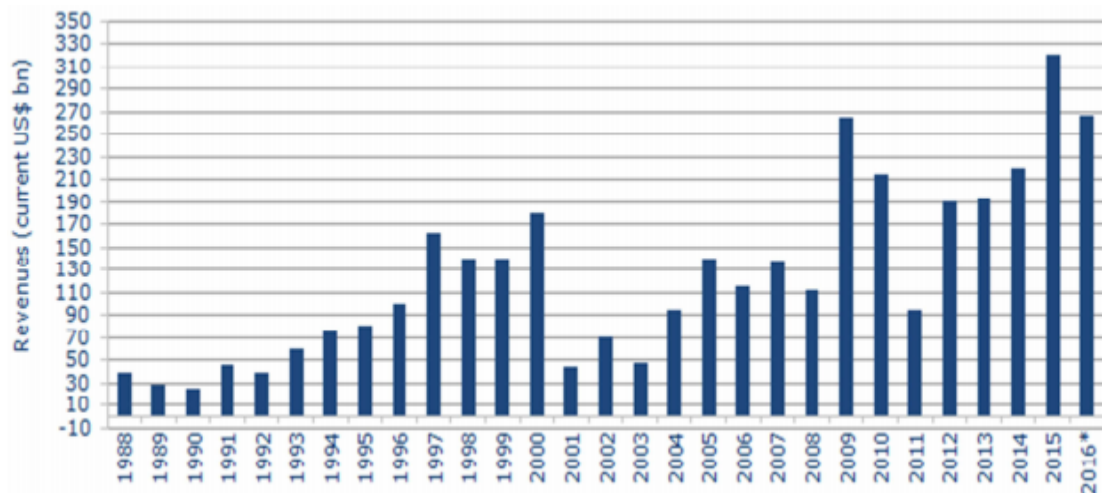


Figure 1. Worldwide revenues from privatizations 1988-2016 (*Privatization Barometer, 2016*)

Although the Russian Federation in 2000-2008 was characterized by the tendency of big expansion of the public sector, later the trend has changed: the share of the companies with the state participation has stabilized or grown insignificantly (nevertheless, it is important to notice the cyclical patterns of the changes). It means, that the process of strengthening the role of the state in the economy has moved to a different step, more quality than quantity. The scale of the process is still not fully clear, but there are certain drawbacks:

1. It leads to the decrease of the efficiency of the market mechanisms: violation of the principle of equality of companies in relations with the state (conflict of interests between the owner and the supervisor of the fair rules) and replacement the mechanisms of competition (through increasing production efficiency or improving products for consumers) with administrative resources and opportunities of lobbying. As a result, the economy starts to fall behind, which causes a slowdown in growth rate and an increase of technological gap with more developed countries.

2. The state as an abstract and non-personified concept is a less efficient owner than private structures, especially in the industries with high competition. Tendency of the poor management is explained by the specialty of the state property, which is usually perceived as collective. The mechanisms of monitoring of the results of the state companies, obviously, cannot include control from each citizen of the country. As a rule, monitoring is performed by some state executive agencies, thus it creates the relationships “principle-agent” which causes even more problems with the mechanisms of control of the results of monitoring performed by the agencies. “Monitoring of monitors” eventually turns into inefficient bureaucratic pyramid with administrative control and formal reports (Arkhipova, Dibrov, Beskrovnaya, & Shchukina, 2016).

3. One of the most important consequences of the described processes is an informal nationalization of the private sector of economy and existence of state private companies, which are, despite the form of ownership, controlled by the state due to the expansion of public sector. At the same time, there is less space for private initiative and opportunities for realization of private property rights, erosion of rights of ownership and competitive markets due to the growth of the public sector.

It would be wrong to state a priori that the state companies are definitely less efficient in comparison with private companies, but other things being equal the state has more difficulties at being an owner and a manager. The scale of state property makes the problems of management more crucial to solve. For this reason, it is vital to put extra attention to the efficiency of the public sector and the adequacy of the privatization programs.

2.1 PRIVATIZATION IN RUSSIA: HISTORY

In Russia, as in the other countries of post-communist transformation, privatization became a significant trend from the end of the 1980s.

In almost all the transition countries it is possible to notice such problems as the connection of the privatization with the changes of the distribution of power in the society (for example, a problem of restitution), scale of privatization, absence of the rational competitive market conditions, technical difficulties, necessity of the ideological choices, absence of the institutional infrastructure of the first step, high level of corruption and criminal.

Even if Russia did not have to deal with such problems as restitution or regional separatism, Russian privatization process was complicated by the following effects, the influence of which was stronger compared with the other transition countries:

- In parallel with a choice of a global privatization model on the micro level there was a spontaneous transfer of the state companies and property into other forms (collective and private, but also quasi collective and quasi private).
- High level of concentration together with backwardness of the many industries prevented the state from realization of effective and less painful for the society structural transformation before and during privatization.
- Privatization and the problems of the property transformation were the part of the economic reforms, where the political and populist pressing was the hardest (Polterovich, 2012).

Political factor during the privatization of the 1990s amplified the inconsistency and instability of the legal framework, which were reflected in the absence of the one legal approach; simultaneous use of the conflicting regulations; frequent change of tactical models; in some cases adoption of normative acts that allowed special rights to

one counterparty, regardless the legal framework; possibility of the cancellation of the taken decisions (Radygin, Entov, Abramov, Chernova, & Malginov, 2019). Furthermore, the highest level of politicization of the privatization in Russia and conflict-compromise nature of its development conditioned the choice of the model of privatization, which was oriented on the maximal social compromise. It provoked high level of transactional costs during the realization of the programs of privatization, but also after, dealing with the redistribution of property.

If it is possible to call 1985-1989 a period of light changes of the system established in the USSR, when all the alternative forms of property were considered only in a context of “socialist economy” with a dominant public sector, then 1990-1991 are the years of more systematic reforms and concepts of pro-market changes, which were connected with the significant shift in the ideological approaches to the questions of property in a whole and in reforming the relationships in particular. The last point reflected in the content of the programs discussed and in the legal framework which was introduced during that time. At the same time with the discussions of the admissibility of the alternative forms of property and methods of privatization the spontaneous process was started.

Together with the spontaneous step, it is possible to distinguish the following steps of the privatization in the modern Russian history (Berman & Filippov, 2011):

- Spontaneous step (1987-1991): no formalized strategy on the macro level.
- Mass privatization (1992-1994): dominant political goals and search for social compromise, start of the important reforms of property based on issued framework for privatization, intensive growth of the “critical mass”, quantity changes.
- First “money” step (1995-1998): mixture of political and fiscal goals, not very successful attempts to change for the new “money” model of privatization.
- Second “money” step (1999-2010): mixture of fiscal and consolidation (the strategy of state capitalism) goals, extensive growth of the public sector;
- Modern step (after changes of the legal framework in 2010 and the start of the program of the federal property management in 2013-2018): mixture of fiscal and optimization goals (Berman & Filippov, 2011). De-facto the public sector is still strengthening, but in a qualitative way, mostly through the increase of importance of the state at the distribution of financial resources and control of economic agents; activation of the vertically integrated structures in some industries; creation of the state corporations which receive assets from the private state companies; pseudo-privatization; wide state control. At the same time, the processes of quantity growth of the public sector are continuing through the additional assets invested in vertically integrated structures and the increase of the state-owned shares in the capital of the largest public companies.

Nevertheless, nowadays after almost 30 years of the privatization history of modern Russia there is no official statement from the people in authority that privatization was negatively assessed. In opposite, on the level of the official statements the

privatization policy is still a trend in the economy of Russia, thus, it is important to see the possible perspectives of the changes in the future.

2.2 PERSPECTIVES FOR THE PRIVATIZATION IN RUSSIA

It seems that the political and social arguments for privatization in the Russian Federation are less important now, than in the 1990s, fiscal arguments are significant, but not crucial in comparison with the 2000s. The main criteria for the increase of privatization are the questions of optimization of the public sector in a whole and of the increase of efficiency. For this reason, the most important arguments for the further privatization in Russia are:

- Redundancy of the state property in terms of execution of its functions.
- In the sectors with a big share of direct and indirect state participation the conditions are not enough for the fair competition, thus there is no motivation for the private property development.
- The state has limited incentives to develop market regulations, as there are direct instruments of influence.
- The state companies are oriented to the support by the state and different preferences, thus their efficiency, as a rule, is lower. The preferences and help from the state for the big companies deform the market.
- Privatization in different industries will not bring additional profit, but it will help to reduce the budget expenditures on the support of assets, excessive from the state point of view;
- Deeper privatization of the big state companies (till the exist of the state from the list of shareholders) can attract additional resources for the state budget. Nevertheless, this possibility is limited.
- Increased quality of management in the public sector, optimization of the expenses on this tasks and liquidation of the potential spheres for corruption are now limited by the size of the public sector, its robustness, presence of the objects in crisis, which are hard to manage, low level of transparency, vagueness of state interests and imperfect mechanisms for their representation.
- Still there are conflict of interests, duality and contradictory position of the state (as a legislator, regulator and direct participant in large companies). In practice, it can be seen in a policy of double standards towards Russian business.

If this approach is thought to be a priority, then the influence of sanctions is not the most significant argument against privatization in the foreseeable future, nevertheless the idea of their importance is a part of the whole context of reluctant privatization (Arkhipova, Dibrov, Beskrovnaya, & Shchukina, 2016). Here we are talking about the external technical asymmetry in the behavior of the state, which is explained by the traditional adherence to administrative methods of governance, the reluctance of the ruling elites to part with the usual levers of power, the possibility to appropriate private

benefits in different forms, including rental incomes, by expanding the state's presence in the economy. Signs of the reluctant privatization can be often seen in the developing countries, the governments of which are usually careful towards the market mechanisms that regulate capital inflows and outflows. Empirical researches of the practice of privatization in 21 countries in 1977-2002 showed that there is a connection between reluctant privatization and specificity of the political systems (Cato, 2012). Talking about modern Russia, it is obvious that political interest is one of the key arguments while discussing decisions of privatization.

Leaving aside the political aspect of the perspectives of privatization in the Russian Federation, it is important to notice, that in the long-term the following dilemma is crucial while choosing a strategy:

- The inertial continuation of the policy of strengthening the role of the state in the economy (the development of non-declared official model of the state capitalism that was formed in the 2000s).
- Policy of privatization (formally declared on the all levels of authority), which includes the search of the pragmatic balance between keeping the mechanisms of state influence (direct intervention or control) and complete withdrawal of the state from certain industries (with using regulations and different forms of control of the companies of strategic importance) (Radygin, Entov, Abramov, Chernova, & Malginov, 2019).

It seems that in the present conditions big slow privatization is becoming a reality. Some palliatives, as privatization while keeping the full state control, are possible and even expected in the middle term. On the macro level such decisions will not influence greatly the dynamics of the development of the state sector. On the micro level the traditional question appears: how much can companies be efficient if the state keeps holding a significant share of the control and property? The empirical researches showed that keeping of the significant number of shares as a state property slowed down the efficiency growth after the privatization (Maggison, 2017).

In addition, it is important to mention how the institutional conditions (property rights, contract rights, political institutions, and corporate governance practices) influence the development of the privatized companies, capital markets and economic growth. In the majority of researches, it is stressed that privatization has a positive effect on the transformation and performance of the companies on the micro level, nevertheless, such changes happen faster and easier if the economic and political institutes are stronger, quality of law and regulation frames is higher. The opposite, partial privatization might create positive effects if the institutes are relatively weak.

For the case of the Russian Federation, besides general measures to stimulate the creation and development of the private companies, privatization means the solution of the complex of tasks in the long-term perspective:

- To provide sustainability and regularity of the process of minimization of state participation in the economy, especially step-by-step realization of the principle of “presumption of utility” of privatization, guarantee long-term perspective of the plans, preparation of the conditions (including the source of money).
- To limit the growth of the public sectors in the economy, first of all to form an adequate system of restrictions of acquisition of new assets for the large state companies, to revise the structure of state holdings and corporations.
- To reduce the scale of the direct participation of the state in the economy, which includes an increase in the depth of privatization of the large companies, a modernization of the system and a replacement of direct control by industry regulations.
- To clean the public sector from small assets through the accelerated liquidation of enterprises that do not do business, simplified way of sale of non-liquid assets, selling shares of subsidiaries to the equity of the mother companies, etc.
- To increase the quality of the state management for the companies with the state participation, which should not be limited with only the changes in the corporate governance. It is necessary to build a system of the state interest as a strategic core, the companies of which should organize IPOs, provide stock quotes and to become public.
- To synchronize federal and regional policies of privatization, to broadcast the presumption of privatization to the level of regions and municipalities and to provide control over its implementation.

The following measures are also important: decrease of not only direct, but also indirect state participation on the market (attraction of private investors for the subsidiaries of the state companies); development of the financial markets, motivation the participation of institutional investors; involvement of the state property into the commercial usage; simplification of procedures, for example, declarative privatization through electronic bidding at the market price; attraction of private investments to the social sphere and service market, which are now occupied by the state, without changing the form of property through the development of the mechanisms of concession with long-term contracts with the following privatization of the competitive companies; reforms of the state orders (such as audit of the choice of providers of goods and services, their efficiency, etc.).

All the described above can provide an improvement of the investment climate and an increase of the attractiveness of the Russian companies for investors.

On the meeting for the questions of privatization in 2016 the President of Russia Vladimir Putin mentioned the following conditions of the future privatization (Interfax, 2016):

- All the privatization deals must follow the law and to be transparent.
- As a result of the privatization the state must not lose control over the enterprises of strategic importance.

- Sales of state property must be economically justified and expedient, market conditions and trend must be taken into account (it is necessary to find a middle ground to avoid selling shares at a bargain price).
- Special attention must be paid to the quality of potential investors, their reputation and experience. The sale of a state company must be possible only if a buyer has a strategy of the development of the enterprise.
- New owners must exist under the Russian jurisdiction to avoid grey schemes, the use of offshores and ownership avoidance.
- Future investors may use their own resources or loans, but not from the state banks.

As the analysis showed, the level of state participation varies greatly depending on the sector of economy. In the four spheres (energetics, transport, mining and finance) the share of the earning of the state companies in the total earning of the 100 biggest companies in each sector is close or more than 50%. At the same time, 100 biggest companies from these four sectors (400 companies in total) create more than 30% of the earnings of all the Russian companies (Radygin, Entov, Abramov, Chernova, & Malginov, 2019). These results explains the high level of the state participation in the economy.

The misbalances of the share of the state companies in the amount of earnings for different industries stresses the importance of taking into account the specificities of the sector of economy to discuss the next steps in the privatization and state property management. In the spheres, where state companies generate less than 30% of earnings, the state can completely withdraw from the ownership to create opportunities for competition. In such industries as transport, energetics, mining, finance and utilities, the share of the state participation can be decreased gradually.

Discussing this issues with more pragmatic approach it is important to see the size of the public sector in Russia today and to analyze the companies that are already included into the plans of privatization and are the objects of reluctant privatization in the modern conditions.

2.3 COMPANIES WITH STATE PARTICIPATION IN RUSSIA

In the 2000s in Russia the role of the state in the economy changed dramatically compared with the 1990s. In 2000-2005 the state tried to optimize its presence in the economy, which was still there after several steps of privatization. In the following years the share of the state participation has clearly increased due to the performance of the companies with the state participation. The state enterprises have embarked on the path of expanding the scale of their business and its diversification, also by participating in merges and acquisitions (Radygin, et al., Large-scale Reluctant Privatization: Contradictions and Challenges under Sanctions, 2018).

After 2005 the state has initiated the policy of integrating of small assets which still belonged to the state to big structures, which sometimes included the whole industries (aviation, nuclear, shipbuilding). New aspect in the state property management became a creation of the state corporations in 2007-2008 (Tass, 2019). The crisis of 2007-2008, as in many countries, in certain level increased at least the indirect state participation, but in Russia, in opposite to some countries, there was no reprivatization (buyback) in 2010-2012. The increase of the indirect ownership continued later, which touched different industries (oil, banks and finances, commerce, etc.)

The state is the biggest shareholder of the Russian market, the share of the companies with state participation, which disclose their shareholder structure, on Moscow Stock Exchange reaches at least 45%, also the state has shares in the majority of the biggest and the most liquid assets (Moscow Stock Exchange, 2019). To fully understand the state influence it will be analyzed based on the effective state share – the amount of voting shares that is owned directly or indirectly by the state agencies.

The system of the public state assets management is very decentralized: nominal owners of the state property are the Federal Agency for State Property Management (which is managed by the Governance of the Russian Federation), the State Corporation Rostec and the State Corporation Vnesheconombank (non-profit organizations) and the Central Bank (Puchkariov, 2018). Also, the shares of some companies belong to the regions of Russia, even if it is hard to call them state-owned.

The biggest part of the state property is managed by the Federal Agency for State Property Management, which controls over 30 public companies, including subsidiaries.

Moscow Stock Exchange introduced a special rating for the companies with state participation – MOEX SCI, which is based on the shares of 16 companies (information about the structure of capital was taken from the official annual reports of the companies for 2019):

- **ALROSA PJSC** – the total share of state participation is 58.03%, from which 33.03% belong to the Federal Agency for State Property Management and 25.00% - to the republic of Sakha (Yakutia). ALROSA-Nyurba, a subsidiary of ALROSA, is also state-owned.
- **Aeroflot – Russian Airlines PJSC** - the Federal Agency for State Property Management owns 51.17% of voting shares and Rostec owns 3.5%.
- **Bashneft PJSOC** – 69.28% belong to Rosneft Oil. Co. and 25.79% to the republic of Bashkortostan.
- **VTB Bank PJSC** – 60.93% of the Federal Agency for State Property Management, 8.99% of Bank Otkritie Financial Corp. PJSC, which is owned by the Central Bank.
- **Rostelecom PJSC** – 48.71% belongs to the Federal Agency for State Property Management, 10.49% to Rostelecom Long-Distance & Intl Telecommunications Co. PJSC and 4.29% to VTB Capital Asset Management CJSC, which are state-owned.

