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ABSTRACT

The measurement of scientific and teaching activities are increasingly common within universities, due to the rise of New Public Management (NPM). Although changing over time and varying from country to country, NPM involves the usage of private sector methods in the public sector.

Usually, performance measurement in universities helps individuals to improve their future performance. Nevertheless, the new systems are more judgemental – i.g. aiming to quantitatively measuring past performance. Performance measurement (PM) is now common in Western universities. This is also the case in Russia, where a new performance measurement tool - the Effective Contract was implemented to ensure that quality was included in universities' PM. But, according this paper the quality indicators in use are, in practice, quantitative.

We study performance measurement in two Universities – in the Baltic State Technical University (BSTU) and in the Northern Artic Federal University (NAFU). Both Universities have been using the Effective Contract (EC) since 2014 year.

In both higher educational institutions we see an increasing use of judgemental forms of performance evaluation and, in particular, the use of more quantitative performance measures within the EC. The use of this more judgemental quantitative systems is seen to have various effects being described in this paper.

The study is based on extensive survey data among employees at Russian universities. According to the results, performance measurement is based on quantitative rather than qualitative measures, and the current Effective Contract system has a negative effect on work motivation among academic stuff. In the light of the empirical findings of the study it seems that the EC is in conflict with intrinsic motivation and the very essence of the faculty members working in universities. There is a risk that the Effective Contract could constrain creativity in teaching and limit contributions to the world outside the university.

Key words: performance measurement, effective contract, teaching activities, scientific activities, indicators.

ACRONYMS

PMS - performance measurement system

PM - performance measurement

EC - Effective Contract

BSTU - Baltic State Technical University

NAFU - Northern Artic Federal University

HEIs - higher educational institutions

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1. INTRODUCTION

During the past 15 to 20 years, an increasing interest in developing a definition of performance and specifying the performance concept can be witnessed. Authors (Campbell, 1990; Campbell et al., 1993; Kanfer, 1990; Roe, 1999) report that being conceptualized performance it's necessary to differentiate between an action (i.e., behavioral) aspect and an outcome aspect of performance.

Performance measurement is a global phenomenon acting an important role of a fundamental building block of an essential part of any organizational structure whether it is public sector or private one. Performance of an organization reflects to what degree the organization realizes the corporate strategy and targets.

In the literature there are various methodologies for performance measurements. Historically, performance evaluation methods are based on financial ratios such as return on investment and profitability. In contrast with this approach more comprehensive methods are developed in order to include measurement for non-financial perspective of companies.

In the early 1990s Kaplan and Norton found that traditional accounting measures were no longer appropriate for businesses. Hence, they designed a new performance measurement framework, allocate it into four different dimensions and added non-financial measures; the Balanced Score Card was created. It was a revolution in PM since it was the first integrative framework and it remains one of the most successful ones (Yadav and Sagar, 2013, pp.951).

According Kalio (2014) instead of using performance measurement tools solely for measuring outcomes, they should include early warning indicators which indicate alarming signals if the company loses track of the desired goals. Considering this, new trends in order to implement PM were appeared. Some measures are only metrics, used to measure the outcomes, the so-called Key Result Indicators (KRIs). The other type of measure is the early warning indicator, which is supposed to help to steer the company in the right direction with the so-called Key Performance Indicators (KPIs). Parmenter (2007) views key performance Indicators as the most critical factors, which are crucial for a successful survival of an enterprise (p. 3).

The model that reflects the 2000s environment is the performance prism. This model as Taticchi, Tonelli and Cagnazzo (2010) state is a strong integrated tool that was introduced by

Andy Neely, Chris Adams and Mike Kennerly (pp. 10-11). The Performance Prism incorporates 5 aspects which are interconnected with each other, namely Stakeholder, Satisfaction, Strategies, Processes, Capabilities and Stakeholder Contribution. This model does not dictate a framework; rather it should be used as a pattern like the Balanced Scorecard.

There are others performance measurement systems in use today, such as action-profit linkage APL (Epstein & Westbrook, 2001) and the Cambridge Performance Measurement Process (Neely, 1995) are designed for business-wide implementation; and the approaches of the TPM Process (Jones & Schilling, 2000), 7-step TPM Process (Zigon, 1999), and Total Measurement Development Method (TMDM) (Tarkenton Productivity Group, 2000) are specific for team-based structures. Each approach has its own group of supporters.

There are two significant public reforms in recent decades: New Public Management appeared in 1980's and post-New Public Management appeared in 1990's (Christensen and Lægreid 2007). NPM had a focus on improving efficiency, horizontally specializing in the public apparatuses, marketization, a private-sector management style, explicit performance standards and output-outcome control. Under NPM government had a strategic, goal-setting role, and civil servants are supposed to be autonomous managers held to account through performance arrangements and incentives (Pollitt & Bouckaert, 2011).

Post-NPM reforms are mainly inter-organizationally oriented. Post-NPM implies marketized services and delivery networks, a client-based, holistic management style, boundary spanning skills, joined-up targets, a procedural focus, impartiality and ethical norms and stronger centralized control (Lodge & Gill, 2011). Under post-NPM government is guarantor of compromise deals between multiple stakeholders, while civil servants are network managers and partnership leaders. Post-NPM is also preoccupied with strengthening the capacity of the center, both politically and administratively, but also structurally reintegrate or control more agencies and state-owned enterprises (Christensen & Lægreid, 2007).

Higher Educational Institutions (HEIs) are an essential part of public sector. The emergence of the liberalization of education has forced HEIs to strive for international standards in order to be able to compete with their competitors. In addition, the student's demands are getting more and more complex. The HEIs then must ensure that the students receive high quality service. HEIs also have to adjust themselves and develop strategies to respond rapidly to the changes in organizational environment and increasing demands of stakeholders.

The HEIs worldwide is facing a dynamic and turbulent environment due to trends such as changing demographics in student populations, decline in public funding and greater emphasis on information and communication technologies in learning and teaching (Conway 2003). HEIs are shifting from a public service to a market-driven one (Kettunen 2003) and universities now face pressing concerns such as financial constraints and global competition (Webber 2003). As a result, HEI are faced with the need to reform many of their existing management practices and mindsets. One of the current issues of interest is the need for performance management, especially measurement of Key Performance Indicators. Key Performance Indicators (KPI) is a fundamental concept in the area of performance measurement.

As in other countries, the principles of New Public Management went the way to adopt of performance measurement system in Russian public-sector organizations. Thus, there is appeared a new performance measurement tool - the system of Effective Contracts in 2014. The basic idea of this system is to implement the organizational strategy through measuring individual performance. The EC is typically encouraged through performance related bonuses, that gives employees the motivation to ensure the objectives needed by the university.

The nature of the EC is to develop essessment systems that encourage the academic staff to concentrate their performance on the organization’s purposes. Kallio (2014) highlights that when performance-related pay is added as a backup, a person who performs well in line with the designated indicators is rewarded in the form of higher monetary compensation or other benefits. Thus, the EC not only encourages employees to work effectively and in accordance with the organization’s strategy, it also increases motivation at work when an individual’s performance affects his or her pay – at least in theory. In practice – it may be highly problematic to apply the EC successfully.

In the case of non-profit activity, such as scientific research, it is very difficult to evaluate the value, the quality of university employee's activity: for example, one top-level manual could be easily more valuable than a hundred research papers. The value of that kind work may only be appreciated after several years, stated Kalio (2014) the construction of reasonable EC evaluation systems is extremely challenging. Consequently, although the focus should be on reaching targets such as high-quality research, it might turn out that the system encourages to produce quantity, such as writing a huge amount of research papers of little value. At least, the EC could become a mechanism that can ruin intrinsic motivation.

The **motivation of the thesis** proceeds to the high interest of researchers around the Effective Contract in Russian educational landscape in recent years. Increased level of competition for funding, employees and students between Universities, changes in national university structure influence on internal and external processes of teaching and scientific activities of academic staff.

It makes sense to look more closely to what happens with universities within the EC. To reach this aim we decided to collect data from our own Universities in Russia: Federal State Autonomous Educational Institution of Higher Education «Northern Arctic Federal University named after M.V. Lomonosov» (NArFU) and Baltic State Technical University (BSTU) «Voenmeh» named after D.F. Ustinov.

Problem statement of the study is to examine the development of the Effective Contract in two Universities. In order to tackle the problem the following **research questions** were formulated:

1) **What has led the Universities to adopt a new performance measurement tool?** For the purpose of this thesis, the following statements will be examined: the nature and aims of the EC, where the system came from, by whom introduced, the way of evaluating activity in the frame of reference and empirical part.

2) **What are the challenges faced by Universities after the implementation of the Effective Contract?** For the purpose of this thesis, there will be represented the monitoring of results, comparison of indicators and the amount of points by different periods of time, the opinion of academic staff and their advices according improvement of the system in the frame of reference and empirical part.

There have been various researches regarding changes in performance measurement and universities nowadays. Most of the last research conducted focus on performance measurement systems by using institutional theory (Bogt & Scapens, 2009, Brignall &Modell, 2000), new institutional theory of sociology (NIS) and “progression-regression performance” theory (Javadi, 2013); stakeholder theory (Harrison et al., 2012, Wicks & Harrison, 2013); theory of work performance (Janudin, 2015, Koopmans, 2011).

We made our research based on the contingency theory. It was prolonged to performance measurement by Rejc (2004); she believed that no universally appropriate performance

measurement system exists for all organisations and in all circumstances. Contingency theory was popular for research area in the middle of 20th century; it includes determining and comparing context settings with organizational settings (Hambrick 1983).

According to contingency theory, there is no best way of organizing; Donaldson (2001) suggests that the appropriate form depends on the nature of the firm's task environment. Some authors offer appropriate forms based on the rate of technological innovation (Woodward 1965), speed of environmental change (Burns and Stalker 1961), or level of uncertainty (Lawrence and Lorsch 1967). Neocontingency theorists (Hrebiniak and Joyce 1985, Zajac et al. 2000) add a dynamic perspective of fit, where adaptation is a dynamic process that is both managerially and environmentally inspired.