- **Gazprom PJSC** – the state is the majority shareholder through several companies, thus the whole share is 50.23%.
- **Federal Hydro-Generating Co. RusHydro PJSC** - the Federal Agency for State Property Management owns 60.56%, and the state-owned companies VTB Bank PJSC and VSMPO-AVISMA Corp. PJCS owns 13.51% and 6.05%.
- **Rosneft Oil Co.** – a bit more than 50% of shares belong to the Federal Agency for State Property Management.
- **Federal Grid Co. of Unified Energy System PJSC** – is controlled by state-owned Rosseti PJSC, which owns 80.13% of shares.
- **Tatneft PJSC** – 32.57% of shares belong to the Tatarstan Ministry of Land & Property Relations, so it cannot be called purely state-owned.
- **Transneft PJSC** – 100% of voting shares are owned by the state through the Federal Agency for State Property Management.
- **Inter RAO UES PJSC** – taking into account treasury shares, the state owns 62% of shares.
- **Sberbank Russia OJSC** – 52.32% of voting shares belong to the Central Bank of the Russian Federation.
- **Novorossiysk Commercial Sea Port PJSC** – after the recent purchase of shares by Transneft PJSC, the effective state share reaches 82% while 20% are directly controlled by the the Federal Agency for State Property Management.
- **Rosseti PJSC** - the Federal Agency for State Property Management owns 88.89% of shares.

It is important to notice, that the index has showed a significant growth since 2012 (Moscow Stock Exchange, 2019), which can be seen in the Figure 2. Also, the results seem decent in comparison with the sectoral indices, but there is a correlation between the indices MOEX SCI и MICEX O&G (index for oil and gas). Taking into account that more than a half of the companies, chosen for the index are from the oil, gas and energy industries, it is impossible to be sure if the positive dynamic of the state companies is caused by their efficiency or just a global growth of the industry.

To check the scale of the share of the state in GDP a list of companies was created, including 256 biggest Russian private and state companies, from which 162 had the state participation. In 2017 such companies had 96.1% stock capitalization and 22% earnings in the Russian economy. The research showed the growth of the state presence from 31.2% of GDP in 2000 to 43.8% in 2017 (Figure 3) (Radygin, Entov, Abramov, Chernova, & Malginov, 2019).

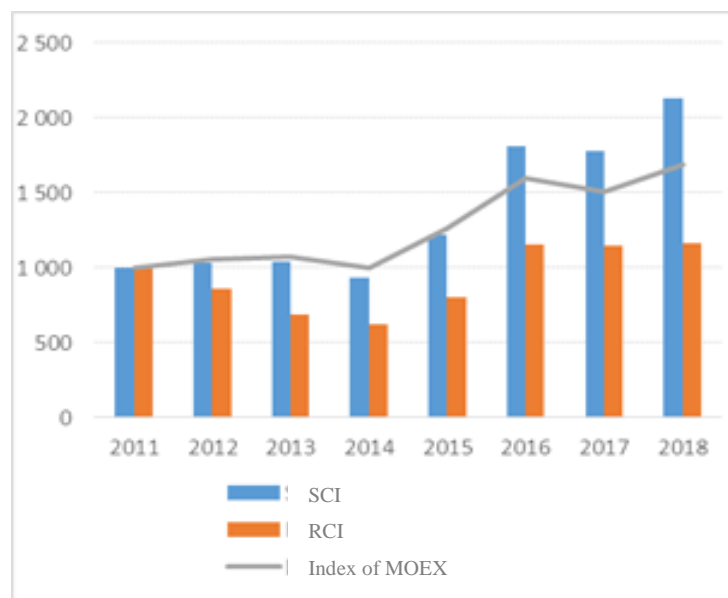


Figure 2. Indexes of the Moscow Stock Exchange for the companies with state participation (SCI) and for the companies with regulated activities (RCI) (*Moscow Stock Exchange, 2019*)

The biggest contribution to the growth of the public sector was made by the state companies and the sector of the state management (state authorities and local governments, state social security funds and non-profit organizations financed and controlled by the state (schools, universities, hospitals, organizations of culture, etc.)). In 2000-2017 the share of the state companies in GDP has risen from 20.1% to 28.7%, while the share of the state management – from 7.1% to 13.7%. The share of the state unitary enterprises has decreased from 4.1% to 1.6%.

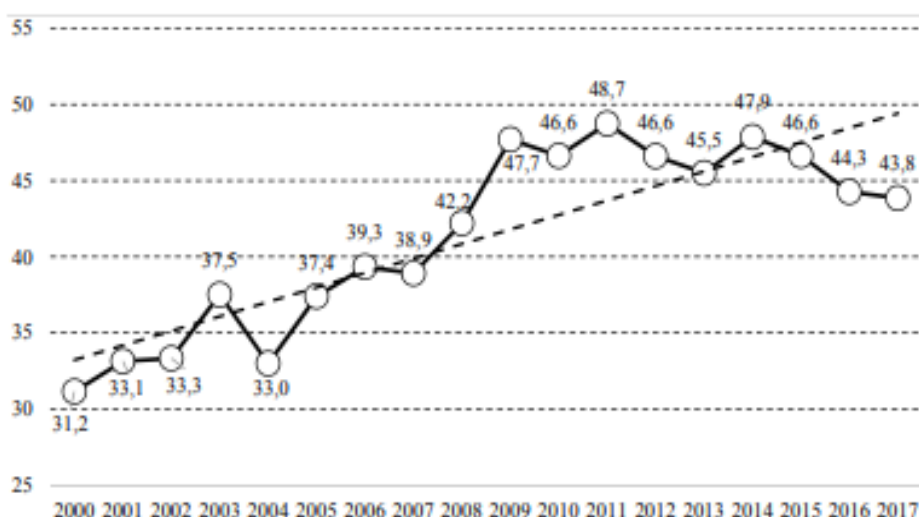


Figure 3. Share of the companies with state participation in the GDP of Russia, 2000-2017, % of GDP (*Radygin, Entov, Abramov, Chernova, & Malginov, 2019*)

The keys reasons explaining the growth of the share of the state companies in GDP were the deals for purchase by the big state companies of shares and assets of private

companies (purchase of Yuganskneftegaz, TNK-VR and Bashneft by Rosneft, Sibneft and Magnit by VTB Bank and the others), creation of the state corporations (Rostec, Rosnano, Rosatom, etc.) and also excessive increase of the earnings of companies from several industries, where the state enterprises play the important role (Radygin, Entov, Abramov, Chernova, & Malginov, 2019). In 2013 in the corrected version of the privatization plan for 2014-2016 the ambitious plans for state withdrawal from the capital of the biggest companies became smaller and in 2014 they were frozen for unlimited term. In addition, the plans of 2012 of full withdrawal of the state from the non-primary sector seem to be unrealistic.

The share of the capitalization of the state companies in the consolidated capitalization of the Russian stock market, which was 50.5% in 2017 more or less corresponds with the same indicator in 2000 (47.4%). However, during 18 years there were two different periods of the dynamics of the state companies. In the beginning of the 2000s because of the privatization of shares of big companies, such as Lukoil and Slavneft, but also due to the progress in the corporate governance, mostly for the private joint-stock companies, the share of the state companies in the consolidated capitalization decreased from 47.4% in 2000 to 32.7% in 2003 (Radygin, Entov, Abramov, Chernova, & Malginov, 2019). However, during the following years the increase of the state presence in the gas and oil industries, creation of the state corporations, changing former private companies into joint-stock provoked an increase of the share of the state companies in the capitalization from 32.7% in 2003 to 52.3% in 2009. After the share has reduced a little but stayed at the level of around 50% in 2017. The privatization of the shares of the big companies in 2000-2010 did not affect significantly the share of the state companies in the capitalization, as these deals as a rule did not reduce the direct and indirect shares of the state lower than 10%. Even the opposite, getting the status of a state company by such enterprises as Bank Otkrytie, Promsviaz Bank, Binbank and Magnit has increased the share of the state companies in capitalization.

Keeping a high share of the capitalization of the state companies in the consolidated capitalization is mostly a negative tendency as simultaneously the companies are undervalued and the level of capitalization is low. The share of capitalization of the Russian companies in GDP (39.0% in 2017) remains at even a bit lower level than in 2003 (39.6%) when the extensive growth of capitalization of the state companies has started. In other words, the extensive growth of the capitalization of the state companies from 2004 was accompanied by stagnation of the general level of capitalization of the Russian stock market relative to GDP. The state holds its position in such competitive industries, as oil and gas, banking, energetics and transport, which creates a conflict of interest with the development of the other sectors of economy.

2.4 EFFICIENCY OF THE PUBLIC SECTOR IN RUSSIA

The term of performance efficiency in economy is complicated and ambiguous. Several researches shows the correlation between the size of public sector and economic growth. For example, (Grossman, 1990) (Afonso & Furceri, 2010) (Folster & Henrekson, 2001) (Justesen, 2008) noted the negative influence of tax withdrawals on the economic growth. (Doppelhofer, Miller, & Sala-i-Martin, 2004) stressed the negative influence of larger scale of state consumption.

The whole analysis and the calculations based on the data from several countries made it possible to note that the increase of the share of public sector in the end of XX century – beginning of XXI century has more of a negative effect on the efficiency of economy. The share of the state in GDP may be used to see the dynamic in comparison with the economic growth and to investigate the influence of the size of public sector on the factor performance.

In the micro level the problem of performance assessment of the state companies is still widely discussed. In theory under the term of a “state company” it is possible to analyze the following alternatives:

- Fully state enterprise, non-public with no disclosure of information and having special functions.
- State company as a public enterprise with the participation of the state, the share of the participation may vary but it performs market functions.

For the first companies such characteristics as profitability may not play the most important role (the state can use non-market behavior, for example, in state medical centers, universities or military industry), but in this case, all the financing is made by the state (budget) and the market mechanisms of efficiency disappear. For the second companies the state makes efforts to attract private capital and in this case the state has to provide the normal conditions for its functioning, thus the problem of profitability becomes crucial.

In line with the idea that investment in more risky instruments must be compensated with the risk premium, the researchers made a comparison of the stock returns of the state companies with the returns of the broad portfolio of RGBEY (Russian government bonds), which can be seen in the Figure 4. From 22 state companies only 7 during the period of 2006-2016 showed higher return than the portfolio of RGBEY. The returns of the others were lower than the government bonds.

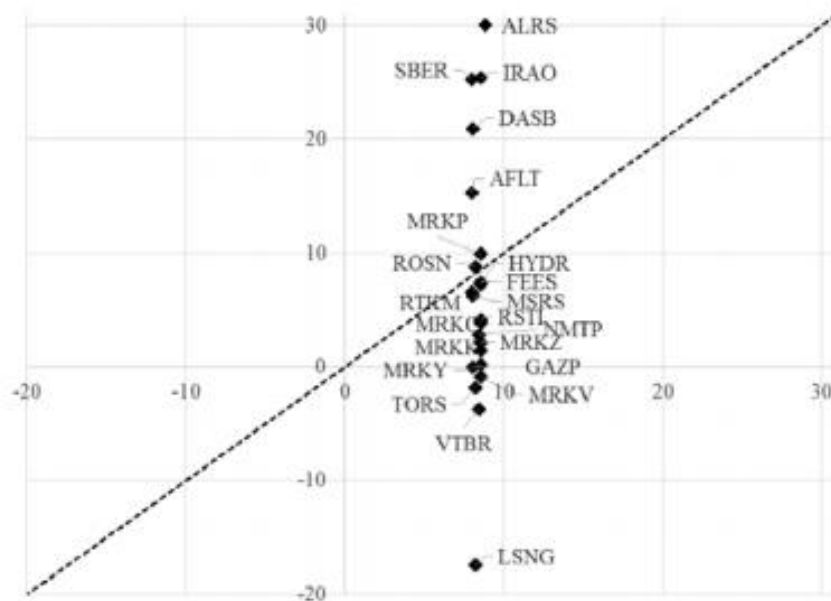


Figure 4. Geometric mean annual return on shares of companies with state participation and portfolio of Russian government bonds, 2006-2016 (*Radygin, Entov, Abramov, Chernova, & Malginov, 2019*)

While choosing companies for comparison of long-term stock return between state companies shares and government bonds it is crucial to take into consideration that the objects are very different here as these securities have different mechanisms and different expectations of the investors and issuers. Nevertheless, such comparison helps to show the serious anomalies of the Russian financial market, for example, the absence of risk premium in long-term investments into the shares of the state companies. The total income on shares of such companies is lower than the minimum market return in shares, which all other things being equal, inevitably reduces the demand for them from private investors and, accordingly, increases the financial burden associated with government support.

As the result, investors tend to buy government bonds, not shares of state companies. Using IPO and SPO² to attract capital for the state companies has become a rarity. In the conditions of low demand on shares from private investors, they have to use different forms of budget financing from the state or state-owned banks. At the same time, it puts additional pressure on the budget, thus the state is forced to attract money on the bonds market with higher return to finance state companies. In this situation the state attracts money proposing higher return than that it receives from the companies it finances.

Several problems of the state companies are seen while comparing the results of their performance with the private companies. For this analysis 16 biggest state enterprises were chosen as it was possible to get enough information from the open

² SPO - Secondary Public Offering, is the sale of new or closely held shares by a company that has already made an initial public offering (IPO) (Investopedia, 2019)

sources. The data from was compared with 133 private Russian companies for the period of 2006-2016, the list included companies with less than 10% of the state presence. The results can be seen in the Figure 5.

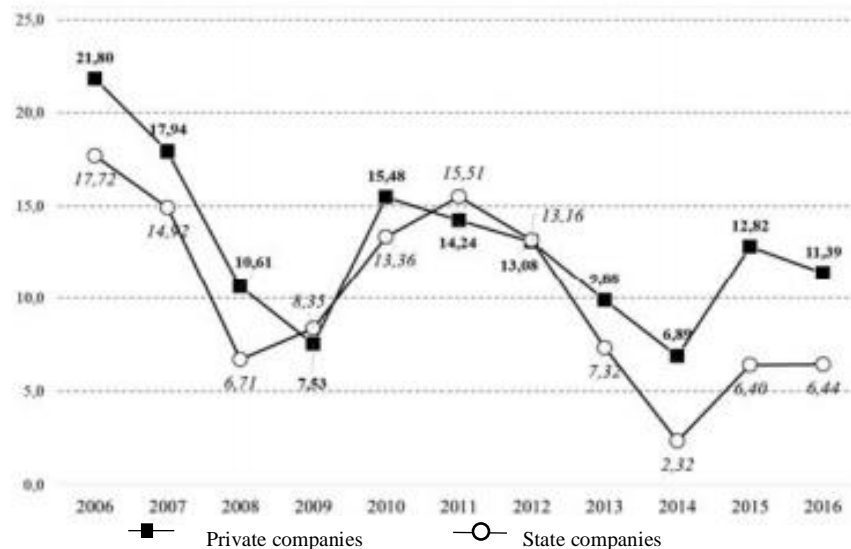


Figure 5. Dynamics of median value of ROE for 16 companies with state participation and 133 private companies in Russia, 2006-2016, % (*Radygin, Entov, Abramov, Chernova, & Malginov, 2019*)

As it is seen in the graph in 2006-2016 there was a clear lag of the state companies compared with the private ones using ROE³. In 2006 the median ROE of the state companies was 17.7% while for the private companies it was 21.8%. In 2016 ROE of the state companies reached 6.4%, while for the private it was 11.4% thus the difference has become even more significant.

Figure 6 shows that in 2006-2016 there was a big difference in the dividend yield. Even if in 2014-2016 for the private companies there was a tendency towards the increase of the sum of dividends, for the state companies this number was decreasing. This moment is very important for investment attractiveness of a company, as the corporate governance gets more sophisticated, the role of dividends as a factor of return for investments and share pricing is becoming more vital for the decision-making.

³ ROE - Return on equity, is a measure of financial performance calculated by dividing net income by shareholders' equity. ROE is considered a measure of how effectively management is using a company's assets to create profits (Investopedia, 2019)

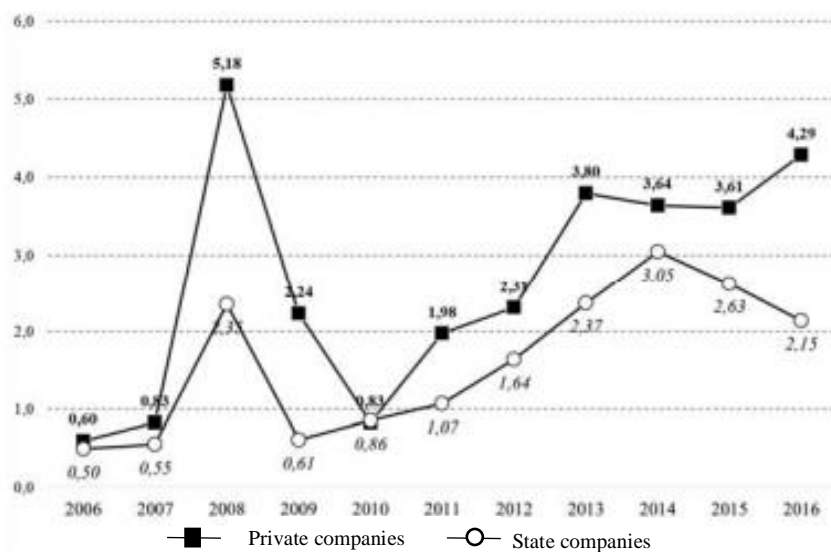


Figure 6. Dynamics of median dividend yield for ordinary shares for 16 companies with state participation and 133 private companies in Russia, 2006-2016, % (Radygin, Entov, Abramov, Chernova, & Malginov, 2019)

The problem of the majority of the state companies is bigger amount of loans which creates additional risks for the state as an owner in case of insolvency. Such companies have bigger leverage (they themselves and their shareholders carry more risks), but there return for shareholders, including the state, is much lower than of the private companies.

The Figure7 shows that in 2006-2016, except for 2016, the level of debt which was calculated as Net Debt/EBITDA for the state companies is much high. In 2016 it became lower in comparison with the private companies, which can be explained by the influence of sanctions that made state companies pay their external debts without future refinancing much faster than the private companies (Radygin, et al., Large-scale Reluctant Privatization: Contradictions and Challenges under Sanctions, 2018).

The trends described before head, including bigger debt together with low ROE and dividend yield, are supported by the comparison with the competitors in the world (Appendix 1). The state companies have bigger leverage, but their returns for the investors, including the state, are much lower. Because of the restricted interest of the private investors, the operations of the state companies are often financed with the loans of the state banks, the use of which might be excessive even considering better conditions. It results that net debt is much higher for the state companies in comparison with the private competitors. Another source of such high numbers is relatively low EBITDA as the state companies as a rule are less efficient.

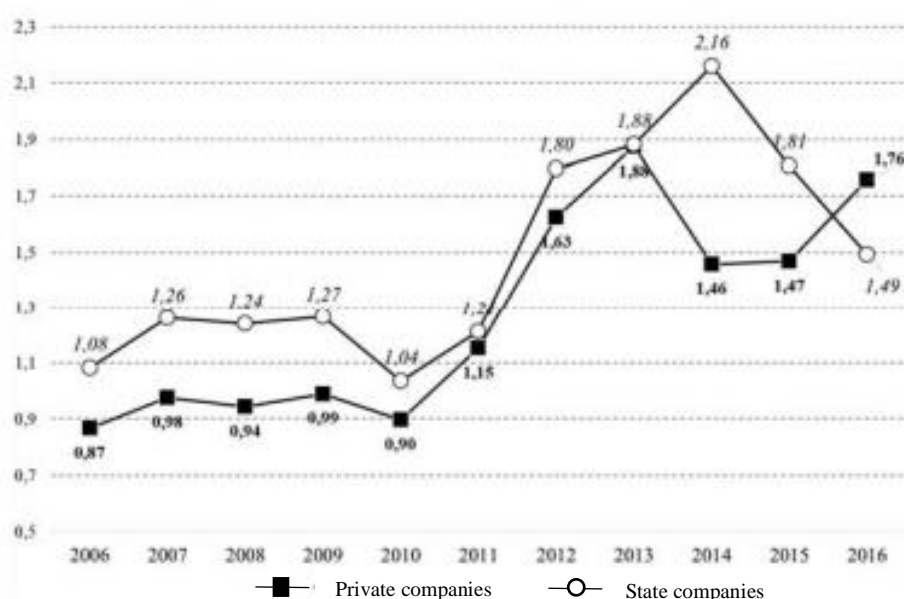


Figure 7. Dynamics of median Net Debt to EBITDA ratio for 16 companies with state participation and 133 private companies in Russia, 2006-2016, % (Radygin, Entov, Abramov, Chernova, & Malginov, 2019)

During the period of 2006-2016 10 out of 16 companies showed lower ROE than their competitors (Radygin, Entov, Abramov, Chernova, & Malginov, 2019). Average dividend yield is lower for 8 out of 16 while 4 did not disclose the information. The debt calculated as Net Debt/ EBITDA was higher for 7 companies while 2 did not disclose data.

A huge level of state intervention into the management of the companies is already a negative factor for investment climate assessment, which is also a reason why the value of the biggest Russian companies is often underestimated. It is possible to notice, indeed, a significant underestimation of the state companies in comparison with the global competitors. Furthermore, the research shows that even in such conditions the underestimation of different companies vary, thus it is possible to judge their efficiency. As according to the criteria of profitability and dividend yield the state companies lag behind both domestic private companies and foreign competitors, it is possible to make a conclusion that the state Russian companies are undervalued more, than the private ones.

The state companies usually lack the market mechanisms to regulate the efficiency of their performance. It is possible to observe during the analysis of correlation between the dynamics of indicator of real gross output per employee and return on equity for the group of companies with high state participation (more than 25%) and the group of companies with minor participation of the state in the ownership structure (Radygin, Entov, Abramov, Chernova, & Malginov, 2019). For the state companies when the real gross output went down, there was no clear statistical correlation between labor productivity and return on equity, which was not the same for the private companies, as

the dependency in their case was significant. It seems that the state companies had the opportunity to compensate the productivity loss and growth of cost with higher prices, which helped to keep the same level of return of equity.

Lower efficiency of the state companies compared with the private ones is often explained by the fact that the state companies also serve as an instrument of social and industrial politics or that they bare strategic and social costs. Nevertheless, based on the state companies' reforms in China, it is possible to notice that because of the information asymmetry, the state cannot receive a precise data about the costs connected to the realization of the official economic course, which makes it possible for the companies to explain their inefficiency with the state politics (Yin, Liu, Wang, & Wen, 2018). This problem might be solved by relieving companies if the burden associated with the economic policy but taking into account the specifics and significance of the produced goods for the state. If the privatization of the state companies is made before relieving the burden, the risks for the state of the loss due to the undervalue of the assets of such enterprises increase dramatically.

To follow such logic, privatization of the state companies is a reason to simultaneously relieve the burden of strategic and social functions and to move it to the state consumers of such services. It can make the state expenses measurable and cause an increase of transparency and efficiency of the state functions.

3 PRIVATIZATION IN THE DIAMOND SECTOR: ALROSA-KRISTAL CASE

As the research showed that privatization can be more efficient in different industries, it seems necessary to analyze the diamond sector to take into account its specificity for providing recommendations in the framework of the case study.

3.1 DIAMOND INDUSTRY IN RUSSIA AND IN THE WORLD

The diamond production process can be divided into three main steps: upstream (mining), midstream (polishing and jewelry making) and downstream (retail).

Upstream or mining is concentrated in the South America, Russia, Canada and Australia. As the entrance barriers in the industry are very high, there are not so many participants in the industry. Around ninety percent of all the mined gems are produced by the five biggest companies.

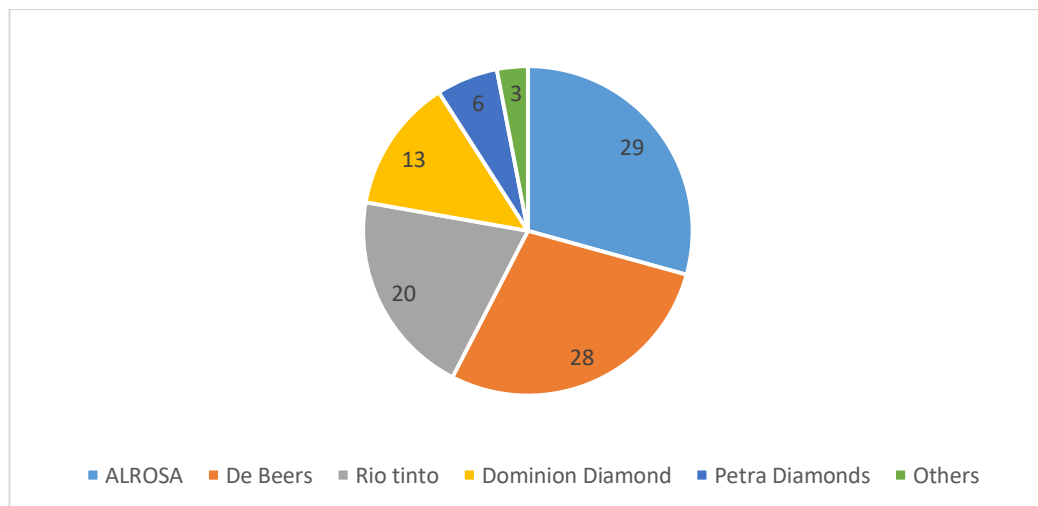


Figure 8. Shares of biggest companies on the market in 2018, % of the rough diamonds mined in carats (*ALROSA, 2019*)

De Beers (part of Anglo American group) used to control more than 80% of the diamond mining market. It was one of the founders of the industry, which because of the successful marketing campaigns in the beginning of the XX century, established the tradition to give engagement rings with diamonds. Nonetheless, the monopoly position of De Beers was changed in the end of the century as the mining companies from the USSR, Canada and Australia joined the industry. Today De Beers controls less than one third of the volume of mining (35.3 million carats in 2018), the mines are situated in Botswana, South Africa, Canada and Namibia (De Beers, 2019).

Rio Tinto is a multinational corporation dealing with the extraction of minerals, as copper, aluminum, iron, coal and the others. The diamonds are mined in the sources of

Argyle (Australia) and Diavik (Canada). In 2018 the company has mined 18.8 million carats of diamonds (Rio Tinto, 2019).

Petra Diamonds owns several mines in South Africa and Tanzania. It has produced 3.8 million carats in 2018 (Petra Diamonds, 2019).

Dominion Diamond is a diamond-mining company, which functions as the group of private companies The Washington Companies. It owns 60 percent share at Diavik (Canada) and 89 percent at Ekati (Canada). Dominion Diamond has extracted 3.0 million carats in 2018 (Dominion Diamonds, 2019).

ALROSA, which develops the mines in Russia, in 2018 showed the best result in the world: 36.7 million carats (ALROSA, 2019). The company's operations are concentrated in the two regions of Russia: Republic of Sakha (Yakutia) and Arkhangelsk region. The biggest mines of the company are Mirny, Udachny, Aikhal, Nyurba, and Anabar located in eastern Siberia (the Republic of Sakha), as well as in the Arkhangelsk region. Besides this, ALROSA participates in the capital of Catoca Ltd in Angola (32.2 percent of participation) and is going to develop the extraction in Zimbabwe.

The geography of the diamond mining industry is shown in the Figure 9:

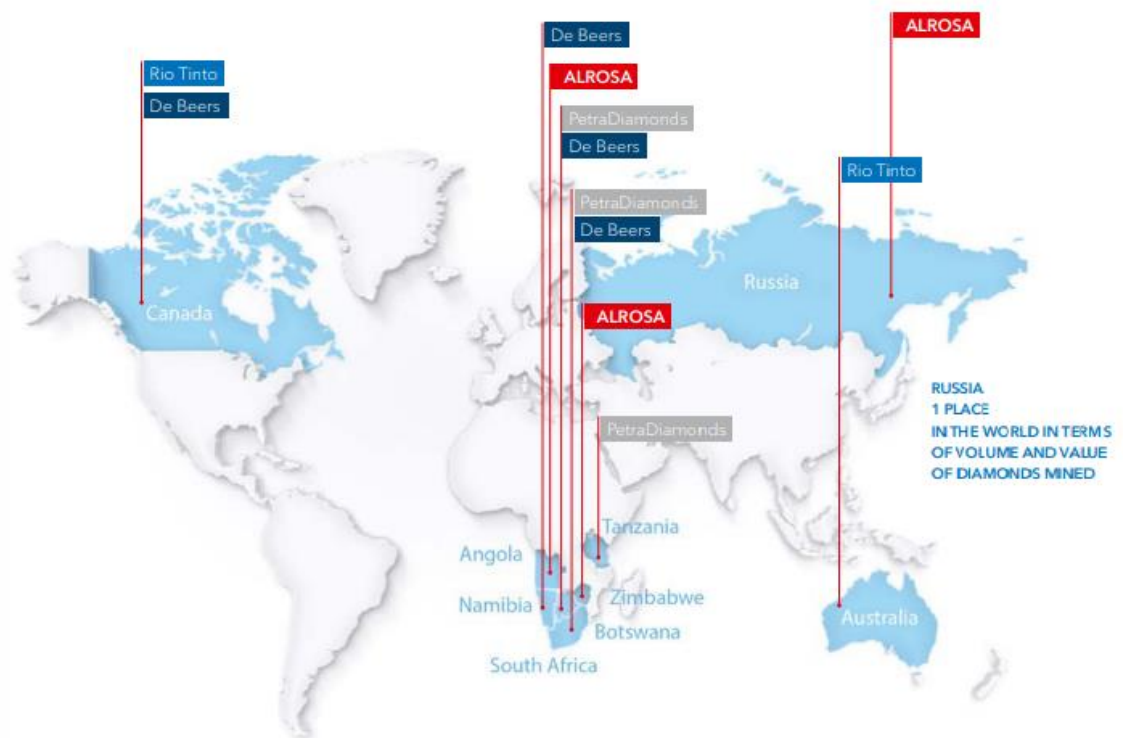


Figure 9. Geography of the rough diamonds mining

The reserves of diamond of ALROSA are the largest in the world: around 1030 million carats (ALROSA, 2019). The cost of mining reaches the minimum level of \$44 per carat, while the average price is \$160 per carat, which helps the company to be profitable and to set EBITDA at the level of the most efficient companies in the industry:

54% in 2018, while De Beers announced 58% and Petra Diamond 39% (Bain & Company, Inc., 2018).

Table 1. Diamond mining by the largest industry players, mln carats (ALROSA, 2019)

Company	2016	2017	2018	Variance
ALROSA	37.4	39.6	36.7	-7%
De Beers	27.3	33.5	35.3	+6%
Rio Tinto	18.0	21.6	18.4	-15%
Petra Diamonds	4.1	4.2	4.4	+5%
Total	86.7	98.9	94.9	-4%

In 2018 ALROSA has decreased to volume of extraction compared with 2017, which was also caused by the accident at the Mirny mine. In 2019 the company plans to produce 38 million carats by further development of Udachny mine and the start of the new Verchne-Munsky mine (Figure 10).

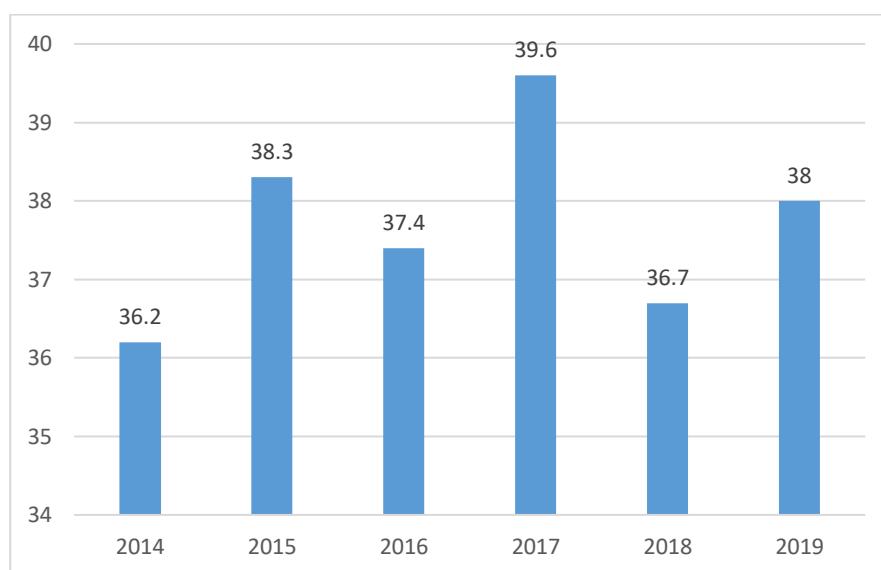


Figure 10. Diamond extraction by ALROSA, mln carats (ALROSA, 2019)

Midstream includes diamond polishing and jewelry making. At this level the absolute leader is India, which is responsible for more than 90% of the world import of rough diamonds and 75% of export of polished diamonds (Bain & Company, Inc., 2018). The country holds the position because of the cheap labor, government support and relative ease of attracting funding.

Midstream is characterized by the low margin (around 1-3%) and high competition: according to the research of Bain & Company, around 5 thousand companies work in this sector. These factors have recently provoked significant changes: the decrease of margin to the record lows (0% and less) in 2014-2015 made the least efficient

participants to leave the market while the process of consolidation has been started which continues now.

An important feature of midstream is seasonality: companies increase stock of rough materials at the beginning of each year. At the same time, seasonal demand for rough diamonds varies according to the sales of jewelry for the Christmas holidays and the Chinese New Year.

Downstream consists of sales and retail. The key market for diamonds and jewelry is the USA. For example, in 2018 the market share of the USA was 48%. There is a clear correlation between the GDP and the demand for diamonds:

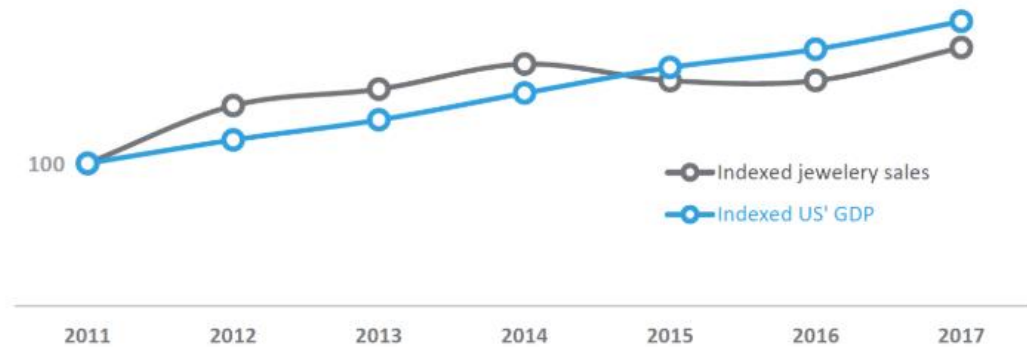


Figure 11. Indexed diamond jewelry sales vs. indexed US' GDP (*Bain & Company, Inc., 2018*)

Chinese market, which now generates 16% of sales, has good perspectives for future development because of the growth of national welfare. Between 2009 and 2015 the sales of jewelry were growing with the average rate of 12% per year, in 2017 the market showed the negative dynamics, but already in 2017 the demand continued to grow (ALROSA, 2019). It is forecasted, that the penetration of diamonds in the Chinese market will go on at a faster pace.

India also has an impressive market share, but in 2018 the growth of interest rates from 6% to 6.5% and the increase of inflation provoked the decrease of demand.

For the international industry diamond exchanges plays an important role, as they work as a place where dealers, brokers and manufacturers meet to sell or buy rough and polished diamonds. Nowadays such exchanges operate in the major diamonds centers in the world: Belgium, the USA, Israel, South Africa, the Netherlands, the United Kingdom and Japan.

Diamond exchange is usually a center of the diamond hub where services and production sites are concentrated. Hubs serve as connecting nodes in trade, polishing and lending, designed for the majority of the world suppliers. As a rule, a diamond hub is organized according to the following principles:

- Big centers of diamond mining and polishing.
- Historical trade centers near major ports.

- Developed capital market.
- Relaxed tax and custom regimes.
- Concentration of skilled and inexpensive labor.

The biggest diamond hubs are situated in:

1. Israel (Ramat Gan): the development of the diamond industry in Israel is highly supported by the government: there is no custom fees for export and import of jewelry and polished diamonds. The development of local manufacturers of polished diamonds also gives a competitive advantage to Israel. The biggest diamond exchange in the country is situated in Ramat Gan, it is a district of skyscrapers which are the offices of the companies working at the market of diamonds and jewelry. The exchange is visited by more than 6 thousand people daily (Bain & Company, Inc., 2018).
2. Belgium (Antwerp): four diamond exchanges operate in Antwerp which makes the city one of the most important center of the industry. In the Diamond district (Diamantenzentrum) there are more than 1500 different companies dealing with the stones. Around 80% of the all diamonds in the world pass through the exchanges of Antwerp. Traditionally this city is also a place for sale of Russian diamonds: ALROSA sells more than 65% of its gems in Antwerp which forms 25% of the turnover of the hub.
3. India (Mumbai): the diamond exchange in India is biggest in the world in terms of its area. On the territory of 8 hectares there are more than 2500 outlets, customer services, banks and other organizations that provide the process of diamond trade. In 2015 new exchange in Surat has been established which made it possible to decrease the costs of companies, as it is close to the manufacturers. The diamonds centers in India are rapidly developing thanks to the tax and customs support from the state: in 2007 the government abolished all custom duties on import of diamonds which was a significant step in the development of the industry as a whole (RAD consulting, 2018).