For theoretical foundation of the paper the Hofstede theory was also used. Hofstede highlights that the cultural dimensions could serve a framework to help in assessment a particular culture and thus better provide a system. There are other factors to take into consideration such as personality, family history, and personal wealth. The proposed dimensions cannot predict individual behaviours and do not take into account individual personalities.

For the purposes of the paper, we are intended to Hofstede's parameter named "collectivism vs. individualism». The Effective Contract is a performance measurement tool of individualistic focus while it was implemented in collective society, thus there should be the consequences of using inappropriate mechanism to culture that will be described in the empirical part.

The phenomena and novelty of our paper is that there is no such researches analyzing and comparing the effects of the implementation of the Effective Contract within two universities in Russian educational landscape.

2. FRAME OF REFERENCES

The frame of references part presents the theoretical foundation of the thesis. The information provided here will be used to analyze the research questions in the empirical part. Performance measurement is used by higher educational institutions nowadays to be able to resist the competitive environment in public sector; to solve the range of issues like financing, attracting attention of governments (for being funded) and students (for being in demand). Therefore, in order to assess the possible dimensions and links of ethical challenges and conflicts of interest that are associated with performance measurement phenomena can be best understood through the help of contingency theory and Hofstede theory. The assumptions behind these perspectives will help discuss the phenomenon of our objectives.

2.1. The Performance Measurement Systems

2.1.1. Performance Measurement

To start discussion about performance measurement, we need to define what organizational performance is. Elenkov (Elenkov, 2002) defined that it represents the degree to which company succeeded in its business objectives.

The measure of organizational performance represented the degree to which a company achieved its business objectives. Ability to survive is delineated as a critical indicator. In order to achieve such aim it is necessary to acquire valuable and scare resources (Wang, 2010).

The idea of performance measures is to show how effectively business strategies are implemented at all functions of business and to identify areas which should be corrected in order to realize these strategies (Grady, 1991).

The most classical definition of performance measurement is delineated by Neely et al. (Neely et al. 1995): it is the process of quantity determination of the efficiency and effectiveness of company's actions. First performance measures were directly connected with financial performance of company. At the beginning of 20th century 3 Du Pont cousins became founders of first method of measuring organizational performance – pyramid of financial ratios (Neely, 2002). Such kind of methods were actual at the beggining of 20th century in industrial era.

Modern environment requires not only financial ratios. Keegan, Eiler and Jones (divided all performance measures into two classes: cost measures and non-cost measures, which are divided into external and internal measures (Keegan et al. 1989). Lynch and Cross (1995) also defined not only financial ratios. They added market ratios which must be considered in order to realize corporate vision.

2.1.2. The definition of Performance Measurement System

A widely accepted performance measurement system definition is the information system as the set of metrics used to quantify the efficiency and effectiveness of actions (Neely, 1995). Such systems play central role in the performance management process. These systems must develop the integration of all areas of business and deployment of business objectives on all levels of organization. Bititci et al (1997) defined this aspects (integrity and deployment) as two main facets of the performance measurement system. It shows that performance measurement system is a complex tool which should pay attention to each detail of business.

Grady (1991) defined that there should be a balance between financial and nonfinancial measures in order to develop high-quality performance measurement system. He defined process measures as critical measures because they directly drive the result.

At the same time, Ritchie and Kolodinsky (2003) suggested that effectiveness of organization cannot be measured by a single measure due to multidimensional nature of effectiveness. It is necessary to develop complex of measures or composite performance measure.

Stivers et al. (1998) researched that a lot of companies started to create new performance measurement systems, which include different nonfinancial measures. Such systems with nonfinancial measures are used in all frameworks of performance measurement systems from the earliest (Keegan et al. 1989; Lynch & Cross 1995) to the most actual and widely used in our times (Kaplan & Norton 1992; Neely 2007). Ritchie and Kolodinsky (2003) suggested to test financial performance measures together with nonfinancial performance measures in order to identify if these measures are correlated or not.

Despite the fact that more and more organizations started to use nonfinancial performance measurement systems, not many of them got potential benefits of this new kind of

nonfinancial systems. Ittner and Larcker (2003) researched this issue and defined that the biggest part of such companies develop their performance measurement systems based not on traditional qualitative and quantitative methods, but on a kind of management guesswork. They defined typical mistakes of companies such as not linking measures to strategy of organization and at the same time such companies do not set right performance targets; the biggest part of companies don't build and verify casual models of performance; companies make a lot of mistakes in interpreting of results of measures.

In our empirical part it will be considered that if organizations want to use nonfinancial performance systems not just to "check the box", but to realize as much as possible of potential benefits, Ittner and Larcker (2003) advice to develop clear long-term strategic plan; develop a casual model based on this plan; structure all data they have in order not to collect "new" data if it already exist; data should be turned into information (by statistical and other kinds of methods); all models and measurements should be reconsidered on a regular basis.

2.1.3. Frameworks of Performance Measurement

Multiple institutional logics are a theoretical puzzle which should be done in order to develop clear measures and indicators and to prevent internal conflicts (Besharov & Smith 2014). This idea motivated a wide range of researchers to develop new frameworks of performance measurement.

Keegan et al. (1989) introduced one of the first frameworks of performance measurement – performance measurement matrix. According to their matrix the necessary condition for performance measurement system is to be balanced between cost and non-cost measures and between internal and external measures

Lynch and Cross (1995) defined quality and delivery as the main nonfinancial basis and cycle and waste as the main financial measures. These measures at the level of departments and work centers are key measures which should analyzed on a regular basis in order to reflect the corporate vision. Customer satisfaction, productivity and flexibility are used in order to fill up the gap between top and low level indicators. The problem of this model is that it doesn't explain how to choose key performance indicators.

According to Kaplan & Norton (1992) point of view, such kind of traditional performance measures were actual for industrial era, but not for today's business environment. The balanced scorecard gives opportunity for decision-makers to analyze their business from 4 perspectives: customer perspective; internal business perspective; innovation and learning perspective; financial perspective. The most important statement about the balance scorecard is «The scorecard puts strategy and vision, not control, at the center» (Kaplan and Norton 2005).

Andy Neely, Chris Adams and Paul Crowe (2001) developed «a second generation of performance measurement framework» called the performance prism framework. This framework emphasizes on stakeholder-centric view of performance measurement. It doesn't mean that all stakeholders are equal because shareholders are the main stakeholders. But the advantage of this framework is that it pays attention to other group of stakeholders such as customers, employees and others who are included into the balanced scorecard (or balanced scorecard approaches).

The Performance Prism considers such measures as: financial and non-financial; internal and external; measures of efficiency and effectiveness. It allows stakeholders to see the balanced picture of the business.

The performance measurement prism framework seems to be the most actual framework. It has 5 main facets: strategies; stakeholder satisfaction; processes; capabilities; stakeholder contribution. First three facets are adopted from previous frameworks. Idea of processes facet is the same as in previous frameworks: Company should identify critical processes which should be operated in order to realize strategies. The idea of strategy facet is modernized because Andy Neely, Chris Adams and Paul Crowe argue that traditional view «measures should be derived from strategy» is not correct because the aim of strategy is to deliver value to stakeholders. Also the performance prism view of stakeholders is broader than in the balanced scorecard because not only shareholders and customers are considered. It is necessary to identify key stakeholders, their aims and needs.

Capability facet is relatively new concept. This concept is important because without «right» capabilities it is difficult to execute processes. So company needs to identify capabilities which it needs to operate processes.

Stakeholder contribution. It is necessary to understand what contribution organization requires from stakeholder in order to maintain capabilities. There should be symbiotic relationship between organization and all classes of stakeholders.

2.1.4. Performance Measurement in Higher Education Institutions

In public organizations, the performance measurement systems are even more complicated due to complexities between business features and non-business features, clear and ambiguous goals. The measurements are inclined to be multi-dimensional, which depends on how people interpret the "efficiencies" to a specific organization goal is (Wang, 2010). Higher education is one of such public sectors. During the last years there is a clear movement from traditional state-centered governing arrangements to alternative models. This led to a re-engineering of the university in order to be more 'complete' organization (De Boer et al. 2007).

Nowadays there are reasons why researchers pay attention to High Educational Institutions. Universities are passing through a 'second academic revolution'. The first academic revolution was when research activities were added to HEIs functions (Etzkowitz, 1998).

Before the first revolution teaching was the main objective of universities. That is why performance measures were connected with teaching aspect. Performance measures were directly connected with teaching. Pouyioutas (2014) defined KPIs in order to evaluate teaching such as: Teaching/Learning Department KPIs (for example, yearly budget for teaching department; percentage of students who attend support courses and etc.); Student Participation and Employers/Social Actors Participation KPIs (such as Average score of student evaluation of teachers questionnaires); Academic Study Programmes KPIs (such as average grade). In other words, university management lived quite a simple life.

After the "first revolution" performance measurement of research activities was added to performance measurement systems of universities. In order to succeed universities started to evaluate such aspects as the value of research grants, peer-review, numbers of publications and other (Meek & van der Lee 2005). The life of university management became not so easy and it took time to adapt to new requirements.

The 'second revolution' includes economic and social development as part of university mission. It is about capitalization of knowledge (Etzkowitz, 1998).

The increasing level of business schools' competition, reduction of government funding in higher education worldwide and changes in environment led to re-engineering of measurement and management systems of all business schools in order to survive and to be competitiveness (Thomas, 2007). Nowadays business schools live in new environment where they need to pay a lot of attention to external fundraising in order to build funds for research, teaching and other activities. The importance of managerial and financial performance led to the increasing professionalisation of university top management (Parker, 2012)

These changes led to rapid spread of new public management according to which business schools (and universities) should involve "businesslike" management practices. Universities are more and more influenced by managerialism and entrepreneurialism concepts. Ter Bogt and Scapens (Ter Bogt & Scapens 2009) defined that because of these changes universities should pay increased attention to budgeting, quality management and especially on performance measurement systems. Bogt and Scapens (2009) made a comparative analysis of two universities from UK and Netherlands in order to explore similarities and differences in use of performance measurement systems. They identified that PMS of universities is under the great pressure of internal and external environment. They described such factors of influence as: changes in financing and government control; internal budgeting of universities; new concepts of management (New Public Management instead of Old Public Administration). Also Bogt and Scapens found a problem of unsatisfied employees who are not agree with changes in performance measurement of university and of their activities in particular.