In Russia the organization of international trade in the diamond sphere is limited due to the following factors:

- Low local demand: low national welfare influences greatly the demand for diamonds.
- Diamond polishing companies are situated out of the country as there is a tendency to move the production to the countries with cheap labor.
- Absence of trust from the partners: due to the geopolitical situation trade in the territory of Russia is perceived with care.
- Absence of free custom zones as in the leading hubs in the world.
- Need for infrastructure and financial services, including easy lending.

The prices for diamonds vary greatly depending on the quality of the stones. There are two main categories of diamonds:

- Technical diamonds – low quality, which are used for industrial purposes;

- Jewelry diamonds – high quality, which are used for making jewelry.

Although the share of technical diamonds is significant, their cost is several times lower than of high-quality stones. Thus, the diamond-mining companies form the biggest part of the profit by selling jewelry diamonds. For example, the share of technical diamonds in the revenue is around 2-4% (Bain & Company, Inc., 2018).

Jewelry diamonds are margin but non-standard goods, thus there is no unified way of pricing. There are several factors that are taken into account to establish the price for each individual case:

- Cost of mining: as it was said before, the process of mining is very costly, for this reason the price includes the materials, technical support, labor cost, as well as the initial investment into the development of new deposits and kimberlite pipes, as the process may take years, require the participation of geologists and chemists and a deep analysis of profitability.
- Level of demand: this factor is purely economic as if the demand grows, so do the prices. Nonetheless, it is important to mention that the demand is highly influenced by the processes happened in the world economy and politics, as buyers tend to invest in diamonds when the financial situation is stable.
- Volume of the diamond mined: it is calculated in carats and shows the amount of diamonds that a country or a region has extracted, as it characterizes the supply. If all the countries sell not a lot of stones, the prices go up as the amount is not enough to satisfy the demand. In case if only one country has low extraction, it is not enough to change the prices as the other regions do not change their supply. The volume of extraction tends to decrease, thus it is crucial for the producers to perform the development of the new mines.
- Size: the bigger the stone is the more expensive it can be, especially if there are no defects. Besides this, as the reserves run dry, diamonds become more and more rare, especially it is related to the big stones. For this reason, the amount of big diamonds will decrease, thus, their prices will grow exponentially which will make the stones more exclusive.
- Country of mining: it influences the price because of the cost of labor which is much cheaper in Africa (except South Africa) and India, while more expensive diamonds are produced in Russia, Brazil, Australia and Canada. Also it is important to notice that the reputation of the producers plays an important role: consumers now demand that the diamonds they buy not to be associated with human rights abuses and blood shed, as during the past two decades seven countries in Africa were involved into military conflicts and civil wars while diamonds were used for financing militaries and rebels, also the groups fought to control the diamond-rich territories. Such diamonds, which relate to civil wars, are called blood or conflict diamonds and remain a serious problem (Brilliant Earth, 2019). Thus, to keep their reputation clean big diamond producers provide special certificates to prove the origin of their stones.

To evaluate polished diamonds the professionals use the grading system developed by GIA in the 1950s, which includes four factors to describe and classify diamonds: Clarity, Color, Cut, and Carat Weight.

- Color: diamonds can come in many colors, but usually they range from colorless to light yellow. As colorless are the rarest, their value is much higher, they set the standard for pricing for the normal range. In the laboratory of GIA diamonds are compared with the stones of known color, which are called the masterstones (Bain & Company, Inc., 2018). Also there are so-called fantasy stones, which can have such colors as pink, bright yellow or blue, they are evaluated using another scale.
- Clarity: a lot of diamonds have internal features, inclusions and surface scratches, which are called blemishes. Depending on their locations, they may remain after polishing and affect the appearance of the diamond. Clarity characteristics can decrease the price of diamonds, but at the same time they help to identify the genuine stones from imitations and to provide valuable information to the scientists about the way diamonds form.
- Cut: different proportions and polish make better use of light thus the stones look brighter and more colorful and shiny. As a rule, the higher the cut grade, the brighter the diamond is, which influences its value. At the same time, the term “cut” also includes shapes, which are divided into standard round brilliant and fancy cuts, such as princess, oval, heart, emerald, pearl, marquise, etc.
- Carat weight: as large diamonds are more rare, thus they do not just cost more, but they cost more per carat, thus one big stone will always be more valuable than the sum of several small stones. Also carat weight has a symbolic meaning: even if the difference between 0.98 carat and 1.01 carat diamonds is negligible, people usually prefer larger stone, even if the difference in prices is around 20% (GIA, 2019).

The research shows that the price on diamonds tend to increase in long perspective which can be explained by the limits of the amount of stones and their rarity. For this reason, it is possible to predict the future growth. Also, it is important to mention that diamonds seem to be “resistant to crisis”, if the traditional components of the investment portfolio such as shares, real estate, future contracts, etc. have depreciated dramatically during the financial crisis of 2008, rough and polished diamonds kept almost the same positions.

No doubt, that diamonds are sensitive to the market fluctuations. From September 2008 till October 2009, when the fall of the Lehman Brothers caused one of the biggest crisis in history, the price for diamonds fell in average by 16.5%, while gold fell by more than 21%, platinum for about 59%, S&P 500 by 52% - everything collapsed, but managed to come back to normal after some time (BAUNAT Diamonds, 2019).

As all the markets were significantly affected, diamonds suffered the least. The resistance of diamonds was noted earlier, in the end of the 1990s and during the market crush of 1987. Only in the beginning of the 1980s diamonds fell dramatically, which was caused by the speculation on the markets, when the banks artificially supported artificially

inflated exchange rates instead of real goods and businesses (BAUNAT Diamonds, 2019).

One of the most significant trends in the industry is the popularity of synthetic artificial diamonds. Such stones are grown in the laboratories and have the same characteristics as genuine gems. The use of synthetic diamonds for industrial purposes nowadays reaches 97%, but recently they have entered the jewelry market (ALROSA, 2019). The prices for synthetic stones are 20-40% lower than the mined ones, but the further expenditure is limited due to the biggest players in the industry. The mining companies lobby the uniqueness of natural stones supporting higher prices for genuine diamonds. According to Aleksei Moiseev, a member of the supervisory board of ALROSA, the market share of polished synthetic diamonds in 2018 reached 20% and is constantly growing (ALROSA, 2019). For example, in September 2018 De Beers Group established a retailer Lightbox Jewelry, which sells lab-grown diamonds (Freedman, 2018).

Extra premium for authenticity and transparent history of origin of stones has become a driver for active introduction of new technologies to the industry. In particular, since 2017-2018 thanks to the projects based on blockchain technology customers can track the entire production chain and verify the natural origin of the stone purchased. Artificial intelligence and real-time control systems are used to reduce the increasing cost of diamond mining.

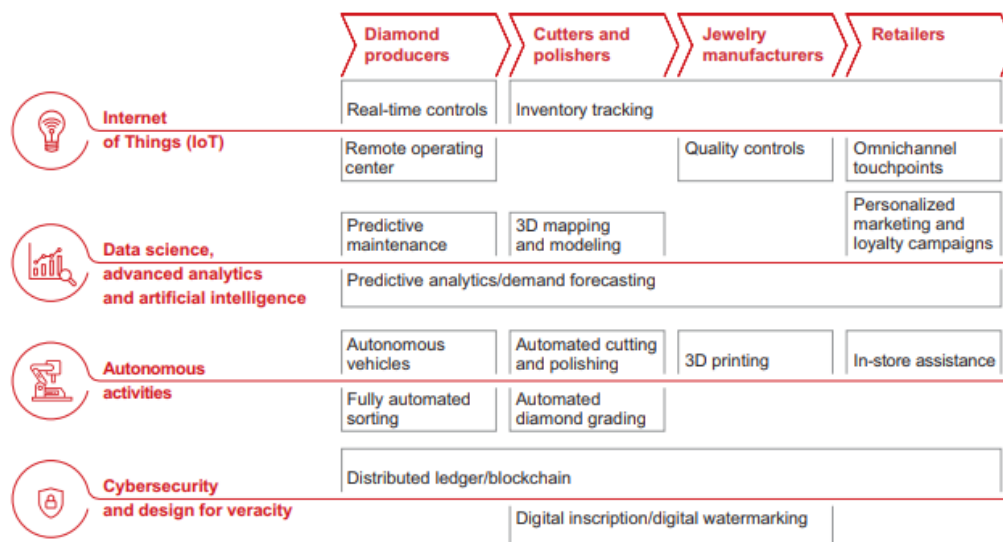


Figure 12. Innovations and future trends in diamond business (*Bain & Company, Inc., 2018*)

Another important trend is a change of generations. De Beers in its studies notes that the portrait of the consumer is changing. The older generation (40+ years) is being replaced by millennials (21-39 years) and Generation Z (0-20 years). For young people, new technologies and social responsibility of companies play an important role while

making a buying decisions. They are critical in their judgments, but their need for love and family is as high as of the older people. Also Generation Z is gaining buying power thus marketing and sales strategies of the companies in the industry will be changed. Social media shopping and self-purchase will increase to attract younger customers with distinct preferences. Also the growing influence of the brand on the value of stones is becoming one of the most important trends on the diamond market. By 2020 the share of branded diamonds may reach 30%, according to (McKinsey, 2014).

Bain & Company believes, that the world demand for diamonds will be growing with the annual rate of 1-2% till 2030 while the supply varies between -1% and 1% due to the reserves coming to an end (Bain & Company, Inc., 2018).

It is predicted that the key markets for diamonds will be the USA, China and India. In the USA the steady growth of real incomes of population of 1.5-2.5% per year will stimulate the demand for jewelry. The rapid development of Chinese economy and the growth of the middle-class stratum will be a major driver of the sustainable trend in diamond consumption. India is now one of the biggest consumers of diamond jewelry and it is forecasted that the market growth will continue due to the increase of the middle class and a high demand for wedding jewelry.

ALROSA expects a drop in the supply on the world market of diamonds already at 2020 which is caused by the gradual development of easily accessible reserves of the mines. McKinsey supports this forecast by stressing that the diamond extraction will remain at the same level till 2025, after a gradual decline will begin due to the end of reserves and the growth of capital and operation expenditures (McKinsey, 2014).

Baselines projections converge that diamond reserves will gradually decline with moderately growing demand. The increasing deficit can support the prices of gems, which is beneficial for the margin of the companies of the industry. ALROSA, which possesses one of the largest diamond reserves in the world, may be the main beneficiary in the implementation of such scenario.

3.2 ALROSA: LEADING PRODUCER OF ROUGH DIAMONDS

History

Nowadays ALROSA mines 95% of all the diamonds in Russia and 27% in the world. The company has the known reserves enough to support the current level of mining for at least 18-20 years.

The diamond mining industry in Russia began its development in the XVIII century, but more sustainable exploration started in the 1930s, when the Russian researcher Vladimir Sobolev published the paper describing geological similarities between Siberia and South Africa, where such companies as De Beers already had their mines. Activities of geological investigation were interrupted by the World War II, but it

the late 1940s they were continued. Geologic expeditions, sent to find rough diamonds around the Vilyui river, in 1949 found the first diamond in Yakutia. By 1954, the first primary deposit of diamonds in the Soviet Union, the Zartitsa pipe, was discovered, from this point the Russian diamonds appeared on the world market. In 1955 pipes Mirny and Udachnaya were discovered together with other 15 primary diamond deposits (ALROSA, 2019). In 1957 it was decided to start mining operations at the alluvial and ore deposits of Yakutia, thus Yakutalmaz Trust was created in the village of Mirny, next to the kimberlite pipe, in two years the company began exporting rough diamonds under an agreement with De Beers.

Initially diamonds were extracted from the Mirny pipe and despite terrible working conditions in the remote taiga, such as temperature down to minus 60 degrees, the absence of roads and big distances to the closest cities, the exploration continued and in 1961 the development of the Aikhal pipe began, which was located almost at the Arctic Circle. During this time, the infrastructure for the industry was established: processing plants, housing, airports, roads and a special R&D university. To provide the mines and plants with the energy, the world's first hydroelectric power plant on permafrost was built. In 1966 Yakutalmaz Trust received the highest award in the USSR for its achievements: The Order of Lenin.

In 1968-1978 the growth of extraction continued with the discovery of the new pipes and building new mines and plants. In 1971 the mining was started at Internatsionalnaya pipe, which provides one of the richest deposits in the world. After for a long period the company was modernizing the way of diamond extraction, implementing new technologies such as X-ray luminescent separation. At the same time, the company supported the local community (towns and villages of Western Yakutia) by modernizing the housing, using local resources, like gas for heating, but also environmental protection facilities were built together with the development of automation, communication, and computer science.

After the crash of the USSR the new era has started for the enterprise, as between 1993-2008 it started the process of establishing and developing the company as a joint-stock one, as it had to face the reality of the market economy. In 1992 Yakutalmaz and several state-owned organizations were merged to create a single joint-stock company – ALROSA.

In the 1990s there was also a restructuring of the organization, as a number of companies such as DiamondCenter, Almazexport, the United Selling Organization in Moscow and The Diamond Trading Company in Yakutsk were established. Thus, ALROSA could not only mine rough diamonds, but also sort and sell them in domestic and foreign market, as the system for sorting and evaluating diamonds was created together with the training for the employees to be able to do this job.

Together with this ALROSA established subsidiaries for cutting and polishing, which helped to diversify the production. There were also significant changes in the industrial policies, as the construction of underground mines.

In 2009 due to the anti-monopoly law the European Commission terminated the partnership between ALROSA and De Beers, thus the company had to build its own policies to sell the products internationally without any help (ALROSA, 2019). In 2011 the company was transformed into a public joint-stock company as its shares were admitted to free circulation. To provide further growth in shareholder value and full protection of the rights and interests of all the shareholders, the company following the best international practices, has continuously improved its corporate governance system.

On July 2013 the company organized the IPO, during which 16% of the shares were sold (7% of shares were provided by the Russian Federation and the Government of Yakutia and 2% by quasi-treasury bonds). Over 60% of the placement volume was bought by the investors from the USA, 24% - from Europe, 14% - from Russia. Oppenheimer Funds and Lazard bought 2% of shares each. During the IPO ALROSA raised 41.3 billion rubles (about \$ 1.3 billion) (ALROSA, 2019).

Fast and successful privatization of 10.9% of ALROSA's shares on the Moscow Stock Exchange in 2016 contributed to an increase in free-float and the emergence of the large funds from the Middle East Europe and Russia in the shareholder structure. The same year the capitalization of the company reached historic maximum. Privatization of shares has proved that a high-quality Russian company is of interest to investors even in the conditions of a turbulent financial market.

Nowadays ALROSA not only implements the largest investment projects aimed at expanding the resource base, reconstructs production facilities, but also efficiently solves the issues of social development as it participates in the public life of the citizens of Yakutia.

Table 2. Financial indicators of ALROSA (ALROSA, 2019)

	12/2014	12/2015	12/2016	12/2017	12/2018
Earnings					
Revenue (M RUB)	207159	224524	317090	269706	273247
Net Income (M RUB)	-17952	30674	131392	77075	89217
EBITDA (M RUB)	93857	118024	176201	124241	147294
EPS (RUB)	-2.44	4.17	17.84	10.47	12.38
Profitability					
Pretax Net Margin (%)	-4	18	54	37	42
EBITDA Margin (%)	45	53	56	46	54
Return on Equity (%)	-13	20	51	29	36
Return on Assets (%)	-5	7	28	18	22
ROIC (%)	-6	9	33	24	29

Production

The process of production is divided into several steps. It is important to analyze them to understand the place of ALROSA in the diamond industry.

1 step: mining

1.1 Open-pit mining operations

ALROSA uses open-pit mines with advanced machinery and technologies including excavators, loaders and drill rigs of the Russian and foreign origins. To prevent diamonds from breaking when blasting rocks a special low-impact technology is used. The use of the advanced mining practices and geological parameters make the mines of ALROSA unique.

When the open pit gets to the depth which was designed, the area of mining is being expanded. The ore (kimberlite) is extracted by blasting, then it is transported to the processing plant.

1.2 Underground mining

ALROSA uses underground mines which include kilometers of shafts, horizontal works, stations, compressors for pumping air to the ground, refrigerating plants and other equipment. All these is supported by the surface facilities consist of several buildings. In the mine the workers cut stopes and as the ore is extracted, the empty space is filled with a special backfill mix and the ore is transported to the surface.

2. Ore treatment and Concentration

2.1 Ore reduction (comminution), wet autogenous milling

When the coarse is reduced in jaw or cone crushers, the ore is put into drum mills for wet milling, which makes lumps of ore smaller. The ore after is put into spiral classifiers, which separate the materials by density. After the ore is screened into several fractions, each of them is processed separately.

2.2 Froth flotation, dense media separation (DMS)

Material of middle size is processed in jigging machines and dense media separation units, where pulsating water separates the diamonds. Material of smaller size goes into a froth flotation machine, where small diamonds stick to froth bubbles and are carried to the final step.

2.3 X-ray Fluorescent Separation

Material of large size is put into X-ray fluorescent separation, which is based on the quality of diamonds to fluoresce in X-rays. If detecting flashes caused by fluorescence, a special knife cuts diamonds from the rock.

Eventually, diamonds are cleaned, handpicked, sorted and packed.

3. Diamond sorting and marketing

3.1 Preliminary sorting and valuation

Rough diamonds from several mines by ALROSA are transported to Mirny where they are preliminary sorted into categories of size, and according to this they receive preliminary valuation. At the step it is possible to control the output from each mine to plan the production in the future.

After the diamonds are transported to the United Selling Organization (USO) in Moscow, where they are sorted according to the reference to master samples of quality and color based on the international standards.

3.2 Valuation and sales

As it was mentioned before, the final sorting and valuation happen in Moscow. Large diamonds are sorted by hand, while medium and small gems are sorted using vibration tables and optical system. At this point the diamonds are mixed and boxed by categories for the future distribution to the Russian and foreign manufacturers of polished diamonds using long-term contracts or tenders.

4. Polished diamonds manufacturing

To produce polished diamonds several techniques are used, such as marking, sawing, bruting, faceting and polishing, most of which are manual. Robots and machines are used only for cheaper and smaller diamonds.

The Moscow-based subsidiary of ALROSA (Brillianty ALROSA) produces stones of 4-6 gr and above, while smaller gems are polished in the subsidiaries in the Central Russia, Barnaul and Orel (ALROSA, 2019).

Distribution

The ALROSA's distribution system is built on long-term contracts with companies producing polished diamonds and jewelry. The share of such contracts in 2017 accounted for 77% of the company's sales (ALROSA, 2019). ALROSA also sells rough diamonds on a competitive basis (auctions and tenders) and as a part of one-time non-competitive deals.

The distributors of ALROSA have offices in all of the world's major diamond centers – the United States, Belgium, The United Arab Emirates, China, the United Kingdom and Israel.

The trade policy of ALROSA is regulated by the Regulations on the procedure and conditions for the sale of natural diamonds, which was developed together with the Federal Antimonopoly Service of Russia. Its main principle is to ensure equal conditions of access to rough diamonds for all clients, the use of uniform criteria and the conduct of uniform procedures during tenders and auctions.

In 2012 ALROSA signed a long-term contract with the Belgian company Laurelton Diamonds Inc., which purchases diamonds for the American jewelry company Tiffany & Co. Under the terms of the agreement, at the first step Tiffany & Co. will be able to annually purchase rough diamonds worth about \$60 million (ALROSA, 2019).

In May 2013 ALROSA and Sotheby's auction house signed a memorandum of cooperation, according to the terms of which, ALROSA will be able to sell at Sotheby's auction large premium-class diamonds produced by the subsidiary of the company, Diamonds ALROSA, as well as jewelry with these diamonds.

ALROSA provides active assistance to the Russian state authorities in the implementation of the goals and fulfilment of the requirements of the Kimberley Process: ALROSA does not deliver rough diamonds to legal entities and individual entrepreneurs, if they:

- Belong to the state that does not have a status of an official member of the Kimberley Process.
- Do not comply with the requirements of the international diamond certification scheme under the Kimberley Process (KPCS).
- Violate the internationally accepted procedure for the separate sale of natural, synthetic, and refined natural diamonds and their products.
- Violate the requirements of tax, custom and other legislation.
- Are in the process of reorganization, liquidation or bankruptcy.
- Report inaccurate information, etc.

3.3 KRISTAL: LEADING PRODUCER OF POLISHED DIAMONDS

Nowadays Kristal is the biggest producer of polished diamonds in Russia and one of the biggest in the world. The company is also the main exporter of the polished diamonds of Russia, specializing on the production of the stones of Triple Excellent quality – the higher standard in the industry (more than 75% of gems receive such certification from the international laboratory GIA).

The company has 53 subsidiaries and points of sales in the biggest cities of Russia and also in the centers of diamond industry, such as Antwerp, Hong Kong, Dubai and New-York (Kristal, 2019). Together with polished diamonds the company has its own production of jewelry and tools and equipment for the other producers.

Kristal was founded in 1963 in the city of Smolensk and is considered as a pioneer of the diamond polishing in Russia. During its long history the company has become one of the leading and the most innovative centers of diamonds production, which are well-known in the world as “Russian Cut”. Nowadays Kristal is a symbol of Russian cutting, polishing and jewelry industries, which is widely known in Russia and in the world, it has

establish a brand which is associated with exceptional quality, impeccable reputation, high level of the development of technologies, flexible marketing and sales policies.

History

March 1, 1963 Smolensk Diamond Factory was established by a decree of the USSR Ministry of Finance. During more than 25 years the whole network of seven enterprises was created to form the Industrial-technical Association Kristal (Kristal, 2019). The production processes were changed a lot due to the improvements of the innovation and research activities.

After the change of management at 1988 the company continued to improve the processes by the development and introduction of advanced diamond processing technologies, including lasers, and modern equipment.

In 1992 the CEO of Kristal, Alexander Shkadov managed to obtain for Kristal a state license for the right of independent foreign economic activity, which allowed the company to sell products on the international market, thus it was the first case of selling Russian diamonds abroad. This achievement gave a strong stimulus for the further development of not only Kristal, but also all the diamond cutting industry of the country.

During that time the company was actively involved into the process of establishing partnerships with foreign customers, thus the products were demonstrated at the international exhibitions in Japan, Israel, and Thailand. Trade missions were opened in Belgium and Hong Kong. A number of joint-ventures were created in Smolensk, that later formed the Smolensk Diamonds Association, which coordinated the activities of the companies on the diamond market. In 1996 by the decision of the National Marketing Institute the Association was awarded the International Diamond Star. In 1997 in the city of Smolensk, a Gemological Certification Center for diamonds was established on the basis of the enterprise.

July 31, 1998, Kristal was the first and the only in Russia to receive a status of a trusted client (sightholder) of De Beers corporation. Sightholders control the movement (purchase, sale, resale, cutting, advertising, etc.) of diamonds in the precious metals and jewelry industry of entire regions and countries.

In 2000, the company started its jewelry production, and in 2002 created a jewelry center Kristal.

Increasing competition on the global diamond market required new approaches to production, trading and marketing. At the beginning of the century Kristal formed its global trading network covering the main diamond markets. The organizational and technological structure of the production was revised, a large-scale technical re-equipment of the enterprise was carried out. During that time partnership agreement was signed with ALROSA, a leading diamond miner and monopolist on the Russian market. In 2004, Kristal entered a promising market in the Gulf countries through an office in Dubai.

After the change of management, the company carried out another reorganization of the production processes. The marketing strategy was improved to promote the product in various markets with a special approach to each of them.

Now Kristal is included in the list of strategically important companies in the country under the personal control of the President of Russia. Nowadays 100% of shares is controlled by the State.

Production

Nowadays Kristal is a vertically integrated company that produces and sells diamonds of the highest quality standards in the industry. The group of companies includes its own jewelry production with a developed retail network and a specialized enterprise for the production of unique equipment and tools for diamond processing.

1. Diamonds

Kristal is one of the world leaders in the production of polished diamonds, which provides its customers with direct access to the rich variety of its products. The company produces classic and fancy cut diamonds, which are of a premium class, which is known worldwide as Top Make and Triple Excellent. Diamonds of the highest price category are made in accordance with the industry standard, which implies a combination of ideal parameters and symmetry with polishing of the facets surface.

In the process of work, only natural “non-conflict” rough diamonds are used in accordance with international and industry ethical standards of conducting honest and transparent business. Kristal pays great attention to the quality control of its products, the policy and quality standards of the enterprise are based on tightly regulated requirements of the domestic and international diamond quality control systems.

Quality control is carried out at all production stages, the stage of evaluation of the finished product, commercial sorting and before the process of forming batches of goods. Thus, the customers can be confident that by purchasing diamonds of Kristal brand, they are guaranteed to receive a high-quality product that meets the standards of the world's leading gemological laboratories.

Kristal is a high-tech diamond processing enterprise that uses the best domestic and foreign equipment, including laser complexes and computer marking and modeling systems. Constant updating and technical re-equipment, including the introduction of unique technologies developed at the enterprise, allows Kristal to occupy leading positions not only in the Russian, but also in the global diamond industry.

2. Jewelry

A subsidiary of Kristal - LLC “Jewelry Group Smolensk Diamonds”- has been successfully operating in the jewelry market since 2002.

The most famous product of the company is flawless diamonds of Russian Cut, made by Kristal, combined with the experience and talent of the jewelers of the group.

The designers manage to combine the age-old traditions of Russian jewelry with modern fashion trends, using advanced technology to create real masterpieces. An extensive variety and a wide price range together with high quality make the jewelry of Smolensk diamonds accessible to any buyer.

Jewelry Group Smolensk Diamonds regularly takes part in leading industry exhibitions, fashion shows and events. In 2012, together with the Kristal a project of national significance was implemented - the creation of a replica of the Great Imperial Crown. To this day, the outstanding work of Smolensk masters is exhibited in the largest museums of Russia and the CIS countries, thereby symbolizing the revival of the Russian jewelry art.

3. Equipment

A significant part of the equipment and accessories needed for the own production of diamonds is produced by the subsidiary Kristal –ALMAZ SERVICE LLC, which was established in 1995.

Since February 2007, the company has been joined by the Kristal Scientific and Technical Center LLC, which has 40 years of experience in the development and production of equipment and accessories for cutting enterprises. As a result of this merger, the range of products has been replenished with specialized machines of various technological purposes, equipped with CNC control systems that combine micron precision tool movement with a simple and easy-to-use control algorithm.

Currently, ALMAZ SERVICE LLC is the only company in the Russian Federation and one of the few companies in the world that develops, manufactures and supplies the full range of unique equipment, accessories and tools for the full technological cycle of rough diamond processing into polished diamonds.

The company constantly conducts scientific and technical researches, develops new and modernizes existing types of products, timely re-equipment of production is carried out, mainly due to the acquisition of new, more productive and modern technological equipment.

The product range includes more than 400 types of products and services. Among the regular customers are more than 80 enterprises from various regions of the Russian Federation and CIS countries (Kristal, 2019).

3.4 THE DEAL: WAY TOWARDS PRIVATIZATION

The position of the Kristal seriously deteriorated in September 2016 after the customs duties on the export of rough natural diamonds were abolished, which was the only form of protection for the Russian manufacturers of diamonds. Because of this, Kristal was actually on the verge of ruin: the price of diamonds mined by ALROSA for

domestic consumers increased by more than 10% (Kuznetsov, 2018). Furthermore, the abolition of duties caused a sharp increase in exports of raw materials and, as a consequence, its shortage in the domestic market.

Experts attribute this situation largely to the fact that India dominates the global diamond cutting market, offering a number of preferences to its diamond producers: from the state program of personnel training to the lowest possible lending rates to enterprises in the industry. This policy of the Asian state, which actually became a monopolist in the purchase of diamonds - more than 80 percent of world raw materials and more than 60 percent of domestic raw materials go to India (Zhdanov, 2017) - leads Russia to lose its position in the diamond processing market.

Already at this moment the governor of Smolensk region Aleksei Ostrovskii suggested that the Ministers of Economic Development and Industry and Trade would consider the possibility of attracting ALROSA as a strategic investor for Kristal. He noticed in particular, that the plant's team needed support from the federal authorities, and the administration was certainly interested in preserving the most important enterprise for the regional economy. As it was explained, the proposal was reasonable, due to the fact that as a result of the cancellation of the export duty ALROSA would be estimated to receive from 12 to 15 billion rubles annually, while the value of shares of Kristal, judging by the information that could be found in open sources, was much less than this amount (Zhdanov, 2017).

On Wednesday, June 7, a response was received from the Minister of Industry and Trade. It reported on the outcome of the meeting with the participation of all interested parties. ALROSA was charged with working out the question of the possibility of integrating the Kristal into its structure. It also explored the possibility of granting the Russian company priority in purchasing raw materials and discounts on it at a rate of 6.5%.

At the same time, the Russian government began to prepare state support measures in the framework of the road map for the development of the diamond-cutting industry to ease the position of domestic diamond cutters and increase demand in the domestic market. These included an increase in deferred payment of a monthly contract, additional quotas for the domestic market and the abolition of VAT. VAT, which is taken into account in the cost of rough diamonds purchased by producers of diamonds, is the main element of the low competitiveness of the Russian cutting industry (Kuznetsov, 2018).

Nevertheless, the measures seemed not enough, thus in March the Ministry of Finance announced a planned privatization of Kristal while ALROSA was considered as the most likely buyer. The press service of ALROSA stressed that the issue of integration was brought up for discussion in order to assess its feasibility and prospects, to consider possible integration options, including issues relating to the potential system of distribution of raw materials and sales management (Kuznetsov, 2018). At the same time, the management of the company highly appreciated the production potential of Kristal.

In May 2018 the supervisory board of ALROSA considered it expedient to acquire a 100 percent stake in the Kristal plant. After the approval of the purchase, the CEO of ALROSA Sergei Ivanov, was entrusted with preparing proposals for the technical task for assessing the value of Kristal shares and sending them to the Federal Property Management Agency and the Ministry of Finance (Kuznetsov, 2018).

The Deputy Minister of Finance of Russia Aleksei Moiseev commented that the sale of Kristal to ALROSA would take place at the market price and should happen much earlier than at the end of 2018. According to him, Kristal will be sold at market price and, of course, only privatization in favor of ALROSA was discussed. "The relevant decision of the government has already been generally approved. Now, the details are being worked out, first of all, the assessment of Kristal is carried out, taking into account all the components, its value as a business, the possible costs associated with its transformation. After this assessment is made, a direct decision will be taken," he said, the RNS reports (Kuznetsov, 2018).

Moiseev strongly disagreed that this was some form of support. "This is a market transaction that leads to the realization of a large number of synergies, which will ultimately prove beneficial for the shareholders of both Kristal and ALROSA," he said (Kuznetsov, 2018).

Nevertheless, later the Ministry of Finance notified that the terms of the deal closure would be moved to the second quarter of 2019. "The evaluation procedure is long, first three months the Federal Property Management Agency held a tender for evaluation, then the appraiser had almost half a year to carry out this assessment, as a result, they sent it to the Federal Property Management Agency at the end of December," said Deputy Minister of Finance Aleksei Moiseev (Kuznetsov, 2018). According to him, now the assessment of the plant is completed, and the department is preparing the necessary documents.

Since there are a number of questions regarding the assessment, the Ministry of Finance is not sure that the transaction will be closed in the first quarter of 2019. "This is such a story that it is better to go through all the procedures, wait for all the terms, do not drive anything, so that later there will be no questions. In principle, their financial and economic situation is stable now", he said. "Therefore, if we have to wait an extra three months, and we close not in the first, but in the second quarter, nothing terrible will happen." (Finmarket, 2018)

It is important to notice that it was decided that in the upcoming government order on the privatization of Kristal and the contract of sale will include conditional obligations of the new owner. In particular, ALROSA will be obliged to maintain the volume of diamond cutting by Kristal, which is profitable for processing, in order to ensure the effectiveness of the Smolensk manufacturer's activities. ALROSA will also make a commitment to ensure the average number of personnel for Kristal, which is "necessary for effective functioning". The supervisory board of ALROSA will monitor the implementation of the financial recovery plan for Kristal.

The head of ALROSA, Sergei Ivanov, said, “Of course, we want to do business that will bring us a small profit, though. There is no task just to incur obligations and losses ... We naturally expect this business can bring a small margin. In the world there is a very small margin in cutting, and in order to make it small in Russia, quite a lot of effort is needed (Finmarket, 2018).”

The question of increasing the presence of ALROSA in the cutting industry, which differs from mining by a significantly lower profitability, as a rule, caused a negative reaction from the market and experts.

Taking into account everything said above, it becomes clear that specificity of the industry (a limited number of competitors in the market, vertically integrated structures, importance of the expertise and reputation, etc.) and the country (mentality, long period of command economy, reluctance of the state, etc.) should be considered while discussing the privatization deal. Even if the Government of the Russian Federation has already made a decision, it seems important to estimate risks and consequences of the privatization and provide recommendations.

4 ALROSA-KRISTAL DEAL: IMPACT OF THE PRIVATIZATION ON THE EFFICIENCY

4.1 PRIVATIZATION IN THE RUSSIAN DIAMOND INDUSTRY: MODEL OF INFLUENCE

After the research of the literature, the results of which can be seen in the chapters above, it became clear that the form of property and type of control has a direct influence on the performance of the companies. Thus, it seems crucial to be able to estimate and forecast such influence in order to choose the best alternative for the structure and to provide support for the managerial decisions. It is important to mention, that the ideas described below could be used for any type of industry and country, but there is a special accent on the Russian market and mining industry in general and diamond mining and processing in particular, as it helps to fully answer the question of the thesis.

As it was said in the Chapter 1, it is possible to differentiate several types of privatization, each of which has advantages and drawbacks, thus can be suitable for different countries in general (due to political situation, mentality, management, history, etc.) and companies in particular. In the framework of this thesis to better understand the processes and to take into account the specificities of the country, the following type of privatization models will be considered:

- State Control – for some companies the best solution might be to remain state-owned, for example, the enterprises of high strategic importance (military industry) or of high social value (healthcare to some point). Thus the idea of privatization at such spheres is not considered as a possible step despite the effects on performance and profitability.

In case of privatization, the following models are considered:

- One-time majority control – a type of privatization when an investor buys more than 50% of shares, thus it becomes an owner of the company. In the framework of the thesis, it seems important to differentiate local and foreign investors. Local Investors might be a good alternative in some cases as they have knowledge and experience to provide efficient business transformation and an increase of performance, but at the same time high level of control allows the owners not to take into account the interests of the minority shareholders and to concentrate on profit and efficiency without any attention to social functions, which might be a serious drawback in some cases, thus the procedure of choosing a potential investor must be done properly with the use of multi-criteria models, specially developed for each case.
- Foreign Investor has the same advantages and drawbacks, but it is more important to consider the type of company and the industry (for example, strategic industries or

industries of high social importance), but also it is crucial to take into account the legal and political systems, as the climate may greatly affect the possibility to attract foreign investors in general. For example, the net outflow of foreign direct investment in the capital of the Russian companies in 2018 amounted to more than \$ 6 billion, which is a record result in the entire history of observations (Forbes Staff, 2019). The experts see this fact as a result of the sanctions and counter-sanctions, so mainly political reasons. Nevertheless, except that, there are several legal measures preventing foreign investors from participating in the capital of the Russian companies, for example, there is a list of strategic industries, which are fully closed from the foreign investors. Beside that, the Governmental Commission may require prior approval and can impose any conditions for the deal (Kaufmann & Abdulmenov, 2017). For the reasons described above, it seems hard to fully use the opportunities that foreign investors possess for the Russian companies, which influences greatly the whole process of privatization.

- **Minority Control** – is considered as a type of privatization when several small investors can have the control over the company. In this case it is very hard to realize an efficient management thus as a rule shares are bought and accumulated by several investors, thus it comes to the idea of one-time majority control in some time.

It seems obvious that the form of control influences the performance of companies through the groups of factors, directly and indirectly. In the thesis such factors are divided into two groups and include the following factors:

External Factors Group 1 include the indicators, which are important for the company, don't depend on the form of control directly.