These changes are the reason why now it is not enough to pay attention only for teaching, research and administrative activities. Multiple logics become important tool of university management. Pettersen (2015) analyzed how should good education be developed and measured from instrumental control logics (management control logics) and from professional/academic logic in order to develop multiple logics for this issue. According to multiple logics, academics and professionals should become a part of measures, performance measures and indicators should be developed and managed by them. In other words, it should rely on discursive processes between the academics and the managers in order to increase relevance of measures for stakeholders.

Performance measures connected with teaching and research activities are extremely important up to now. Performance in universities should be measured according to all main

university objectives. In order to develop correct performance measures it is necessary to define all main dimensions of universities' interest.

Wang (2010) described performance measurement in universities from managerial prospective. Wang analyzed performance indicators which can be used in university settings and identified that performance in universities can captured into 2 dimensions (academic and management dimension) and 4 sub-dimensions (education, research, human resources and finance). Academic performance is defined as the core of university performance and management performance is a driving force of it. In order to be effective and competitiveness it is necessary to develop performance measures which are connected with education, research, human resources and finance.

2.2. The Contingency Theory

There are a number of reasons why contingency theory was chosen for the study. Contingency theory "enables a researcher to relax assumptions underlying theoretical propositions and introduces factors to explain or predict expected phenomena" (Umanath, 2003:37). It is therefore important to understand how the environment influences the management using the performance measurement system.

Contingency theory is based on the assumption that there is no universally appropriate performance measurement system that applies equally to all organisations in all circumstances. Using the contingency theory may lead to a better understanding of performance measurement by including the identification of "specific aspects of a performance measurement system that are associated with certain defined circumstances" (Rejc, 2004:140).

The contingency theory of management was extended to performance measurement by Rejc (2004) based on her view that no universally appropriate performance measurement system exists for all organizations and in all circumstances. There is the number of authors has supported this idea; Gareth Morgan in his book "Image of Organization" describes the main ideas underlying contingency: organizations are open systems that need careful management to satisfy and balance internal needs and to adapt to environmental circumstances. Authors (Donaldson 2001, Drazin and Van de Ven 1985, Venkatraman 1990) took the same view that

high performance results from a fit between the organization and its environmental contingencies.

Managers have the responsibility for organisational design, study the contingency factors that influence on organizational design and then on design of a structure to fit these contingency factors.

Authors distinguish different contingency factors, i.e. Otley (1987) stated important contingent variables and listed below authors supported that classification: 1) *the effect of technology*: Woodward (1965) has recognized its influence on the design of internal accounting systems and Piper (1978) also highlights aspects other than production technology that have "an effect on the information that should be provided for effective performance".

2) *The effect of organization structure*: Hopwood (1972) distinguished between: budget constrained use of accounting information, where meeting the budget was the single most important factor in a superior's evaluation of his subordinates; and profit-conscious style where longer-run effective was also considered more flexible.

3) *The effect of environment*: Khandwalla (1972) examined the effect that the type of competition faced by a firm had on its use of management controls. Price, marketing, product competition all have an impact.

Emmanuel et al. (1990) summarizes three main classes of contingent factors that have been identified as influencing the design of an accounting system: the environment, organisational structure and technology.

Relevant peculiarities of *an organisation's environment* affecting accounting system design that have been suggested involve its degree of predictability, the degree of competition faced in the market place, the number of different product/markets encountered. Concerning our case, the north part of Norway has an amazing nature that people can enjoy but the climate is minus for those who used to be in more warm country, but with good coordinators this task can be neutralized.

Structural features engage size, interdependence, decentralisation and resource availability. The number of employers working in an organisation indicates its size. It is observed that large organisations differ structurally from small ones in terms of division of labour, rules

and regulations, performance appraisal and budgeting procedures. The bigger educational institution the greater opportunities can be offered to consumers.

Technological factors include the nature of the production process, its degree of routineness, how well means-end relationships are understood and the amount of task variety. This factors has been also mentioned by Burns and Stalker (1961). In relation to our subject, it is obvious that the greater conditions, innovations the university has the bigger amount of consumers (students in our case) it will attract.

There is also a research focused on two other factors, *strategy* and *culture*. According Dent (1990) discussion of corporate strategy has not been popular in studies of control design despite some arguments that differences in corporate strategies should logically lead to differences in planning and control systems' design. Chandler (1962) stated a link between the corporate strategy selected by a firm and the organizational structure appropriate to its effective implementation.

Logical structure follows strategy because organisational structures are built to achieve objectives by implementing the strategies. When strategy is changed, structures must be changed as well. At the corporate level, strategies are formulated based on the company's mission and strategic goals or objectives. More often, the influence of organisational culture on control systems is researched. Emmanuel et al. (1990) mentions some of them (see also Ansari and Bell, 1991).

Performance measurement has been studied in the last two decades, relatively little consideration in terms of the factors that influence the design of performance measurement systems given. Wisner and Fawcett (1991) were among the first who recognized the need for performance measures to be reviewed and adopted to provide measures remaining relevant. They highlight the need to re-evaluate the relevance of the established performance measurement systems in view of the current competitive environment.

For the current research, we added a few more factors like an age of the organization, government and unions which are also have an influence on performance measurement for an organization.

Age of the organisation: with age an organisation incorporates standardized systems, procedures and regulations. Like human, an organisation goes through stage of life cycle – birth,

youth, midlife and maturity. In the birth stage, the organisation created by the entrepreneur is informal, with no rules and regulations. Decision making is centralized with the owner and tasks are not specialized.

Government influences businesses through its control of fiscal and monetary policy as well as its ability to establish and abolish laws and regulations concerning how businesses can operate. By integrating these control mechanisms, the government can have a great influence both on private and on public sector, especially on the second one because the government provides financial support, various funds, grants, etc... Thus, i.e. with help of government the international students have this great opportunity to study in Norway, to explore it, making the Nord University known in other countries.

Unions is the way of joint collaboration between enterprises, i.e. the cooperation with another higher institution in order to save its position in its market segment or to make it stronger, to improve its position due to possibility to meet different academic interest, to attract more group of students, to get more funding and grants, and so on.

We can distinguish two types of contingency theory: contingency theory of decision making and contingency theory of leadership.

In contingency theory of leadership, the success of the leader is a function of various contingencies in the form of subordinate, task, and group variables. The effectiveness of a given pattern of leader behavior is contingent upon the demands imposed by the institution. These theories stress using different style of leadership appropriate to the needs dreaded by different organizational issues.

Fiedler's contingency theory is one of the most popular and detailed researched (Peretomode, 2012). It states that group performance is a result of interaction of two factors. These factors are known as leadership style and situational favorableness. In Fiedler's model, leadership effectiveness is the result of interaction between the style of the leader and the characteristic of the environment in which the leader works. But this contingency theory is not relevant to our case study unlike the contingency theory of decision making.

Contingency theory of decision making or normative decision theory holds that the effectiveness of a decision procedure depends on a number of aspects of the situation: the importance of the decision quality and acceptance; the amount of relevant information possessed

by the leader and subordinates; the likelihood that subordinates will accept an autocratic decision or cooperate in trying to make a good decision if allowed to participate; the amount of disagreement among subordinate with respect to their preferred alternatives.

Contingency theory is similar to situational theory. But we choose the first one because sitiuational theory tends to focus more on the behaviors that the leader should adopt not an organization, while contingency theory takes a broader view that includes contingent factors about leader capability and other variables within the situation.

2.3. The Hofstede Theory

Hall (1960) and Hofstede (1983) suggest their cultural models, which outline the basic principles of business activity in different country prom the cultural perspective. Both researchers grouped different countries on the basis of some core factors, which determine their cultural nature.

Hall (1960) suggested the concept of low and high contexts in understanding different cultural orientation.

Low-context culture's main feature is that people of this culture rely on the direct meaning of written or spoken words.

High-context culture's representatives use and interpret more of the elements of the message to create their own understanding of the message (Hollensen, 2004).

Table 1 summaries some of the differences on the basic life factors between low-context and high-context cultural groups.

Characteristic	**Low-context/ individualistic (e.g. western Europe, US)**	**High-context/ collectivistic (e.g. Japan, China, Saudi Arabia)**
Communication and language	Explicit, direct	Implicit, indirect
Sense of self and space	Informal handshakes	Formal hugs, bows and handshakes

Dress and appearance	Dress for individual success, wide variety	Indication of position in society, religious rule
Food and eating habits	Eating in a necessity, fast food	Eating in social event
Time consciousness	Linear, exact, promptness is valued, time = money	Elastic, relative, time spent on enjoyment, time = relationships
Family and friends	Nuclear family, self-oriented, value youth	Extended family, other oriented, loyalty and responsibility, respect for old age
Values and norms	Independence, confrontation of conflict	Group conformity, harmony
Beliefs and attitudes	Egalitarian, challenge authority, individuals control destiny gender equity	Hierarchical, respect for authority, individuals accept destiny, gender roles
Mental processes and learning	Linear, logical, sequential, problem solving	Lateral, holistic, simultaneous, accepting life's difficulties
Business/ work habits	Deal oriented, work has value, rewards based on achievement	Relationship oriented, rewards based on seniority, work in a necessity

Table 1. General comparative characteristics of cultures

A classical cultural model created by Hosftede (1998) is well-known all around the world, respected and used in the process of analysis of a new country and its culture. Hosftede (1998) argues that culture is like an onion, which shell is based on cultural symbols, traditions etc., while its heart represents the values hierarchy (Hollensen, 2004).