- **exchange rates** – as international trade is an important factor for the development and performance of companies, the exchange rates become one of the most vital indicator to consider for planning and forecasting. For the diamond market it has high importance, as the majority of operations are made between a small number of big companies using dollar as a currency, thus for this industry exchange rate is crucial to support the biggest part of the business activities.
- **environment** – ecological factors have a tendency to become more important as there is a shift towards more sustainable way of doing business. For the mining and extracting industries the question of nature protection is one of the most crucial during the strategy planning, as it must not only obey the law, but also create benefits for the stakeholders, including clients and investors, as the ecological score can make the company more attractive.
- **demography** – such factors can specify the possible demand on products provided by companies, especially such factors are important if products are differentiated by gender, age or social status. In case of the diamond industry, the main factor to consider might be the income level, but at the same time, taking into account the way of doing business, it seems reasonable to concentrate on the world market in general,

as the process of transportation of rough and polished diamonds is not very complicated thanks to well-established logistic chains. This factor is beneficial for the diamond companies as they can concentrate on the countries with growing level of income and high interest in luxury goods as China and India.

- social factors – as special needs of the employees and in general of the citizens of regions, for example demographic situation in the region, gender and age structure of the population, income and cost of living, cultural environment, level of education, etc. The social factors that play a significant role in the functioning of the enterprise also include the way in which employees are involved in professional activities and their lifestyle (the degree of their involvement in solving internal management tasks, qualitative changes in the relationship of employees standing at different levels of the hierarchy, internal expectations of people from the work, various risks, concerns, etc.). In case of the industry analyzed, it is important to notice the lack of qualified personnel as, first of all, the jobs are not considered prestigious and, second, the location of the mines is far from big cities in the zone of extreme weather conditions, thus it is crucial for the companies to create better conditions for the future development. For Kristal the social factors are important also because it employs a significant amount of the citizens of Smolensk, thus any changes in its functioning may influence greatly the economy of the region.

- technology - scientific and technological discoveries seriously change the environment of the company. There are new technologies, new products, which, of course, increase competition. Many companies systematically monitor the trends of scientific and technological progress, which has a positive effect on their activities. The innovations appear in the design, production, distribution and marketing, thereby they influence the overall strategy of the organization. For the diamond industry, technology is vital for the production, thus a lot of companies create their own subsidiaries for development and implementation of equipment and processes.

External Factors Group 2 – in opposite, their influence depends on the structure of ownership:

- political climate – as it was mentioned above, political climate plays an important role for the functioning of companies. Here it is possible to analyze such factors as the political situation in the country, stability, loyalty of the authorities, protectionism, presence of administrative barriers, etc. These factors are especially important for Russia, which is famous for instability, barriers, especially for foreign investors, and some forms of protectionism for certain industries. At the same time, the state can provide support for the state-owned and strategic companies in form of subsidies or guaranteed orders, which can increase their chances for survival, as it happened with Kristal when the competition with India became too high. Of course, private companies do not have such support and may suffer from the pressure of the state-owned enterprises, which are as a rule given priorities.

- legal system - changes in legislation directly affect many types of business activity. These changes are occurring at a fairly high level (for example, the introduction of tax accounting in Russia had a strong impact on the activities of enterprises), and in specific issues (for example, the range of issues related to the introduction of certain sanctions and regulations, changes in labor and work legislation). These factors are important as legal acts are usually different at some point for state-owned and private companies, also the state has the right to impose some legal measures, for example, to restrict the participation of the foreigners in the capital of strategic companies. At the same time, the state-owned companies can lobby changes in law to provide better conditions for their business.
- resources – no doubt that easy and convenient access to resources is one of the most important conditions of the successful functioning of the companies, thus they try their best to establish long-term relationships with reliable suppliers. This factor is especially vital for the analyzed industry as for mining companies it is crucial to have access to the land and have the permission for extraction, which they can get from the state, which is, of course, much easier to do for the state-owned companies, that sometimes have monopoly in this sphere (ALROSA has the exclusive right for the diamond extraction in Yakutia, the richest region in the world). At the same time the state can support the companies by influencing the supplies to give the priority to the state-owned companies, for example, the state convinced ALROSA to provide Kristal with rough diamonds to increase the level of production.
- competition – the performance of the competitors influences the demand and profit of the company, thus it is vital to possess the information needed about their strategy and plans. This is even more crucial for the diamond sector, as there is a little amount of companies, thus small changes in the performance of one company may change the whole industry. For example, as such companies as De Beers and Rio Tinto plan to reduce their extraction in 2019-2020, ALROSA, in opposite, forecasts an increase in mining, as the amount of resources is enough for it, thus it can satisfy the demand of the larger audience (ALROSA, 2019). Change of the type of property can influence these factors, as attraction of competitors as strategic investors may not only reduce competition, but increase the performance of the company thanks to the experience and knowledge of competitors in the sphere and the synergy effect.
- loans and capital – as not a lot of companies can support its activities only by their own capital, it is important to take into account how fast and convenient the enterprises can find ways for financing their business, which depends not only on the internal financial condition of the company, but also on the overall financial and economic situation in the country and the world. As a rule, state-owned companies are considered more reliable and stable, thus are more interesting for conservative investors, at the same time the state can provide guarantees for the banks or just give loans and subsidies on refundable and non-refundable basis. Nevertheless, private companies can provide higher level of profitability, also there are much fewer conditions for

potential investors (foreign, in particular), which makes it easier to attract equity, including venture financing.

All the factors described depend on the external environment as the companies cannot change them. But there are certain conditions that are under control of enterprises, so-called **internal factors**, that influence greatly their performance. Thus it is important to take them into account:

- **Production.** As one of the main goals of enterprises is to provide goods or services to the customers, the characteristics of production play the main role while analyzing the company. In this sphere it is vital to pay attention to the following indicators: volume, structure, production rates; product range; provision of raw materials, inventory levels, the speed of their use, inventory control system; equipment and its usage, spare capacity, technical efficiency of capacity; location of production and availability of infrastructure; production ecology; quality control, costs and quality of theriology; patents, trademarks, etc. For the diamond industry it seems reasonable to stress the importance of the equipment and its use, as the technology and machinery are complicated and the companies invest a lot into the research and development project to introduce new types of equipment and modernize the existing ones. Also raw materials are crucial for the diamond polishing industry, as it was described above.
- **Personnel.** People is considered as one of the most important resource of the companies, as they perform all the functions needed for the production, distribution, marketing, etc. To analyze the situation with the employees, it is possible to introduce the following indicators: structure, potential, qualification of personnel; the quantitative composition of workers; labor productivity; staff turnover; labor cost; interests and needs of employees, etc. It is also important to monitor the level of motivation of personnel and provide needed actions to stimulate the work quality and productivity. In diamond sector the question of employees is one of the most important, as for each step of diamond production there are certain problems with the staff: for diamond mining the working conditions are tough as the extraction is performed in extreme weather conditions and dangerous environment (for example, in 2017 there was an accident in Mirny, in the mine, in which there were workers, water burst from the cup located near the spent pit; it contained about 300 thousand cubic meters of water, eight miners were considered dead (Meduza, 2017)) also it required physical force. To attract new employees ALROSA introduces different motivation packages and also sponsors local universities and schools and provides scholarship for students who study geology and engineering. Diamond polishing companies have the same problems as the work requires high level of professionalism and precision, which requires experience, for this reason there is a lack of young people who could participate in the production process, thus the biggest challenge is to deal with the aging of the personnel. At the same time, the cost of labour in Russia is still very high compared with the developing countries, especially India, while the

quality of the final products is low. Because of this situation, Russian companies concentrate on special and exclusive products and new technologies of polishing.

- **Management.** No doubt that the way the company is managed plays an important role for its efficiency. The enterprises can be characterized using the following factors: organizational structure; control system; level of management; qualification; abilities and interests of top management; branded culture; prestige and image of the company; organization of the communication system, etc. For the management of the company the form of property is crucial for the decision making, as for state-owned enterprises strategic goals and ways of management may pursue the aims of the State, which can contradict the market conditions at the certain moment. At the same time, listed companies often have to deal with the conflict between the shareholders and the management. Talking about structure, big companies in the diamond industries tend to introduce vertical integration to consolidate all the business processes from mining to jewelry distribution as it helps them to use all the expertise to control the whole chain, thus the purchase of Kristal is a step in this direction.

- **Marketing.** This factor can be broken down into the following components: goods produced by the company; market share; ability to collect the necessary information about the markets; distribution and sales channels; marketing budget and its execution; marketing plans and programs; innovations; image, reputation and quality of goods; sales promotion, advertising, pricing, etc. It seems that marketing strategy is not the top priority in the diamond sector, but it is wrong, as the demand on rough diamonds depends on the demand on the final product – diamond jewelry, thus the mining companies are as well interested in marketing and promotion. Besides that, in diamond business image and reputation play a very important role as the companies need to prove that the stones are of natural origin and that they were extracted in conditions not connected to war (so-called blood diamonds). As an example of the involvement of a mining company into marketing, ALROSA pays great attention to marketing and participates in project related to sales of unique diamonds, launching its own store, using social networks to promote diamonds and jewelry to the young generation and providing a service of tracking the origins of a particular gem from mining to purchase (ALROSA, 2019). Of course, the sellers of polished diamonds and jewelry use marketing communications more often, using mostly occasional positioning (diamond engagement rings) and working with new segments, that recently showed their interest at the luxurious goods (India and China), but they also target at traditional markets, that usually are a stable source of profit (the USA and Europe).

- **Finance and accounting.** No business can continue without financial resources needed to support it, thus this point is crucial for analysis. It is possible to analyze such factors as financial stability and solvency; profitability (by goods, regions, distribution channels, intermediaries); own and borrowed funds and their ratio; effective accounting system, including cost accounting, budgeting, profit planning. Companies prefer to concentrate mostly on financial performance and its monitoring.

For example, ALROSA uses instruments for visualization and analysis of financial situation for fast decision making. For state-owned companies, as a rule, it is easier to get financial assistance as the State serves as a guarantor and source of funds. At the same time for this reasons they tend to be more reckless with money as they don't fully feel the responsibility for the profitability of the companies.

All the factors described and many others influence the performance of the companies, which results in certain indicators of the level of efficiency. As a rule, the companies establish some measurements of their efficiency in form of KPIs which are written in their strategies. Such indicators may vary greatly depending on the company and industry, so, taking into account the specificities of the diamond business, described in Chapter 3, it seems reasonable to analyze the indicators by dividing them into several categories:

1. **Objective** – such indicators can be easily measured based on the results of the company performance during the certain period, thus they are very popular and sometimes are used as the only criterion of efficiency, which seems as a wrong approach as the efficiency should be analyzed from several points of view. In this sphere it is recommended to use such indicators, as:

- Core product sales revenue. Revenue from the sale of products represents the cash income received by the company from customers for products sold, thus this indicator expresses the monetary relations between producers and consumers. It is determined based on the number of products sold and their value. In the diamond industry it is important to differentiated revenues from the core product, which is the one most associated with the company (rough or polished diamonds in this case). As a rule, a product margin on core product is rather low if the company makes more revenue on supplementary goods. In case of diamonds, the main revenues streams come from the stones, thus it is vital to track it more carefully. Also because of the structure of the industry and the way it functions, it is recommended to measure this indicator in dollars, thus it takes into account exchange rates fluctuation.
- Rough and polished diamond production. Volume of goods produced is needed to be measured as the prices and demand are rather stable, thus this indicator influences greatly the profit. In the diamond industry production volume depends on several factors, including production capacities, raw materials and situation on the market. As there are only several competitors on the market, it is crucial to forecast their actions to benefit from the positive situations.
- Cost of sales share in the sales revenue. The cost of products (works, services) characterizes the costs for specific enterprises of the production and sales and reveals the economic mechanism for the reimbursement of these costs from sales revenue. Reflecting the processes of production, circulation and distribution, it acts as one of the main synthetic indicators of the enterprise. Being the most important qualitative indicator of an enterprise's activity, expressing the costs associated with the production and sale of products, the performance of work and the provision of

services, it reflects in a concentrated way the results of the enterprise's economic activities, its achievements and the available reserves. The indicator consists of the costs associated with the use in the process of production of natural resources, raw materials, fuel, energy, fixed assets, labor resources, as well as other costs of production and sale. It characterizes the level of use of all types of resources at the disposal of the enterprise. The research shows that high cost of production and sales is one of the biggest problems of the Russian companies, as the labor is more expensive than in such countries as India and China, while the efficiency is still rather low, which is one of the reasons why it is important to measure this indicator and concentrate efforts on positive changes in this sphere.

- **Innovations.** It is obvious that nowadays innovations are one of the keys to the success in business, so for the companies it is crucial to work on R&D projects and to introduce innovations in products, technologies, processes and management techniques. In the diamond industry R&D is usually carried out within the company or its subsidiaries, as they have all the necessary knowledge, experience and qualification to do it. Besides, it helps to adapt the projects to the needs of each company and to keep the certain level of secrecy as any small advantage may be crucial for competition. Thus, the innovation development is aimed at creating and putting into practice new solutions for improving competitive ability, at cutting costs and increasing operating efficiency, at IT and industrial automation, at increasing the quality of procurement and feedback for efficient support of the core business and the other.
- **Dividend flow.** High dividends flow is one of the best way to attract potential investors. It is also possible to measure the cost of company using the dividend discount model – DDM (Galaktionov, 2019). This model is used when the following conditions are met: the company has a stable dividend payout history and a clear dividend policy, which suggests the size of future payments; it conducts stable activities and there is reason to expect that it continues in the future. The idea of the method is that for shareholders of such companies the main source of earnings from the shares are dividend payments, while the exchange rate varies in a relatively narrow range. Then the intrinsic value can be determined by discounting future payments and at a distance the market price of the shares will tend (theoretically) to this value. This indicator is less important for the state-owned companies, but crucial for the private ones. For example, ALROSA continuously improves its dividend policy, in 2018 the principles of dividend calculations were changed to make the process more transparent and clear for investors and shareholders (ALROSA, 2019).
- **EBITDA margin.** EBITDA margin helps to assess an operation profitability of the company in form of a percentage of its total revenue. It is calculated as earnings before interest, tax, depreciation and amortization divided by total revenue. As the indicator of EBITDA excludes interest, depreciation, amortization and taxes, EBITDA margin is helpful for the investors, as it gives a clear view on operating profitability and cash flow. This indicator can be useful to monitor efforts to cut the costs as it separates

operating expenses, and, as it was said before, costs are a big problem of the Russian company, but besides that in the diamond sector operating expenses are very high, thus it is important to pay attention at the changes of EBITDA margin.

- Return on equity (ROE) is an indicator of net profit in comparison with the organization's own capital. This is the most important financial indicator of return for any investor or business owner, as it shows how effectively the capital invested in the business was used. In contrast to the similar indicator return on assets, ROE describes the efficiency of using not the entire capital (or assets) of an organization, but only that part of it that belongs to the owners of the enterprise.

- Net profit. This indicator shows the number of sales money remained after the operating expenses, taxes, interest and preferred dividends were deducted from the revenue. This number plays an important role for financial analysis and ratios, besides that, shareholders pay great attention to it as net profit is a source of income for them and if the company cannot provide enough profit for compensating the owners, the value of shares can decrease dramatically, and in opposite, high level of profit generation may attract new investors and raise the prices of shares, as it proves that a company is in good health and has a potential for growth. It is vital to understand that net profit does not show the amount of cash a company got during the period, as there are a lot of non-cash expenses included during the calculation, for example, depreciation and amortization. As net profit can vary greatly depending on industry or company, it is more rational to analyze net profit as a percentage of sales (profit margin).

- Net debt/EBITDA. It is an indicator of the debt burden of a company, that shows its ability to repay the existing liabilities (solvency). As an indicator of the of funds gained for the calculation of the debts of the organization, in this case, EBITDA (profit before interest, taxes and amortization) is used, as it is believed that from all the indicators of financial results EBITDA more or less accurately characterizes the flow of funds (the exact flow can be found only from the cash flow statement). The debt to EBITDA indicator shows the company's solvency and is often used by both management and investors, also for evaluation of the publicly listed companies. Debt to EBITDA is a rather popular coefficient among analysts, as non-monetary items as depreciation are not taken into account. Under normal financial condition of the organization, the value of this ratio should not exceed 3. If the value of the ratio exceeds 4-5, this indicates an excessive debt load on the enterprise and probable problems with the repayment of its debt. For enterprises with such a high coefficient value, it is problematic to attract additional borrowed funds. Like other similar ratios, the debt to EBITDA depends on industry specifics, so it is often compared with the numbers from other enterprises within the industry. In addition, it is important to take into account that such expenses as a purchase of new equipment that affect the outflow of funds will not be considered when calculating this indicator, as the purchase itself does not change the financial result of the organization, and depreciation deductions do not participate in EBITDA. Another important point - when assessing the indicator,

it is assumed that the organization's receivables are regularly repaid by buyers. If the enterprise has an unpaid debt of buyers, it certainly worsens its solvency, but does not affect the ratio of payables to EBITDA.

2. **Subjective** (psychological, physiological, socio-psychological) – these indicators are harder to measure and there is no single approach for it, but they are not less important than the objectives ones. These indicators pay more attention at the employees of the organization, as their influence on the results and the performance of the organizations cannot be overestimated. Among the most important indicators from this group are the following:

- **Motivation.** This indicator of performance shows the strength of a person's internal resources, his psychological role in society, and the degree of physical and mental preparation. The degree of motivation is estimated by the strength of employee involvement in the production process, according to how much energy he spends when working on a project. The level of motivation is hard to measure in absolute numbers, but at the same time not enough attention in this sphere may seriously damage the performance of the company. It is also hard to create a motivation program which would take into account the needs and interests of the employees, as it requires not only budget, but a deep knowledge of psychology and opinion of personnel. Despite that, it is recommended to organize researches about this matter as some measure to raise motivation level can be relatively cheap while the effect may be impressive.
- **Labor and social activity of employees.** Labor activity is reflected in such indicators as labor productivity, product quality, etc. In addition, it is important to measure not only the level of the professional skills of the employees, but above all their creative attitude to the work, participation in innovation activity. Social activity is shown in participation in the socio-political life of the country, social movements, development of new economic conditions. This indicator also displays the levels of psychophysical and socio-psychological activity of employees.
- **Job satisfaction.** This is an indicator of an employee's personal attitude towards his work and group members. The importance of satisfaction can be analyzed with both short and long-term visions. In the short term, it is possible to speak about the match between an employee and a company and about the chance that an employee can stay in the organization for longer, as if the new employees do not see the company in positive light, they may want to change the place of work soon after starting. In the long term, it may create certain problems if an employee is not satisfied with his job but continues working because of some reasons. In this case the employee starts to search for reasons to dislike the company more, which is reflected in the image of the enterprise and the idea of the value of the employees for its development, thus this process affects not only the company directly, but the whole range of stakeholders. In addition, it is important to notice, that a dissatisfied employee usually shares his negative points about the company using external channels due to the fear

of repercussion, thus it impacts a wide range of people, including potential employees and clients. For the reasons described above, it is crucial for the HR to identify dissatisfied employees and to try to change their negative impressions into more positive ones. So job satisfaction is crucial for the employees to stay in the company and to remain loyal to it.

- **Relative stability of the organization.** In each group, a core of personnel workers is formed, around which the rest of the staff is concentrated. Stability indicator is associated with employee turnover rate, which is calculated as a number of employees who left the company during the time frames compared with the total number of staff. Usually this indicator is calculated as a percentage per year, but it is possible to measure it for different periods. A certain level of staff turnover is a normal phenomenon for each company. If the group has been absolutely stable for a long time, it has been conserved, then this negatively affects its development, people's relationships, the development of new ideas, etc. Therefore, it is reasonable to talk about the relative stability of the organization, bearing in mind the importance and necessity of a certain staff turnover. At the same time, it is vital to manage the company well and to create an environment for employees' happiness and development. Firstly, during the recruitment process the HR should be sure that new candidates are not only suitable for the job according to their professional qualities, but also to check their fit with the culture, team and management as it can help to avoid future disappointment. Secondly, the company can provide different compensation packages that should be reviewed annually. Thirdly, it is important to get updates about the achievements of the employees to create programs for recognition and positive work environment, which can be relatively cheap, but very efficient to improve job satisfaction and decrease turnover rate. Fourthly, clear career paths must be outlined for the employees to give them motivation to stay in the company for longer (Reh, 2019).

- **Coherence of the organization.** This indicator characterizes the stability and strength of interpersonal interactions. With its help, the psychological state of the system of functional interaction of employees is assessed. The harmony of the people in the group speaks about the well-structured organizational and psychological mechanisms of their activity and is a prerequisite for the cohesion and compatibility of the members of the organization.

Except the indicators that show the efficiency of the company in financial and non-financial senses, it seems reasonable to research the social performance of the companies. During the last decades, companies have come a long way towards realizing their own responsibility to the environment, society, workers, and therefore they decided to improve the quality of life of both the local population and their staff, solve social and economic problems, respect human rights, fight corruption and other public issues. As a result, corporate social responsibility gradually became a qualitatively new entrepreneurial philosophy, in accordance with which companies exist not only for profit, but also for achieving socially beneficial effect and protecting the environment. These

factors are especially important for the state-owned companies as the State has a right to demand a certain level of support of the social initiatives, as according to the laws of Russia, the main function and purpose of state enterprises is the solution of socio-economic problems determined by the needs of society and the state. Among such tasks are: material support for the defense of the state and the protection of public interests; production of essential goods (works, services) in those sectors of the economy that are not covered or insufficiently covered by the private sector (for example, if the production of a particular product cannot generate income, which is why private individuals do not produce it); carrying out activities in areas related to the state monopoly or being a function of the state, with the exception of control and supervisory functions, etc.

Among the social functions of the companies it is possible to name the following:

- Provide the level of employment, also to involve local population. For example, ALROSA employs local people for certain types of works, including temporary and construction, including representatives of indigenous nationalities of Yakutia (ALROSA, 2019). Also the company organizes vocational trainings and education for the local citizens to employ them after.
- Invest into the economy of the region. For example, ALROSA funds the construction of the Republican Healthcare Facility for Children in Yakutsk (ALROSA, 2019), it also participates in realization of the programs of social and economic development of the region.
- Support ecology, including such initiatives as, for example, rational use of resources and their preservation, minimization of negative environmental impact, compliance with international standards for environmental protection.
- Care about the employees, as health, rest and pension programs, maintaining sport and recreation facilities, which helps to improve the motivation level and to make companies more attractive for potential employees.

As it was said before, the functions are especially important for the state-owned companies, as they are one of the reasons of existence of such enterprises. Despite this, social goals are also vital for private companies as it is beneficial for their image, relationships with the stakeholders and many others. Besides, the companies are obliged to follow some local and international standards and initiatives (for example, Kimberley Process Certification Scheme for ALROSA).

Taking everything described above into account, it is possible to propose a model that considers the influence of the factors of external and internal environments on the indicators of efficiency (Figure 13)

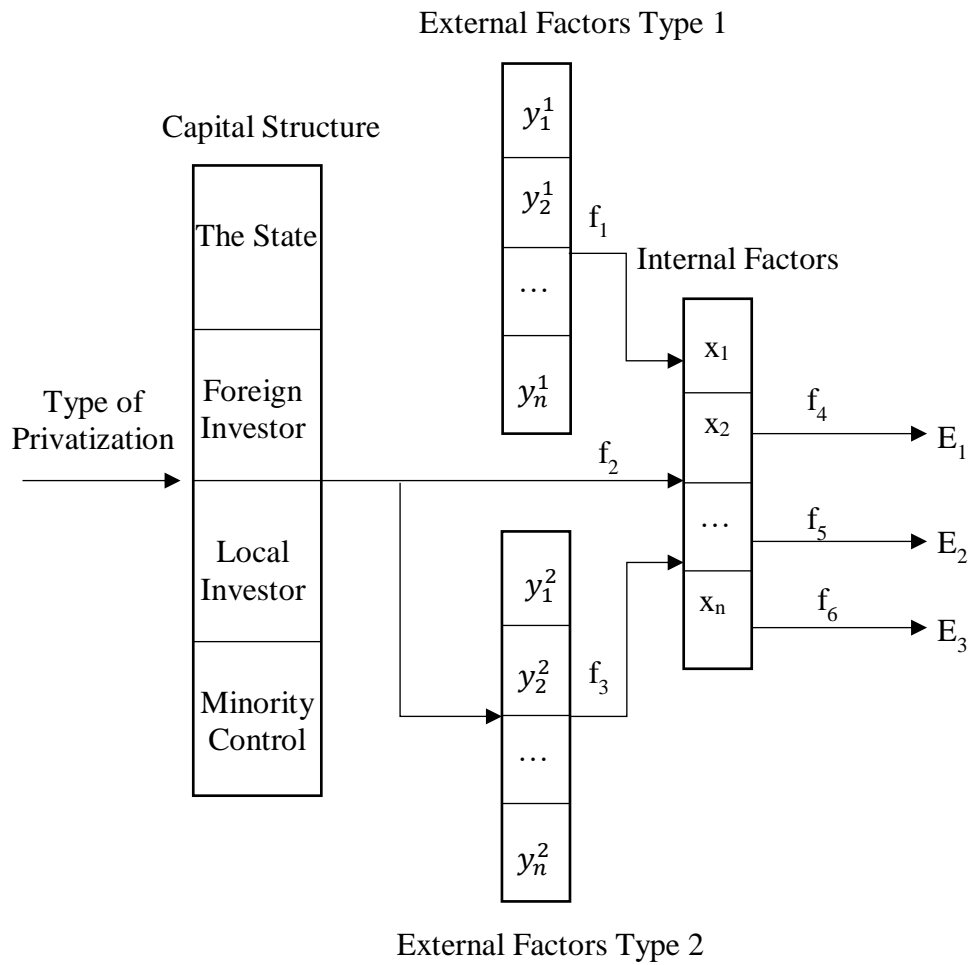


Figure 13. Model of influence of capital structure on efficiency (Dli, 2019)

From the picture it follows that the type of capital structure, which is formed after privatization, influences external factors type 2 (political climate, legal system, resources, competition, loans and capital, etc.) and internal factors (production, personnel, management, marketing, finance and accounting, etc.), which, together with the influence of external factors type 1 (not depending on capital structure, such as exchange rates, environment, demography, social factors, technology, etc.) result in some measures of efficiency, which are divided into objective, subjective and social. The relationships between the factors and indicators can be described with formulas of correlation and dependency, however, to forecast the influence of the privatization on the factors of the efficiency, more data is needed at this step of the research.

4.2 RESEARCH

Goals

The research has the following four main goals:

- To estimate the influence of the privatization on the efficiency and performance of the companies.
- To provide information for Kristal and ALROSA to make well-thought decisions in the future.
- To see the correlation between the ownership structure and the performance of the companies.
- To address the points that are not well researched and described in the literature.

The main goal of the research is to answer the question about how the ownership structure may influence the performance and the efficiency of the companies. The literature always stresses the necessity of the privatization in the all spheres and all industries, mostly explaining this point by the phrase that “the state is a terrible owner” (Guriev, 2018). Nevertheless, at the same time it is hard to imagine that the problem is so one-dimensional and that there is no proof that for some industries it is better to be controlled by the state. In addition, while the scientists concentrate on the idea of efficiency itself, they mostly mean objective indicators, mostly financial, as they are much easier to measure. For this research it seems important to investigate the idea of the efficiency from several points of view to provide more factors for taking into account while making decisions.

The second important goal is related to the case itself. If for ALROSA the deal may be not that extraordinary and can be considered as a part of a long term strategy, then for Kristal the privatization with the participation of the strategic investor will require the dramatic changes in structure, way of management, strategy, production and the other spheres, thus it is vital to know what the changes will be and how they will influence the performance.

The third goal is to see the correlation between the ownership structure and the performance. The point of this part of the research is to see if the participation of the state in the capital of the companies is really an important factor that changes a lot the efficiency. As a rule, owners can influence the strategic direction of the development of the companies, but is their power enough to dramatically change the position of the enterprises in the industry? Maybe, the importance of the privatization is a bit overestimated, thus there is no reason to rush to introduce it everywhere. This point will be investigated more detailed in the following chapters.

Last but not least, thanks to the research, it will be possible to close some gaps that exists in the modern literature considering the matter investigated.

Taking into account the debates about the necessity of the privatization (especially, in Russia and in Europe), the results of the research will be of interest for both the scientific community and the business practitioners. The investigation will also provide information for further academic usage.

The following sections will introduce the hypothesis and the framework of the research.

Hypotheses presentation

After the given overview of the theoretical and practical approaches to privatization, market and industry analysis and presentation of the case, it seems reasonable to point out the objectives of the research and then to present the methodology and the hypothesis.

For future investigation the following hypotheses are proposed:

- I. Changes in ownership structure influence the performance of the companies, at the same time the effect of the privatization can vary and a choice of the ownership structure depends on the industry.
- II. In the diamond industry (in case of ALROSA and Kristal in particular) privatization with the participation of the strategic investor will be beneficial and will allow to increase efficiency.

The named hypotheses appeared from the analysis of the literature sources and practical experience. It is important to stress that because of the certain limitations of the scope, time and resources possessed, this research will be concentrated on the aspects important for the particular case in particular and industry in general. Furthermore, even if the same methodology will be used to check the two hypotheses, the meaning of them is different, as hypothesis I includes more theoretical approach as they are aimed at proving the existing ideas from the literature, while the hypothesis II requires practical experience that can be used for a particular case.

The research will be useful in order to:

- Estimate the effect of the changes in ownership structure on the performance of the companies in general with an accent on the diamond industries.
- Provide the forecast for the changes in efficiency for Kristal and ALROSA due to the privatization deal.

To test the hypotheses it is necessary to describe the methodology which will be used to get enough data to reach the objectives described above.

Methodology

To answer to the question of more precise correlation between privatization and performance of companies, it is important to develop a methodology of the research, as the suitable methods can influence on how precise and accurate the answer will be.

To get the data needed, quantitative and qualitative approaches will be used, as in such way it is possible to see the problem on several levels and to receive not only objective historical number and information, but also to deep dive to understand the reasons and processes standing behind the results.

The quantitative data would be collected from the official documents published by the companies, state-owned and private, to see the dynamics of financial and non-financial indicators which allow to estimate the performance of the companies and their attractiveness for the investors. It is important to stress, that according to the framework of this research not only efficiency of the companies is taken into account, but also social responsibility, which is especially vital for the state-owned companies. As it was said before efficiency and profitability indicators can vary greatly according to the industry, for this reasons the data, provided by ALROSA and Kristal, would be compared with the pull of several companies from the mining business (MMC Norilsk Nickel PJSC, EVRAZ plc, PJSC Rosneft, PJSC Bashneft, PJSC Tatneft, Surgutneftegaz PJSC, Mechel PAO, PJSC Uralkali, PJSC Lukoil, PJSC Phosagro, etc.). At the same time, as the diamond industry is very special (as it was described in Chapter 3), it seems reasonable to compare the analyzed companies with their competitors (De Beers, Petra Diamonds, Dominion Diamonds, etc.).

The qualitative research is important in this case as the situation described is specific, thus the quantitative data would not be enough to understand the processes and forecast consequences based on the observed correlation. Thus, the methods used would include observation and experience gained during the internship, interviews with the employees and management of the organizations analyzed, as they have a deep knowledge of the industry and tendencies of its development. Besides that, a big research would be carried out which would be based on the experts' opinions about the privatization in general, its consequences, risks and possible influence on the performance of the companies. The list of experts would include university professors, scientists in economy and representatives of the private and state-owned companies.

To summaries written above, the methods used for the research, include:

- analysis of data provided by the companies and found in the open sources.
- survey for the employees and the management of the enterprises analyzed in form of interviews.
- observation of the different processes (production, sales, distribution, marketing, etc.) during the intership at Kristal.
- detailed interviews with the experts, employees and management.
- survey of the opinion of the experts in economics and the industry.

In this particular case, expert survey seems the best alternative, as it helps to get information from the counterparties that are usually influenced by privatization (as management and employees of the private and state-owned companies), face with the processes and consequences (government) and have valid experience and knowledge at

economics and management. To reach the goals of the research and to answer to the questions the expert survey will be used for:

- Prediction, as thanks to the knowledge and experience, the experts can participate in building forecast for the specific situation, as the investigated case, as it is vital to see how the situation may change over time and what the consequences will be.
- Expert ratings. As the research is mostly based on predictions, it is necessary to establish the degree of reliability of information provided and the results achieved, which can be done by the experts.
- Reliable information. As the case and the industry are quite special, ordinary respondents may not have enough information needed to base the conclusions on, thus the data from the experts is more valuable to use in building and testing hypothesis.

The benefits of such approach include:

- The possibility to obtain reliable and comprehensive information on the problem.
- The results will help not only to describe some phenomenon or process, but also to explain it.
- The possibility to control the process of the survey.
- The possibility to develop new solutions, to get extraordinary information and unusual opinions.

At the same time, it is important to avoid drawbacks, including:

- Risks of unjustified exaggeration of the value of the data.
- Risk of deliberately distorted information.
- Influence on the result of the opinion of each expert.
- Risk of making a mistake when experts evaluate complex phenomena.

It is possible to organize expert survey in two forms: personal conversation or interview with each expert, the advantage of which is that depending on the person's awareness and answers, questions and interview progress can be adjusted on the go, and in absentia form, when prepared questions are given to the expert in writing. In the framework of this research it seems reasonable to use two forms at the same time, as not all the experts are available for the interview and their written answers are enough for the analysis and conclusions. At the same time, interviews are organized either in case if an expert could provide valuable information for the deeper understanding of the problem. Nevertheless, it is important to be familiar with all the methods to choose from.

The simplest type of an in-house expert survey is a written survey (collection of opinions). In this case experts are sent (distributed) specially prepared questionnaires in which they must state their opinion on the substance of the questions posed. From 50% to 90% of open questions are used to compile an expert questionnaire (Maestas, 2018). Collecting opinions very much resembles an interview and differs from it only in the written form of the survey, which makes it possible to attract a large number of experts.

At the same time, written survey is associated with organizational difficulties, due to the low level of return of questionnaires.

A formalized expert survey is a regular questionnaire with questions formulated in both open and closed form. In terms of goals, objectives and content, this method is significantly different from the written surveys, as the collection of opinions is carried out to identify heuristic, fundamentally new ideas, views on the problem, unexpected ideas approaches to the old problem, the formalized survey questioning is aimed at finding out the assessments of certain aspects of the ready-made solution. The usual method of data analysis in this case is statistical.

The method of independent characteristics allows to give a generalized assessment of one phenomenon, information about which comes from several independent sources (from different people). At the first stage, a comparison of different opinions takes place; at the second stage, they are processed using mathematical and statistical procedures; at the third stage, reliable conclusions are formulated. In a collective assessment, subjective deviations are mutually repaying, which ultimately provides an objective, scientifically based result.

One of the most common expert survey procedures is the Delphi technique. The method involves interviewing experts in several rounds, processing the results of each round, informing the experts about these results and repeating the same procedure again. In the first round, the answers are given without argument. After processing, extreme and average judgments are distinguished and communicated to the experts. In the second round, the respondents again turn to their estimates. Since they had enough time to think and learned about the existence of other positions on this matter, they are given the opportunity to reconsider their views or, on the contrary, to argue. After the second round, new assessments are processed: extreme and average opinions are summarized, the results are again reported to the experts. This is repeated 3-4 times. Practice shows that after the third or fourth round, the opinions of experts do not change (Pavlov & Sokolov, 2015). In the course of such a procedure, an agreed assessment is produced, and the researcher should not ignore the opinion of those who, after repeated surveys, remained in their position.

The Delphi method is aimed at improving the process of making expert assessments, but with the goal that the overall assessment would be derived not by mathematics and statistics, but by the people themselves, focusing on the opinions of others, if necessary correcting it, strengthening their argumentation or rejecting it in favor of , more reasonable point of view (Pavlov & Sokolov, 2015). Such a technique makes it possible to reduce the influence of insufficiently competent experts on a group assessment, as is observed with a simple questionnaire. It is achieved by obtaining valuable information from more competent experts.

The method of forecast scenarios has been the most popular in recent decades. A scenario is a probabilistic description of a picture of the future, based on competent technical judgments. One forecast includes several scenarios, in most cases three:

optimistic, pessimistic and intermediate (most likely, expected). The scenario is compiled in several stages: 1) structuring and formulating the question: collecting and analyzing the initial information, coordinating the task with all the project participants, highlighting the structural characteristics of the problem; 2) determining the factors of external influence; 3) finding indicators, preferably alternative, of the future state; 4) the formation and selection of consistent sets of assumptions; 5) development of practical recommendations for the future scenario and determination of possible consequences of its implementation.

For the present research the Delphi method was chosen, as it helps to get the more objective problem overview and to collect opinions and more creative ideas. Besides that, by using this method it is possible to get information from a bigger amount of experts and to analyze is using special models and techniques.

Sample group presentation

Next step after the choice of methods used is the choice of the experts. On this stage it is important to be guided by the following qualities of the respondents:

- Level of competence in the area in question.
- Level of awareness of related areas.
- Academic degree, work experience, title.
- Experience of expert, positions he has ever held.
- Objectivity of judgment.
- Ability to creative thinking.