Hofstede model considers six cultural parameters:

1) Collectivism (versus individualism)

2) Power distance (equality versus inequality)

3) Masculinity (versus femininity)

4) Uncertainty avoidance (versus uncertainty tolerance)

5) Temporal orientation

6) Indulgence (versus restraint).

1) Collectivism vs. individualism

Cultures with the individualism orientation have quite free people. Individuals feel free to ask their critical opinion. There is a high level of publication freedom. Middle class presents the majority of people. Career success depends on the employee's development, values, and success. There is goal orientation in deals, not personal orientation. The value of personal success and career building dominates. Other people are "resources" which need care relation. The goal stays above personal relations. The relationships between the boss and the employee have a rational character.

Cultures with the collectivism orientation grow up children from the perspective "we" not "I". The family, group opinion, interests are more important than the personal's ones. Responsibilities on family/ company interests and its members form an overall harmony of interests, respect to the general position and shame feeling of misbehaviour. The relationships have more weight in the company than goals. The relations between the boss and the employee are based on moral and ethics.

2) Power distance

Countries with the high power distance mostly have autocratic style of management or power character. Employees wait for what they will be told to do. The fact that managers have privileges and 20 times higher salaries than employees is a normal situation. The ideal manager is an autocrat or associated with "the family father".

In the individualism culture personal hierarchy (a role inequality) is a time measure, set up to drive management efficiently. Subordinates take part in making up some decisions. The ideal boss is a resourceful democrat, who has access to the employees.

3) *Masculinity vs. femininity*

Masculinity is the adherence to such goals like courage, records, heroism, goal-achievement, success.

Femininity is relations building, tendency to compromise, care of others, quality of life.

Cultures with higher level of masculinity are based on the principles of career building and financial welfare. People are decisive, ambitious, hard-working and strict. People live to work.

In cultures with high level of femininity work is not the core root. People work to satisfy their needs – love, interests etc. Relations at home and work are more important than financial welfare (Hollensen, 1998).

4) *Uncertainty avoidance.* Cultures with autocratic style of management and long power distance have more bureaucracy and uncertainty in every level of management than countries with individualism orientation and short power distance.

5) *Temporal orientation or long-term vs. short-term orientation.* This dimension describes a society's time horizon. Short-term oriented cultures appreciate traditional methods, spend a considerable amount of time to build relationships, they understand time in a circular way. This means the past and the present are interconnected and that which cannot be done today can be done tomorrow. The opposite of this is long-term orientation, which sees time as linear and looks to the future rather than the present or the past. It is goal-oriented and values rewards.

6) *Indulgence vs. restraint.* This dimension measures a culture's ability to satisfy the immediate needs and personal desires of its members. It is about those people who value restraint, have strict social rules and norms under which satisfaction of desires is regulated and encouraged.

2.4. Summary of Key Frame of Reference Assumptions

The key assumptions of the frame of reference are summarized to reflect on the core points that the researcher's intends to examine the empirical data and apply in the analysis part of this thesis.

2.4.1. Performance Measurement Systems

The measure of organizational performance represents the degree to which a company achieved its business objectives. The idea of performance measures is to show how effectively business strategies are implemented at all functions of business and to identify areas which should be corrected in order to realize these strategies. A widely accepted performance measurement system definition is the information system as the set of metrics used to quantify the efficiency and effectiveness of actions. Such systems play central role in the performance management process.

Nowadays universities are passing through a 'second academic revolution'. Universities must take into consideration not only traditional teaching and research performance, but also economic and social development.

In order to answer our research questions we need to analyze how these changes influenced on the implementation of the performance measurement tool - the Effective Contract.

The performance measurement frameworks can help us in analyzing how effectively the Effective Contract in BSTU and NArFU designed. The performance measurement prism framework seems to be the most actual framework which combines the ideas of all previous frameworks and considers all trends of modern business environment.

It is necessary to define if performance in two universities mentioned above is measured according to all main university objectives. Academic stuff with 2 sub-dimensions (teaching performance and scientific activities) seems to be the most suitable in order to analyze these objectives.

2.4.2. The Contingency Theory

Contingency theory is a class of behavioral theory states that there is no best way of organizing and that an organizational style that is effective in some situations cannot be useful in others. To put it another words: the optimal organization style is contingent upon various internal and external constrains.

These constraints may consist of such factors as: organizational environment, structural features, technological factor, strategy and culture, and we added three more factors: government, union and age.

We can summarize several important statements of contingency theory such as: there is no universal or best way to manage. The design of organizational and its subsystems must correspond with the environment. Effective organizations have corresponding with the environment and between its subsystems. The needs of organization are better satisfied when it is designed properly and the management style is appropriate both to the task undertaken and the nature of the group work.

So, there is no universal management control system, which applies equally to all organizations in all circumstances. Organizations are different and find themselves in different environments. The choice of management control tools or systems is therefore contingent on each and every organization's environment. The design of a MCS must therefore consider the contingent variables situating the organization in question. Thus, to apply performance measurement it is necessary to use a contingency theory. Because it's important to adopt our measurement system the Effective Contract to factors of the particular organisation, and in our case it is two universities - Baltic State Technical University (Voenmeh) and Northern Artic Federal University (NArFU) and their environment.

2.4.3. Hofstede Theory

The theory is based on the idea that value can be placed upon six cultural dimensions. These are power (equality versus inequality), collectivism (versus individualism), uncertainty

avoidance (versus uncertainty tolerance), masculinity (versus femininity), temporal orientation (long-term orientation vs. short-term), and indulgence (versus restraint).

Hofstede highlights that the cultural dimensions are only a framework to help in assessment a particular culture and thus better provide decision making. There are other factors to take into consideration such as personality, family history, and personal wealth. The proposed dimensions cannot predict individual behaviours and do not take into account individual personalities.

Hofstede model considers six cultural parameters mentioned above. We are interested in the first parameter "collectivism vs. individualism». The thing is that the Effective Contract is a performance measurement tool of individualistic focus. But it was implemented in collective society i.e. in Russian universities. The results of empirical part shows what are the consequences of using an appropriate mechanism to culture.

3. RESEARCH METHOD

The function of the research method is to outline the research process of this study. Easterby-Smith et al. (2008) argue that the core root of designing a good management research bases on good organization of research activity which includes data collection, with the suitable methods to reach the research purpose and answer the research questions.

This chapter provides as well a review of the research methods and data gathering techniques being used including research design, primary and secondary data sources, reliability, validity and ethical issues.

3.1. Philosophical Background of the Research

Philosophy of research method is about the different ways of interpreting and looking at the world (described in ontology), the ways of knowledge which can be best obtained (described in epistemology), and whether people can be managed by external factors (described in human nature) provided by Burrell& Morgan (1979). It is also about how the researchers gather the data from reality and how this data is examined.

It’s necessary to point out the researcher‘s philosophical viewpoint causes the research design. The researcher belongs to what the literature refers to as social constructionism. According Easterby-Smith et al. (2008, p.80) «All researcher hold philosophical assumptions, although these are often tacit rather than explicit positions». Thus, one more important thing is that each researcher should be able to avoid his own philosophical assumption because it can violate the impartiality of the study (Easterby-Smith et al., 2008).

This paper attempts to understand what consequences will result the implementation of a new management control tool named EC and whether environment and cultural differences influenced on these modifications through sharing interviewees experience and experience of abroad researchers. It's appropriate to use interviews in order to obtain the data from the faculty members attached to the EC during their involvement in practicing the system. Data was collected within the perspectives of those people who involved in practicing the EC in particular professors, senior lecturer, assistant lecturer, and shared the survey feedback with the advisor in consultation meetings, interpreting and analysing the data.

3.2. Qualitative Research Method

The research design is depended of the type of data. If data are going to be in the form of words, then qualitative strategy is initiated. If data are going to be in the form of numerical analysis, then it is quantitative strategy.

Thus, to collect the data for our purposes the best way is to use qualitative research method as that type of research because it depends of methods based on multiple meanings of personal experiences, meanings that has been made socially and historically.

According Yin (1994, p. 84) one of the most important sources of case study information is an interview. Open-ended interviews, in-depth interviews are a common way as they ask both specific fact-based questions along with questions focused on obtaining the interviewees opinion about a situation, fact and so on. Interviewees can be an information holding insight on the particular topic of interest that can be possible only due to their direct involvement with the event in question.

According to Borland (2001) the conclusions received from one survey may not be generalised to other survey. Nevertheless, Borland accepts the fact that when performed with appropriate level of structures and a balance of objectivity and no bias to increase confidence, it provides basis, models, and descriptions of human experiences and perceptions within the particular contexts. Thus the objective of this paper is not to generalise but to bring the new facts into the ongoing discussion about the Effective Contract in Russia.

3.3. Research Design

"A research design is a statement usually written before any data is collected, which explains and justifies what data is to be gathered, how and where from. It also explains how the data will be analyzed and how this will provide answers to the central questions of the research" (Easterby-Smith et al., 2008, p. 82).

Research design is about operating research activity, with the gathering of data, using most appropriate techniques to reach the goal stated by Easterby-Smith et al., (2008).

Qualitative research design is relevant when the target is to realize what is going on, getting new understanding and shed new light on a phenomenon. Grønhaug & Ghauri (2002)

also highlighted that qualitative approaches are associated to an exploratory design and concentrates on reaching the understanding. Case study research exceed at leading us to an comprehension of a complex issue or thing and can make our experience bigger or add strength to what is already known with help of previous research. Case studies underline full contextual analysis of a limited number of events or conditions and their relationships. According Robert K. Yin the case study research method as an empirical research that examines a current phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which numerous sources of evidence are used (Yin, 1984, p. 23).

The researcher did their best to evaluate how people connect with the world they are interpreting by applying open-ended questions in semi-structured interviews to create an ability where respondents can share their opinions based on their past and present experiences. The time covered for our research goes back to 2014 when the reform was implemented. Although the most of our data consists of what is going on now, after 4 years. It makes data collection easier, and encourages the going in depth because it is easier to conduct follow-up interviews.