Taking into account these criteria, the list of experts was created, which included scientists in economics, representatives of the companies and the government.

Talking about the amount of the experts needed for the research, it is important to remember that the number of members of the expert group is much smaller in comparison with the number of respondents interviewed during the mass survey. The selection of experts, the formation of expert groups is a rather complicated task, the result of which to the greatest extent determines the effectiveness of the method and the correctness of the solutions obtained. To get the consistency and to provide the competency needed for the survey, it is recommended to form a group of experts not more than 20 people. Taking into account the specificity of the industry and the case, it was decided to invite 15 people for the interview, together with a written questionnaire for the realization of the Delphi method.

Structure of the survey

As the group of experts has been identified, the next step is to formulate the survey itself. The survey will be carried out in two languages, Russian and English. The Russian language will be used for interviewing experts from Russia, as in this case it will be easier to understand all the nuances important for the case. English will be used for the foreign

experts, because of different nationalities, it seems more logical to use English as a lingua franca.

At the first step the interviews with the experts were organized. The questions of the interviews were adapted and changed depending on the qualification of each expert, as the goal of this step was to get the biggest amount of creative ideas and useful information to formulate points for the future discussion. Before the interview, the respondents received the description of the case and statistical data for more objective suggestions.

Except the interview, experts were given a written questionnaire that included open, closed and questions with an evaluating scale, which helped to preliminarily test the hypotheses and to receive information in more convenient form for the following analysis.

At the second step, the information received from the experts was summarized and analyzed to get rid of extreme variables and to calculate the average answers. The main conclusions were put into short form for the experts to read and approve.

At the third step the results of the first round were sent to the experts to get their comments and approvals. Based on their answers it was possible to formulate the recommendations and conclusions of the research.

Data analysis

The information obtained during the expert survey is not a ready-made examination, it should be processed, systematized, evaluated in terms of quality, analyzed and interpreted, and only after that, it can be considered as a solution to the task. As it was said before, the quality of expert information can be improved if survey is carried out in several rounds, which allows to gradually bring together expert assessments, clarify and adjust the opinions. It is believed that the reliability of expert estimates is higher, the smaller the spread of opinions, which can be determined by calculating the standard deviation.

One of the most critical stages of processing the information collected is the coordination of expert opinions, which can be done on the basis of one of the following rules:

- Rule of majority – to choose the solution or the assessment of the that majority of experts prefer (however, it should be noted that it is not uncommon that the experts who give more reliable answers in the minority).
- Rule of authority – to choose an alternatives which was pointed out by the most authoritative experts (in this case, each expert should be assigned with a "weight", taking into account his level of competence).
- Rule of average evaluation - expert opinions are reduced to a common denominator. For quantitative assessments, this is quite simple: either a simple or a weighted average estimate is determined; for qualitative information, such

coordination is more difficult. When using a quantitative approach, elimination of the lowest and the highest estimates and building the average can also be used.

To analyze the data the best possible way, taking into account the limitations of the research, it was chosen to use the written questionnaire with closed and evaluation scale questions while assessing it with the rule of majority and authority. Then statistical methods were used to see the patterns and to be able to make conclusions.

The next section will present the results obtained in a form which is better for understanding.

2.3 RESULTS OF THE SURVEY

The objective of this part is to present the results of the analysis of the experts' opinions that were obtained from the survey, described in the chapters above.

As all the responses were collected, it became possible to have a profile of a sample group, which included:

- 2 representative of a local administration.
- 3 representatives of the management of state-owned companies.
- 3 representatives of the management of private companies.
- 5 scientists and professors of economy and management.
- 3 specialists in diamond business.

Thus, the number of respondents was 15, which is optimal for the deep survey, but at the same time their number was limited due to the specificity of the industry and the problem itself. Due to the specificity of the questionnaire and the positions of the respondents, it was asked not to disclose the names of the sample group.

As the experts have different level of expertise and professional knowledge and background, it seems logical to give their answers different weights taking into account their proficiency.

The question asked and the results are summarized in the table in the Appendix 2.

As it follows from the answers of the first question, the majority of the experts believe that the influence of the privatization in the diamond sector will be positive, while the equal amount of respondents voted for no influence or negative influence. These results demonstrate the same ideas that can be found in the literature for any industry, but for the analysis of this results bigger weights were given to the answers of the specialists in diamond business, as their knowledge is more reliable as the specificity of the industry must be taken into account.

One of the most important questions was about the choice of the capital structure for the companies in the diamond sector. The possible choices are state control (no

privatization), local investor, foreign investor or minority control. The majority of the experts agreed that the privatization in one or the other form is a good solution for the diamond companies. 75% of the respondents propose the use of the strategic investor (local or foreign), preferably from the same industry, as it will help to avoid the problem of incompetent management and at the same time it will allow to use the expertise from the other players on the market.

As the best way of privatization was chosen, next questions were concentrated at the precise way privatization can be done in the diamond sector, as two alternatives were suggested: to attract the supplier of the rough diamonds or the distributor of the finished goods. In case of Kristal, it is possible to think about different choices for the privatization: already planned takeover by ALROSA, the supplier of the rough diamonds, or other alternatives, for example, merge with a distributor of finished goods such as jewelry producers. Furthermore, it is possible to think about the participation of the foreign investors, as the competitors in the diamond business, such as De Beers, as Kristal has partnership relationships with the company and their expertise and experience might be beneficial for the future transformation of Kristal.

The majority of experts believe that the idea to attract suppliers or distributors in the diamond sector is a reasonable solution. At the same time, the respondents see the supplier as a better alternative, mostly because there is a limited amount of the suppliers of rough diamonds and the competition is very high, thus the priority in the access to the resources becomes the crucial factor for providing the level of production needed to reach a certain level of the economy of scale for the efficiency. Furthermore, as there is a stable demand on jewelry with diamonds (especially in China and India), which is forecasted to remain the same or even to increase, demand on polished diamonds will continue to grow, thus the distribution of stones may not be the problem.

Next, the experts were asked to estimate the impact of Kristal on the social and economic indicators of the region. The results show that the influence of Kristal on social and economic situation in the Smolensk region is significant. Indeed, the research of the statistical data and experts' opinions prove that in case of its efficient performance Kristal provides up to 10% of tax incomings to the budget of the region and significantly contributes to the level of employment (Federal Statistics Service, 2019).

Taking into account the results of the previous question, it was asked if it is reasonable to get the government of the region involved in the future privatization. The majority of the experts believe that the participation of the local administration in the privatization of Kristal is reasonable and recommend to buy 5-10% of shares as it will allow them to include their representative to the board of directors and at the same time will not become a financial burden.

As it is important to analyze the future perspectives of the development of the companies after privatization, the next question was aimed at finding out if it is reasonable in the long-term strategic perspective to decrease the participation of ALROSA in the capital structure of Kristal in order to attract more private investors.

The results show that the opinions of experts were mixed, but they think that it is reasonable for ALROSA to reduce the amount of shares of Kristal they have in the strategic perspective.

Taking into account the results of the previous questions, the experts were asked if it is reasonable to sell small amounts of shares of Kristal to private investors and if yes, how soon it is possible to transfer from 100% control of ALROSA to mixed ownership structure. It shows that the idea of attracting more private investors is reasonable and feasible, but the period of such transfer is still unclear, but, according to experts, it will take at least 10 years.

In the next section experts were asked about a possible risks of the privatization in the specific case, their answers were analyzed and summaries, the results will be shown in the next chapter.

As the research was finished, it has become possible to make certain conclusion, see if the hypotheses are proved and to provide recommendation for the process of privatization of Kristal. But before it seems reasonable to mention the limitations of the survey to take them into account and to show direction for future work.

Limitations

In this part it seems reasonable to mention the limitations of the survey, as it is just the first step towards the solution of the more global problems, thus this point is aimed at giving direction for future more detailed investigation.

There were three main limitations:

- Limited number of experts: due to the time limits and the specificity of the industry, it was difficult to gather enough opinions, also it was hard to summarize all the opinions for more detailed analysis. For the future research it is recommended to create several working groups of respondents and to organize free exchange of ideas in the form of brainstorm or collective discussion.
- Experts' objectivity: even if the experts were supposed to be objective in their ideas, it was hard to fully avoid the bias, as some of the experts were the representatives of the companies participating in the deal and some were representative of the government, as it was important to know their opinion as they have unique insights of the situation. Even if the influence of the bias was corrected using the weights for calculation of the final results, the level of objectivity is still to be taken into account while investigating the problem in the future.
- Local specificity: as the case analyzed in the thesis takes place in Russia, mostly Russian experts were invited to participate in the discussion, thus there is an influence of the mentality and usual ways of doing business on the results of the survey. Although this approach seems reasonable in the framework of the thesis, but it is important to mention that the results cannot be extrapolated on the other countries or industries.

Taking into account written above, it is important to stress that the research is a considerable contribution towards the understanding of the risks and consequences of the privatization in the diamond sector, however, due to the limitations described, it would be wrong to see it as an ultimate solution, as deeper analysis is needed to forecast more precise the influence of the privatization on the efficiency of the companies.

The next point will be dedicated to the conclusions and recommendations to Kristal about the privatization deal, which are possible to make based on the research.

4.4 RESULTS AND RECOMMENDATIONS

Based on the analysis of the literature and expert survey, it is possible to say that the choice of the capital structure during privatization depends fully on the industry and even the company, thus each case should be analyzed in particular before making decisions, as it will influence the processes of tactical and strategical management.

In case of diamond industry, it is recommended to use a model of one-time majority control, as the specificity of the sector requires precise knowledge, expertise and reputation, which are hard to obtain and provide in case of mass privatization or insiders model.

As it was seen from the expert survey and the analysis of the literature and statistical data, the decision of the Government of the Russian Federation about the privatization of Kristal is right and reasonable. Taking into account that the social programs realized by Kristal nowadays significantly impact the region, it seems reasonable that ALROSA will play the role of a strategic investor, as due to the majority participation of the state in its capital, the government can still keep certain level of control under the strategic decisions.

Furthermore, the deal will help to attract investments for the development of new technologies and business processes and for purchasing advanced equipment, and, the main point, it will allow to build a sustainable system of supply of rough diamonds of the required quality and volume in the framework of the single vertically-integrated supply chain of ALROSA. Expertise of ALROSA, which is the oldest diamond company in Russia, will be useful for increasing the efficiency of Kristal thanks to the transfer of knowledge, know-hows and management techniques.

At the same time, ALROSA will benefit from the expertise and reputation of Kristal as a leading exporter of polished diamonds of the excellent quality and from a built export system and knowledge of the market.

Thus, as a result of the deal, ALROSA together with Kristal will form a vertically-integrated company that will include all the steps of diamond production, from mining to sales of jewelry, which, as the analysis of the industry shows, is the best way to compete on the market. The privatization deal will create synergy and increase efficiency of the both companies.

Nevertheless, it is important to notice that even if there are certain advantages of the privatization, it seems impossible to ignore the risks. Based on the opinion of the experts, analysis of practical cases and personal experience, it is possible to see the following risks:

- As ALROSA is the strategic investor that will keep 100% control over Kristal, it is difficult to call the deal privatization in its traditional meaning, as the majority shareholder of ALROSA is the state. In this case, not all the advantages of privatization may be reached, for example, more control over the interested owners and attraction of additional investments for the modernization of production processes. Even if there are plans for the future privatization of ALROSA itself, the state is not ready to sell more shares as the company is profitable and the shares are currently undervalued on the market (Invest Funds, 2019), for this reason, full privatization may be considered only in the strategic perspective.
- If a foreign investor has a big amount of shares, it can, taking into account high labor cost compared with the other countries, like India and China, close or liquidate the production in Russia, thus it will be harmful for the country and the region. On the other hand, without the participation of the foreign producers of rough and polished diamonds, as well as jewelry, may cause the lag in the development of technologies and business processes.
- As the Regional Administration is excluded from the process of privatization, it may cause the risks of inconsistency between the social and economic programs of the development of the region and strategy and performance of Kristal. This scenario may cause the job cuts and rising social tensions. As an example, the Administration of the Republic of Sakha (Yakutia) is a strategic shareholder of ALROSA (ALROSA, 2019).
- The management and the employees of Kristal are not directly interested at the process of privatization, thus it is possible to face the resistance to change and reluctance for the knowledge transfer and innovation activity.

To eliminate risks or to decrease their probability, it is possible to provide some recommendation. As the deal has been already approved by the government and the both companies, it is reasonable to recommend some paths for changes in the future to fully use the potential of the privatization and to increase the efficiency of the enterprises.

It is proposed for Kristal to implement the following structure of the capital:

- 50%+1 share – ALROSA. No doubt, that ALROSA can provide a boost of efficiency for Kristal, but at the same time it seems reasonable to attract more investors to maximize the performance thanks to the expertise of the potential participants. In case if ALROSA has the majority participation, it can keep the control over the decisions of strategic importance, thus it is still safe for the state.
- 25%+1 share – strategic foreign investor, which has a wide experience at diamond distribution at the global market. This party can be chosen from the competitors of ALROSA, as in this case it is possible to use the expertise and know-how, but the share is not big enough for changing the strategy. It will also prevent the Russian diamond industry from lagging behind the other countries because of the lack of innovations for its development.

- 5-10% - Administration of the Smolensk region. It is reasonable to include local authorities to the privatization, as it was proved that Kristal has a big significance for the region. This amount of shares was proposed, as it is enough for delegating a representative to the board of directors, which will allow to coordinate the programs of the strategic development of the company with the programs of support and motivation of the industries of Smolensk region.
- 5-10% - representative of a leading Russian sellers of jewelry (like Russkoe Zoloto or Sunlight), thus it will be possible to build even more integrated chain as the distributors of finished goods will be included.
- other – the shares left should be sold to minority investors, including the management and the employees of Kristal, as in this case it will improve motivation and interest at the performance of the company.

Taking into account everything said above, it is possible to propose the following model of transformation of the capital structure of Kristal:

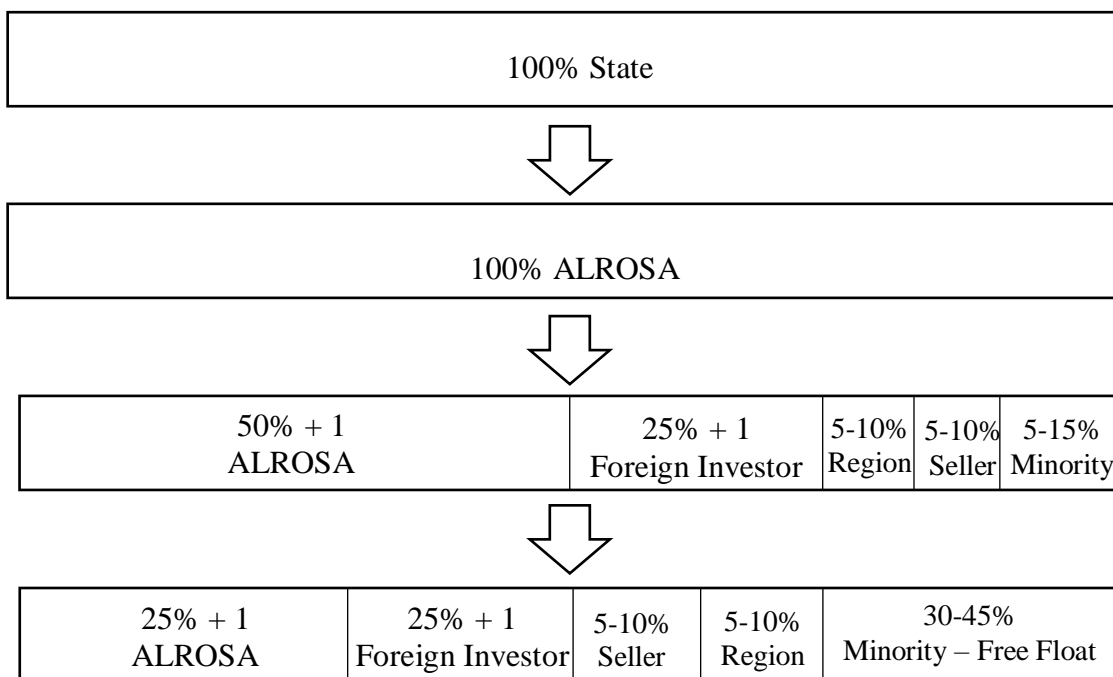


Figure 14. Model of transformation of the capital structure of Kristal (Dli, 2019)

It is important to notice that in the strategic perspective it is possible to consider the idea of a slow decrease of the state participation in the capital of ALROSA while attracting investors on the stock market while keeping a blocking package of 25%+1 share, nevertheless, this scenario seems unrealistic for the following 10-15 years as the shares for now remain undervalued.

CONCLUSION

The analysis of literature proved that even if privatization seems to be beneficial for the performance of the companies, it is important to take into account the country, industry and even company, as the impact may significantly vary. There are several approaches to the idea of efficiency itself and it seems unreasonable to analyze only internal financial performance. For this reason in this work three types of efficiency were considered: objective, subjective and social, which helps to fully see the results of the performance of the companies.

The investigation of the practical cases of privatization and the current situation in Russia showed that the country came through a long path from the comand economy to the market, thus the state still plays an important role and, even if privatization was started rapidly in the 1990s, in the middle of the 2000s the process slowed down dramatically and the chances that it will be speeded up are low. At the same time, the government actively uses half-measures by creating the companies with state participation, thus the state can keep a certain level of control, but to attract investors.

The research showed that the state companies have bigger leverage, but their returns for the investors are much lower, thus they have to ask for loans of the state banks, which results at higher Net Debt. Furthermore, they have relatively low EBITDA, which can be a proof of the bad management. At the same time, the results take into account only the financial efficiency, while ignoring the social one.

The analysis of the industry allowed to make certain conclusions: there are only five big companies on the market that built vertically integrated structures to maximize efficiency while the most important factors for success are expertise, synergy and reputation. The specificity of the industry is needed to be taken into account while planning a privatization deal.

The analysis showed that the deal of the privatization of Kristal with the participation of ALROSA as a strategic investor is a right choice and will be beneficial for both companies as it will create a vertically integrated enterprise and provide a synergy effect. At the same time, there are certain risks that are needed to be taken into account. As the risks are associated mostly with the fact that the control of ALROSA which is de-facto state-owned will not change much for Kristal, thus it will be impossible to reach the maximum effect of privatization. Due to this it was proposed to introduce a path towards changes in the capital structure of Kristal with the participation of the local administration, foreign investors and distributors.

Thus, it is possible to state that the objectives of the work were reached.

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