One of the most significant sources of case study information are interviews (Yin 1994, p. 84). Open-ended interviews are a general approach as they ask both fact-based questions and questions pointed at getting the interviewees opinion about the case. Respondents can be an informants providing understanding the topic of interest that is likely only because of their direct engagement with the event in question. Yin (1994) offers audio recording interviews to provide an precise interpretation of the responses. Miles (1979) believed that timely transcription, coding and analysis are needed to avoid forgetting, simplifying or losing interest in the interview responses.

To find a common language and to collect data for our thesis we have chosen the Universities where we got our bachelor degree at BSTU and NArFU. We selected our own two departments as the field sites for this study primarily because of our familiarity with these departments and the ease of access and for validity of the research we selected two additional departments (see the table 1 below). Twelve semi-structured and in-depth interviews were made, the amount was defined by sufficient amount of data to answer our research questions. The respondents were the members of academic staff of a different range from fhe senior people (mainly the full professors), who have been working in universities for some years, and their more junior colleagues, particuarly those who had been appointed relatively recently. Academic

staffs are the main respondents because they are directly related to the research as the EC aimed to improve the quality of their work. Data collected from the academic staff can tell something about how they experience the EC and highlight the challenges and advantages of the system. Interviewees were selected thoughtfully to comprise all actors of the academic life including researchers, lecturers, professors, senior lecturers and others.

Position	Date	Code of respondent
Associate professor	20.03.17	1.1
Professor	24.03.17	1.2
Assistant professor	27.03.17	1.3
Senior lecturer	30.03.17	1.4
Researcher	31.03.17	1.5
Head of the Department	31.03.17	1.6
Associate professor	03.04.17	2.1
Senior lecturer	03.04.17	2.2
Associate professor	05.04.17	2.3
Senior lecturer	7.04.17	2.4

Table 2: Overview table of completed interviews (where the first number at code of respondent means 1 - Voenmeh, and 2 - NArFU).

It was important to hold interviews in-person to get more detail and accurate data and we successfully hold it in-person. Most of participants were professors who taught us. It provided

the getting easy communication, no misunderstanding, common mother tongue contributed as well. That is why the mentioned above universities were chosen. It's more easy to talk and analyse things you really know about. The aim of the interviews was to get known what individual academics feel about the effective contract, how does it work according their opinions, has the system minuses or it hasn't, to put another words to look how does it work inside academic stuff. Interviewees were suggested to give their responses going outside the expected scope of the interview if they think they can give more contribution according the theme.

The used interview guide is attached in Appendix 1. The interview guide was formed thoroughly to collect data that could provide a deeper understanding of the issues. Thus, it is obvious that the questions should not lead to quick and short non-informative answers such as "yes" or "no" and the interview guide was supposed to be presented to informants in person and all of the questions were open-ended.

Respondents were asked the same set of questions and were welcomed to comment outside these specific questions. Following the recommendation of Stake (1995) and Yin (1994) to analyze the interviews, responses were coded and grouped according the research questions. To provide consistency in the coding, the researcher conducted the interviews, transcribed the audio recordings and coded the responses. The coding was made for easy finding and analyzing of interview responses.

Each interviewee was given a specific code to provide anonymity. All interview responses used during the writing discussion part were marked by a relevant code number. The duration of each interview was for 20 minutes in average. All interviews were firstly recorded, later transcribed, then send to each respondent for confirmation and finally the responses were ready to be analyzed. The semi-structured interviews allowed us to ask additional questions during their discussions in a friendly atmosphere.Thus, interviewees could make an extra contribution.

3.4. Primary and Secondary Data Sources

There are two types of data sources: primary and secondary. The alternative of choosing of what type of data collection method to use comes from the type of the research.

The primary data is gathered from an experiment, an interview, a survey, or watching. It is the data that had never been collected before. Primary data is unique!

The secondary data is data already been written and published by someone. Secondary data is mostly used by students because it is easy to get access, cheap or free, easy to understand because it has already been interpreted.

"Qualitative research is open-ended, in-depth and seeks unstructured responses that reflect the person's thoughts and feelings of the subject" (Cateora and Ghauri, 1999, p. 150). Qualitative method is used when it is necessary to analyze a concept, company, a case from all the perspectives to make a full picture. Among most common methods suggests in-depth interview, case studies and focus groups.

When large samples of data are to be analyzed and interpreted, quantitative method is used. Many responds of questionnaires or surveys from respondents need to be analyzed. There are special computer statistical programs that help to analyze huge sources of this kind of data. Usually researchers practice to make this type of research because it requires knowledge of how to use the computer statistical programs as well as how to analyze these sources of data later. At last, the process of making this kind of method takes a lot of time. Many respondents need to be informed, and then tested. The data is to be collected and then analyzed and interpreted.

Students are likely to use qualitative method of study, and we are not the exclusion. The data collected in this research is both primary and secondary.

The primary data was gathered from respondents through in-depth interviews as well as semi-structured ones. A depth interview is a loosely structured interview. It allows freedom for both the interviewer and the interviewee to explore additional points and change direction, if necessary.

According Cateora and Ghauri (1999) depth interviews are normally carried out face to face so that a rapport can be created with respondents. Body language is also used to add a high level of understanding to the answers. Telephones can also be used by a skilled researcher with little loss of data and at a tenth of the cost. The style of the interview depends on the interviewer. Successful in-depth interviewers listen rather than talk. They have a clear line of questioning and use body language to build rapport. The interview is more of a guided conversation than a staccato question and answer session.

Semi-structured interviewing, according to Bernard (1988), is best used when you won't get more than one chance to interview someone and when you will be sending several interviewers out into the field to collect data.

The semi-structured interview guide provides a clear set of instructions for interviewers and can provide reliable, comparable qualitative data.

Semi-structured interviews are often preceded by observation, informal and unstructured interviewing in order to allow the researchers to develop a keen understanding of the topic of interest necessary for developing relevant and meaningful semi-structured questions.

The inclusion of open-ended questions and training of interviewers to follow relevant topics that may stray from the interview guide does, however, still provide the opportunity for identifying new ways of seeing and understanding the topic at hand.

This type of interview contributes to help collecting the information relevant to researchers' interest and to give the guarantee that interviewee will understand the questions.

Secondary data was composed from different sources such as accounting and management journals, tutorials, quality reform documents, articles, and several internet resources such as official education system's performance monitoring. Some of the secondary data are also collected from internal normative documents of BSTU (see references).

3.5. Data Analysis

When we deal with quantitative data it is not necessary that the person analysing the data is the same one who gathered it. But when we deal with qualitative data there is no sense to analyse data which has been collected by another researcher. It happens because we have to communicate with another persons and a lot of details have mater.

Our interview responses from BSTU and NArFU were analysed separately that helps us easy to find differences when we started to compare our results. Our data is consist of notes taken during the interviews and the transcription of the recorded interviews. The secondary data collected from various sources as it was mentioned above and it was mainly used at the theoretical part of the paper and its background as well as the quality reform that led to the new management control tool named the Effective Contract.

3.6. Reliability, Validity and Ethical Principles

The *reliability* is about the consistency of results obtained in research at the current case it are results of interviewing respondents. Whether another researcher could repeat the original research or the same researcher could repeat the original research but at a different time (Johnson & Duberley, 2000 p.46). To make the study reliability we have composed several interviews and consulted with different people at different hierarchical levels and used relevant secondary data both from the internal normative documents of Voenmeh (at NArFU such documents wasn't in free access), the state education websites, and the quality reform named the Effective Contract from November 26, 2012, No 2190-p.

Quality is one of the most important parts in research. The idea of *validity* is referring to the quality of various conclusions we might achieve based on a research project. Thus, the validity is the principle that we use to judge the quality of research.

Bell and Bryman (2007) composed a content analysis of the *ethical principles* consist of 10 items (see table X). The first seven of the principles are described protection of the interest of the research subjects or informants, and the last three are about to provide accuracy, lack of bias in survey.

1	Ensuring that **no harm** comes to participants.
2	Respecting the **dignity** of research participants.
3	Ensuring a fully **informed consent** of research participants.
4	Protecting the **privacy** of research subjects.
5	Ensuring the **confidentiality** of research data.
6	Protecting the **anonymity** of individuals or organizations.
7	**Avoiding deception** about the nature or aims of the research.
8	Declaration of affiliations, funding sources and **conflicts of interest**.
9	**Honesty and transparency** in communicating about the research.
10	Avoidance of any **misleading** or false reporting of research findings.

Table 3. The key principles in research ethics.

Thus, the research process is supposed to be done truthfully and at the same time it should not violate ethical aspects. To ensure interviewees honest answers all interviews were

anonymous and there won't be any names of faculty members taking part at our research. This is not only important for the validity of the research paper but also important from an ethical point of view. It leads to the confidential conversations and relax atmosphere; no tensions or nervousness were observed during the interview sessions. The interviewees have the opportunity to clarify any unclear moments, they also could see their printed answers excluding any misunderstanding, thus, helped to make our survey more validity and reliability. There were all questions opened, no leading questions and no pressure from interviewers. The interview structure is outlined in Appendix 1.

4. EMPIRICAL PART

Based on the information collected through the interviews and related articles of Russian and European researchers, in this section we will examine the nature, utilisation and consequences of the performance measurement system tool the Effective Contract (EC) in the universities of Voenmeh and NArFU. Firstly, we will describe the EC and how it is used in higher educational institutions. Then in the second subsection, we will describe the effects of these performance measurement systems.

4.1. Reform of Higher Educational Institutions

In 2012 after elections Russian government started to reform public sector and higher educational institutions as a part of it. The government adopted strategy to implement institutional reforms of HEIs. The main priorities of this strategy are described in a great number of official documents:

- Presidential Decree of May 7, 2012 № 597 "On measures for implementation of the state social policy" (2012).
    - the pay system should be refined in order to increase occupational prestige and appeal of public sector; the system should allow employees to increase the level of salary by fulfilling concrete key performance indicators.
    - Average wage of faculty members should be increased till 200% from the average regional wage till 2018.
    - At least one third part of total number of faculty members should be highly qualified.
- Phased program to improve the remuneration system in the state (municipal) institutions for the years 2012-2018 (2012)
    - Labor compensation rise should be caused by fulfilling of concrete indicators (about quality and quantity of rendered services)
- Plan ("roadmap"), "Changes in the social sphere, to improve the effectiveness of education and science" (2012)

- Elaboration and implementation of effective contracts with;
- Information and monitoring support of effective contract implementation.

- Federal Law of the Russian Federation dated December 29, 2012, No. 273-FZ “About education in Russian Federation” (2012)
- Government-sanctioned program in Russian Federation "Education development" for 2013 - 2020 years (2014)

One of the main aim of this strategy is transition to the principles of effective contract between government and HEIs employees. (Kurbatova M.V., Levin S.N., 2013).

4.1.1. Monitoring of HEIs’ Performance

In order to realize Presidential Decree of May 7, 2012 № 597 "On measures for implementation of the state social policy" Ministry of Education and Science of the Russian Federation performed package plan for higher education system’s performance monitoring.

Association of leading universities (which includes Moscow State University, Saint Petersburg State University, Association of Federal Universities. National Research Institutes) developed indicators, criterions and treshholds for this monitoring, which were approved by Presidium of Russian Rectors Union (Federal higher education system’s performance monitoring. Russian Federation, 2012).

Balyhin (2016) emphasized that ina a result term “education system’s performance monitoring” transformed into “education system’s efficiency monitoring”.

Aim of monitoring:

- Development of analytical and informational materials based on information about higher educational organizations and affiliated universities based on performance indicators.

Objects of monitoring:

- Higher educational institutes of Russian Federation.

Principles:

- Transparency and openness of all data and activities during monitorings.
- Consistency and comparability
- Development of monitoring indicators according to the nature of higher educational organizations.
- Quality of data provided by higher educational organizations can be documented.
- Data about higher educational institutions can be acquired from external data sources (in relation to higher educational organizations).

Six groups of higher educational organizations were identified:

- Military and power orientation.
- Medical orientation.
- Agricultural orientation.
- Creativity orientation.
- Sport orientation.
- Transport orientation

Stages of monitoring

- Definition of key activity areas of higher educational organizations.
- Development of indicators for evaluation.
- Raw data collection and verification.
- Data analysis and formulation of proposals.
- Publication of monitoring results.
- Usage of results for decision-making by stakeholders;
- Usage of results for control supervisory event planning by Federal Education and Science Supervision Service.

All higher educational organizations participated in monitoring are divided into 5 groups:

1) Higher educational organizations which fulfill 4 or more indicators.
2) Higher educational organizations which fulfill less than 4 indicators.
3) Higher educational organizations during restructuring.
4) Higher educational organizations which fulfill less than 4 indicators last year. These organizations are under government control.
5) Higher educational organizations which have deviations in their reports in comparison with data about higher educational institutions which was acquired from external data sources (in relation to higher educational organizations).

We decided to analyze the development of indicators which are used in higher education system's performance monitoring in order to define

- which indicators were used to measure activities which are directly connected with faculty members' performance;
- how these indicators were changed. (Information-analytical content for operating committee Meeting about higher education institutions performance monitoring. About monitoring; 2016)

Higher education system's performance monitoring for 2012

According to Dmitry Livanov (Minister of Education of the Russian Federation), Higher Education System's Performance Monitoring allowed to conduct the first audit of quality of higher education. He made a point that it is extremely important to test all universities by the same clear criteria because now any person can look through this information on the ministry's website in order to estimate how a university functions.

134 of 502 (26,7%) state universities were identified as non-effective universities. 453 of 930 (48,7%) state affiliated universities were identified as non-effective.

41 of 70 (58,57%) non-state universities and 55 of 97 (56,7%) non-state affiliated universities were identified as non-effective. It is necessary to mention that participation for non-state universities and non-state affiliated universities was not obligatory, that is why the biggest

part of them (376 non-state universities and 563 non-state affiliated universities) didn't participate in it (Malyhin, 2012).

The indicators which were used in Higher Education System's Performance Monitoring 2012 are provided below in table 4:

Indicator	Brief description	Is this indicator connected with faculty members' performance
Educational activities	the average Unified State Examination score of newly enrolled students	-
Research and Development	funding of research and advanced development per faculty member basis	+
International activities	share of foreign students in the total number of students at university	-
Financial-economic activities	University revenue from all activities per faculty member basis	-
Infrastructure	Total university premises per student basis	-

Table 4. Indicators in 2012

New indicators of Higher Education System's Performance Monitoring which are connected with faculty members' activity. Source: Indicators of federal state higher education universities and their affiliated universities (2012).

Research and Development indicators are defined as indicators which are connected with faculty members' activity. At the same time it is necessary to mention that there are no indicators which are connected with teaching activity.

Higher Education System's Performance Monitoring for 2013

934 state and non-state universities, 1478 state and non-state affiliated universities participated in Monitoring in 2013. 7 state universities, 125 non-state universities, 57 state affiliated universities and 184 non-state affiliated universities were defined as non-effective universities which should be restructured. Moreover, 23 state universities, 15 state affiliated universities and 7 non-state universities should optimize their activities (RIA NOVOSTI, 2013).

In 2013 the monitoring was modified with the help of new indexes. Some indexes which are connected with faculty members and their activities were modified.

Indicators	**New indicators which are connected with faculty members' activity**
Educational activities	+ the number of Ph.D. candidates per 100 students basis + share of Ph.D. scientists and scientists with higher doctorate in a total number of faculty members.
Research and Development	+ The number of citations in Web of Science/ Scopus per 100 faculty members basis + The number of citations in Russian Science Citation Index per 100 faculty members basis + The number of scientific papers in articles included in Web of Science/Scopus per 100 faculty members basis + The number of scientific papers in articles included in Russian Science Citation Index per 100 faculty members basis + The share of young scientists in a total number of faculty members.

International activities	No new indexes which are connected with faculty members activities
Financial-economic activities	+ Average faculty member wage to average wage (in the region) wage Ratio
Infrastructure	No new indexes which are connected with faculty members activities
+ Graduate employability	No new indexes which are connected with faculty members activities
Additional characteristics	No new indexes which are connected with faculty members activities

Table 5. Indicators in 2013

New indicators of Higher Education System's Performance Monitoring which are connected with faculty members' activity. (Source: Information-analytical content for Operating Committee Meeting about higher education institutions performance monitoring, 2013).

We assume that the most important change is the usage of indicators which measure number of scientific papers and citations. It is extremely important to mention that These citations and scientific papers should be included in Web of Science/Scopus, Russian Science Citation Index. It means that government wants to take into consideration only high-quality research and development activities.

Another important new indicators is Average faculty member wage to average wage (in the region) wage Ratio. It shows that government is really interested in increasing wages of academic staff and that is why it is included in the new list of indicators.

Higher Education System's Performance Monitoring 2014

968 state and non-state universities, 1356 state and non-state affiliated universities participated in Monitoring in 2014. 77 state universities, 159 non-state universities, 487 state affiliated universities and 283 non-state affiliated universities fulfilled less than 4 indicators. Moreover, 18 state and non-state universities, 190 state and non-state affiliated universities

should optimize their activities. 107 affiliated state and non-state universities should be restructured (Ministry of Education and Science of the Russian Federation, 2014).

Indicators	**New indicators which are connected with faculty members' activity**
Educational activities	No new indexes which are connected with faculty members activities
Research and Development	
International activities	
Financial-economic activities	
Infrastructure	
+ Graduate employability	
Additional characteristics	

Table 6. Indicators in 2014

New indicators of Higher Education System's Performance Monitoring which are connected with faculty members' activity. Source: Information-analytical content for operating committee Meeting about higher education institutions performance monitoring. "Northern (Arctic) Federal University named after M.V.Lomonosov, (2014).

In 2014 there were no indexes which are connected with faculty members activities. We can assume that the Ministry was satisfied by indicators from previous year Higher Education System's Performance Monitoring. Another assumption is that the Ministry wanted to have an opportunity to compare results of Higher Education System's Performance Monitoring 2013 with results of Higher Education System's Performance Monitoring 2014 and it is much easier to do when all indicators are totally the same.

Higher Education System's Performance Monitoring 2015

900 state and non-state universities, 1232 state and non-state affiliated universities participated in Monitoring in 2015. 25 state universities, 32 non-state universities, 142 state

affiliated universities and 8 non-state affiliated universities fulfilled less than 4 indicators. (Ministry of Education and Science of the Russian Federation, 2015).

Indicators	**New indicators which are connected with faculty members' activity**
Educational activities	No new indexes which are connected with faculty members activities
Research and Development	+ The number of citations in Web of Science per 100 faculty members basis (*1) + The number of citations in Scopus per 100 faculty members basis (*2) (Indicators *1 and *2 were measured as one indicator in previous Higher Education System's Performance Monitoring) + The number of scientific papers in articles included in Web of Science per 100 faculty members basis (*3) + The number of scientific papers in articles included in Scopus per 100 faculty members basis (*4) (Indicators *3 and *4 were measured as one indicator in previous Higher Education System's Performance Monitoring) + The volume of funding of research and advanced development (without embedded contractors) to Total volume of funding of research and advanced development Ratio.

Research and Development	+ Amount of faculty members (who passed Ph.D. or doctorate defense during the period under consideration) to total amount of faculty members Ratio. + The number of grants (during the period under consideration) per 100 faculty members basis
International activities	No new indexes which are connected with faculty members activities
Financial-economic activities	
Graduate employability	
+ Staff composition	+ share of Ph.D. scientists in a total number of faculty members (*5). + share of scientists with higher doctorate in a total number of faculty members (*6). + share of Ph.D. scientists and scientists with higher doctorate in a total number of faculty members (*7) .(Indicators *5, *6 and *7 were measured as educational indicator in previous Higher Education System's Performance Monitoring) + The number of Ph.D. scientists and scientists with higher doctorate per 100 hundred students basis.
Additional characteristics:	
+ Educational activities	No new indexes which are connected with faculty members activities

+ Research and Development	+ The volume of funding of research and advanced development (without embedded contractors) + The volume of profit from services and works connected with scientific, scientific-technological, creative services and work (without embedded contractors) + The total number of scientific papers per 100 faculty members basis + The total number of Ph.D. students + The total number of postdoctoral students + The number of dissertation boards
+ Staff composition	+ Share of faculty members with academic degree in a total number of faculty members + Share of faculty members under 65 years in a total number of faculty members + Share of faculty members under 40 years in a total number of faculty members + Faculty members' average salary
+ International activities	+ The number of scientific papers prepared together with international organizations
+ Financial-economic activities	No new indexes which are connected with faculty members activities
+ Infrastructure	No new indexes which are connected with faculty members activities

Table 7. Indicators in 2015

New indicators of Higher Education System's Performance Monitoring which are connected with faculty members' activity. Source: Information-analytical content for operating committee Meeting about higher education institutions performance monitoring. "Northern (Arctic) Federal University named after M.V.Lomonosov (2015).

We assume that the most important change in the list of indicators of Higher Education System's Performance Monitoring 2015 is a lot of new indicators which are oriented on the quality and academic degree of faculty members.

Higher Education System's Performance Monitoring 2016

838 (515 state and 323 non-state) universities and 936 state and non-state affiliated universities participated in Monitoring in 2016. 11 state universities, 81 non-state universities, 199 state affiliated universities and 156 non-state affiliated universities fulfilled less than 4 indicators.

Indicators	**New indicators which are connected with faculty members' activity**
Educational activities	No new indexes which are connected with faculty members activities
Research and Development	No new indexes which are connected with faculty members activities
International activities	No new indexes which are connected with faculty members activities
Financial-economic activities	No new indexes which are connected with faculty members activities
Infrastructure	No new indexes which are connected with faculty members activities
Graduate employability	No new indexes which are connected with faculty members activities

Staff composition	No new indexes which are connected with faculty members activities
Additional characteristics	No new indexes which are connected with faculty members activities

Table 8. Indicators in 2016

New indicators of Higher Education System's Performance Monitoring which are connected with faculty members' activity. Source: Information-analytical content for operating committee Meeting about higher education institutions performance monitoring. Northern (Arctic) Federal University named after M.V. Lomonosov (2016).

In 2016 there was the same situation as in 2014: there were no indexes which are connected with faculty members activities. We can assume that the Ministry was satisfied by indicators from previous year Higher Education System's Performance Monitoring. Another assumption is that the Ministry is oriented to change indicators not more frequently than 1 time in two years. As it was mentioned before, it allows them to compare results of Higher Education System's Performance Monitoring 2014 with results of Higher Education System's Performance Monitoring 2015 and it is much easier to do when all indicators are totally the same. According to this assumption we have one more assumption: there would be new indicators in the Higher Education System's Performance Monitoring 2017.

Higher Education System's Performance Monitoring 2012-2016

As it was mentioned, Aim of Higher Education System's Performance Monitoring is development of analytical and informational materials based on information about higher educational organizations and affiliated universities based on performance indicators.

We can assume that the real aim is to decrease the number of non-effective universities. First of all the Ministry defined non-effective universities. After it non-effective universities had a chance to solve all problems and to become an effective university according to the next Higher Education System's Performance Monitoring. If problems are not solved the Ministry can:

- to suspend accreditation of university

- to suspend license of university
- to suspend admission of students.

During Higher Education System's Performance Monitoring in 2012-2016 there were defined a great number of non-effective universities. The statistics about non-effective universities is provided below:

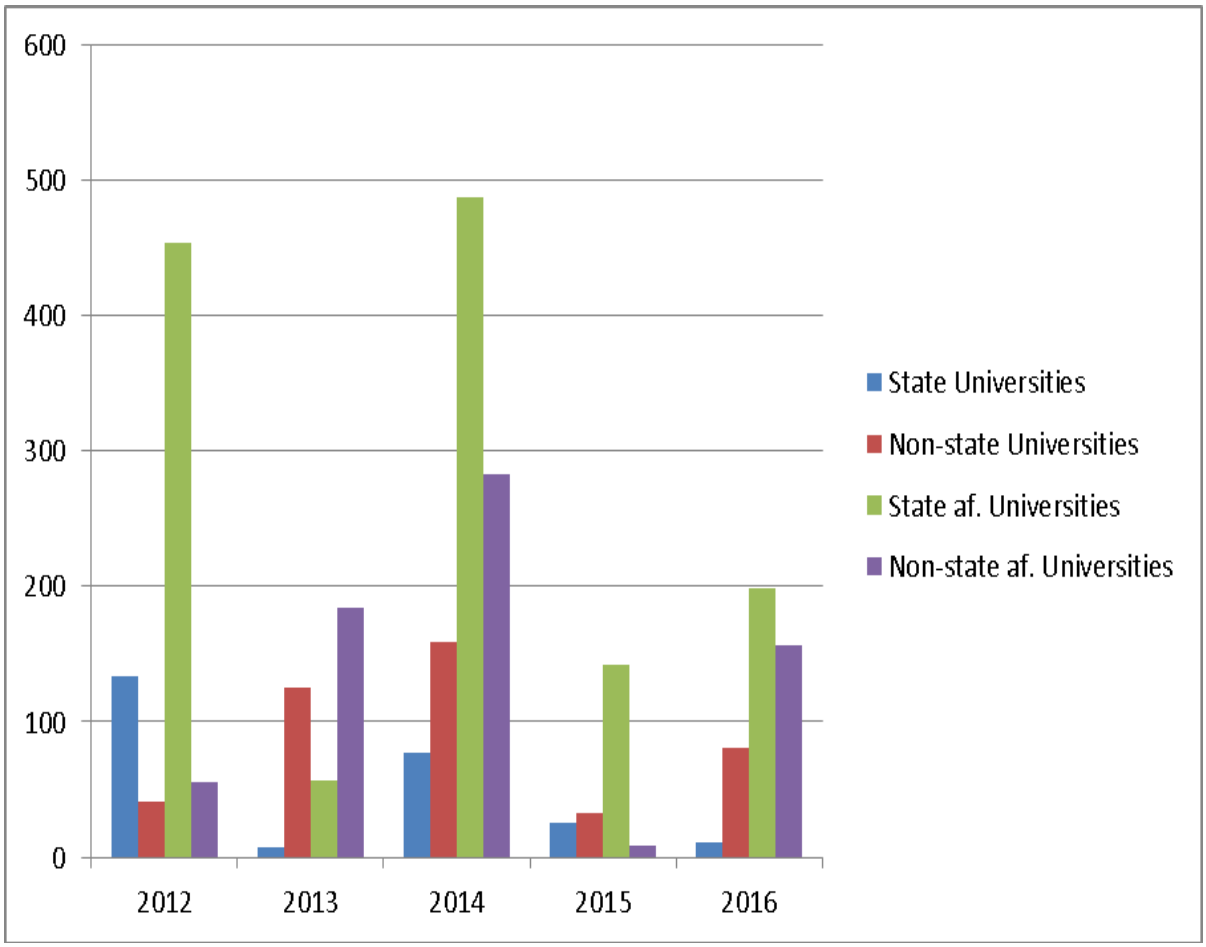


Diagram 1. Number of Higher Education universities and affiliated universities which were defined as non-effective

There were 204 universities whose licenses were suspended since 01.01.2014 (Federal Education and Science Supervision Agency, 2014). Since 01.01.2015 licenses of 151 were suspended (Federal Education and Science Supervision Agency, 2015). In 2015 accreditations of 129 universities and affiliated universities, licenses of 15 universities and affiliated universities and admission of students of 72 universities and affiliated universities were suspended. In 2016 there were 128 sanctioned universities (Zarembo I., 2016).

We assume that these “results” are really good motivation for administrations of all universities to do all their best in order to be effective universities. These administrations should use different methods for this and we assume that the implementation of the Effective Contracts is on of such instruments.

4.1.2. Employment duties of faculty members

In order to understand what are the functions of modern faculty member we decided to find relevant information in literature but we were surprised when we didn’t find any information about standardized employment duties of faculty members. Also it was not possible to find employment duties of Voenmeh and Northern Arctic Federal University on open access.

It was decided to analyze several employment duties of faculty members which are on open access. The most frequently used duties are provided below:

1) To educate students according to requirements of state educational standards.

2) To organize and to control students’ individual work.

3) To use the most effective methods, forms and teaching techniques, new pedagogical technologies.

4) Formation of students’ professional skills and students’ professional knowledge; preparation of students for implementation of academic knowledge in practice.

5) To participate in development of new educational programs, take the responsibility for the realization it not in the full capacity in according to the study plan and an academic calendar, quality of alumnus’s preparation.

6) To respect rights and freedoms of educates.

7) To hold on the study discipline, to control class attendance.

8) To implement study plans and programs, compliance workplace safety requirements.

9) To do a personal development work with students.

10) To increase the level of professional skills.

11) To give a professional advice in specially designated hours.

12) To participates in meetings of teachers and in other forms educational and methodical activity.

13) To improve practical experience, professional qualification and pedagogical skills.

14) To raise scientific and theoretical levels.

15) To participate in the preparation of programs, necessary trainings and methodological materials for study processes. (Administrative-managerial portal, n.d.; HR – portal, n.d).

According to this examples of faculty members' employment duties we can divide all faculty members' activities in 4 groups:

1) Teaching activity. We assume that this group is the most important because the biggest part of duties (like to educate students, to organize students' individual work, formation of students' professional skills and students' professional knowledge and etc.) is connected with teaching.

It is written that it is important to use the most modern and effective educational and pedagogical technologies. It means that faculty members should spend time not only on lectures (and preparations for lectures).

2) Scientific activities. Duties which are connected with scientific activities are not frequently used but we assume that such duties as increasing of the level of professional skills and improving of practical experience, professional qualification include a lot of different activities. It is difficult to understand why these group of duties is not described in great details in faculty members' contracts.

3) Methodological activity. We consider this group is the second most frequently used group of duties (such as participation in development of new educational programs, take the responsibility for the realization it not in the full capacity in according to the study plan and an academic calendar).

4) Non-teaching work with students. This group of duties is described in all contracts but it is very poorly-defined.

4.1.3. The transition to the Effective Contract

Many countries, including Norway, Denmark, Sweden and Russia, have taken action to implement their own higher education reforms, typically involving some sort of performance evaluation of both institutions and individuals. The institution evaluation will be described in the empirical part of our paper, in this subsection will be described the evaluation system for individuals.

The term "effective contract" was first used in the election article of Vladimir Putin in 2012, "Building justice: social policy for Russia". Further, in the decree of the President of the Russian Federation of may 7, 2012 № 597 «About an event of realization of state social policy" and the Budget message of the President of the Russian Federation dated 28.06.2012 G. "On budget policy in 2013-2015 years" in order to preserve staff potential, increasing the prestige and attractiveness of professions in the public sector of the Russian Government was instructed to develop a program of gradual improvement of the wages system for employees of budgetary sector of the economy, led to an increasing in salary for achievement of specific indicators of the quality and quantity of services provided.

The Budget message of the President of the Russian Federation for 2013-2015 states that "...the application of the "effective contract" is also intended to increase the competitiveness of the state as employer in the regional labour markets and the comparability of the cost of labor in state, municipal and private sectors of the economy."

Thus, an effective contract is intended to conform to the wage growth of employees, improve the quality of provided state services.

The conceptual basis of an effective contract is the organization in the form of the totality of processes subject to analysis and continuous improvement to ensure the quality of educational services. An effective contract will provide an opportunity to encourage employees who achieved the best performance.

What are the goals and objectives were set out in the Programme for the gradual improvement of wage systems in the state (municipal) institutions, approved by Order of the Government of the Russian Federation of 26.11.2012, № 2190-R "On approval of the Program for the gradual improvement of the wages system at state (municipal) institutions in 2012-2018».

The main objectives of the Programme are:

• preservation of personnel potential;

• increasing the prestige and attractiveness of work in educational organizations;

• ensuring the accordance of remuneration of employees the quality of providing by them state (municipal) services (performance of works).

What is an effective contract?

According to the Ministry of labour and social protection of the Russian Federation of 26 April 2013 No. 167н "On approval of recommendations for registration of labor relations with the employee of the state (municipal) institutions with the introduction of an effective contract" and section IV of the Program, effective contract - this is an employment contract with the employee, which specified his duties, terms of wages, the indicators and criteria of performance assessment to assign incentive payments depending on the results of the work and the quality of state (municipal) services and measures of social support.

According Lily Raitskaja (2014) "the implementation of the system of effective contracts in higher educational institutions of system of effective contracts will allow you to differentiate the wages of the academic staff and improve the quality of education».

For about two years heads of educational institutions and academic staff discuss the pros and cons of an effective contract in education. Leading Russian universities in recent years, actively develop and introduce their own system of effective contracts. All participants of this process remains a number of questions: what is an effective contract, how do you measure efficiency in education, why do we need a new type of labor relations and, finally, how this system will affect on professors and universities.

Lets start from that the efficiency is an economic category. By the efficiency is understood, in practice, productivity. The demand from academic staff to provide the amount of work bigger then it's established (law and plan) for a period of time shows a higher efficiency of work of the faculty members.

To determine that a professor works effectively in universities and higher schools of Russia with the most successful operating efficient contracts introduced a unified system of records of load and efficiency. The professor, according to the law, works in the year 1500 hours,

which are conventionally divided into training (so-called "morning") and "afternoon", which covers educational, methodical, scientific, educational and other types of work (Raitskaja, 2014). If the teacher develops the required hours (i.e., 1500 hours), and excess baggage, for example, publishes educational manuals, scientific articles, defended his thesis, etc. (all types of work are also assessed as specific quantitative indicators), it is the activity proves the efficiency of an academic staff.

Accordingly, the leading universities have implemented the system where each semester each faculty members send in the electronic form report about his workload, including all that being performed above the norm. Responsibility for represented information rests on the professor and the head of the department who once a semester or a year passes printed version of the report of that professor, signed by the professor and head of department. Further data from special programs is summarized automatically, which allows for minimal time to calculate the overfulfillment of the planned load of academic staff across the University and to appoint factors or bonuses on the effective contract.

The implementation of these contracts has led to some reduction in the academic staff of the universities (sometimes up to 5-10%) due to the fact that, as it turned out, some teachers do not consistently develop their full load on legislation. As a rule, these professors are not engaged in scientific work and not released tutorials. As a result, such academics have been suggested to get 0.75 (or less) interest rates, or to work off with help of additional loads.

The analysis of new systems of efficient contracts in the leading universities of Russia in the last three years has identified two main approaches:

- systems based on the accounting of hours spent on each type of works;

- systems based on the scores of types of work.

Regardless of the applied scoring system in all universities selected criteria in three main groups (educational and methodical activities, scientific activities, and other activities).

Based on the experience of the Russian universities, for the successful implementation of the effective contract to the University should:

1. Clearly defined (as an option in the employment contract) minimum mandatory work in all areas as a condition of passing the competition and conduct the competition in full

compliance with such minimum, and failure to comply with minimum contract only for a year and not to renew the repeated failure of the minimum (respectively the number of articles, training etc is taken into account only if an additional, in excess of the required volume of work).

2. The effective contract system should be built solely on a system of credit rather than fines; you can't use subjective or irrelevant criteria, such as ratings of students, ratings of colleagues, the volumes of funds attracted to the University.

3. The system must be built on several clear sets of criteria, under which should be clearly spelled out all the options criteria indicating the weight in points or other units (hours).

4. The indicators of personal achievement of academic staff are introduced to the table on the website (via the office) during the year, and at the end of the reporting period are printed and certified by the head of the Department (unit).

5. The academic staff are excluded from the bonus payment with minor processing, that is, establishes an indicative minimum for each variant of bonuses.

6. The «cost» is calculated further of one point or hour of over-processing, the sum of points (hours) of the academic staff is multiplied by the "weight" of the unit of account — it turns out the fee for the year. Bonus Fund on the effective contracts, as a rule, is not divided by faculties and departments, as it leads to unfair the system of material incentives as "effectively working" faculty members can also be distributed to faculties uniquely.

By order of the Ministry of labor of Russia No. 167н of 26 April 2013, wage systems, employment contracts and additional agreements according labor contracts with employees of the agencies are encouraged to be used the following payments of stimulating and compensatory character:

a) payments for intensity and good results of work:

- bonuses for the intensity of labor;
- bonuses for high performance;
- bonuses for performance of especially important and responsible works;

b) payments for quality of performed work:

- the bonus for the qualification category;
- an award for exemplary performance of state (municipal) tasks;

c) payments for length of continuous work, years of service:

- payments for years of service;
- payments for length of continuous work;

d) payment of bonuses by results of work:

- the award by results of work for the month;
- the award by the end of the quarter;
- the award by results of work for the year;

e) payments to employees engaged in heavy works, works with harmful and (or) dangerous and other special working conditions;

f) payment for the work in conditions deviating from normal (at performance of works of different qualification, combining of professions (positions), expansion of zones of service, increase in volume of work performed, overtime work, work at night and at performance of works in other conditions deviating from normal):

- the fee for combination of professions (positions); -
- the fee for the growth of service areas;
- the fee for increased workload;
- the fee for the performance of duties of a temporarily absent employee without release from work defined by a labour agreement;
- the fee for performing work of different qualifications;

additional payment for night work;

g) the bonuses for work with information constituting a state secret, classification and declassification, as well as work with codes.

Can be provided other payments of compensatory and stimulating character according to the labor legislation, other normative legal acts containing norms of labor right and collective contracts and agreements.

According to the idea of effective contract between teacher and university, teacher is a person who:

a) has enough knowledge and skills to fulfill teacher work;

b) has interest in research, teaching, communication with colleagues and students, who values free time and opportunity to make decisions about his activity management. Kuzmin named satisfaction from these interests as “academic reward”.

In other words university teacher should identify psychic income from his activity and he should attach value to it, which can compensate lower level salary in comparison with alternative variants of using his skills and knowledge.

It means that the system of effective contract between teacher and university teacher should provide fair wage for university teachers on all levels of career. At the same time this wage shouldn’t be too high because it can increase the number of people who don’t value “academic reward” and who want to work as university teacher only because of money.

At the same time there should be professional communities of teachers and researchers who have sufficient qualification and experience to estimate the quality of research and teaching activities of all university teachers and researchers. It is extremely important because it is very difficult or next to impossible for students, their parents, entrepreneurs, government and etc. to estimate the quality of teaching services. (Kuz'minov, Ja. I., 2011)

It is necessary to mention type of people who are ready to work as university teachers in Russia when wage level is so low:

1)1st type: real professionals who believe that “academic reward” is the main reward from this job and wage level is not so important for them. It is good for university to have such specialists but it is not right to depend only on them because they constitute a very small part of all teachers.

2)2nd type: people with low self-esteem, people who are not competitive on a labor market. “Academic reward” is not important at all for them.

3)3rd type: people who use this job in order to get profit with the help of “informal ways” (corruption and etc.).

Another negative implications of low wage level are:

1)The outflow of qualified specialists to business and abroad universities.

2)The necessity to have extra job in order to have enough money for life. These extra jobs negatively influence on employee activities which is difficult to estimate: research, methodological work and etc.

3)Lack of teachers and researchers with high level of qualification and experience who can work in professional communities which can help to estimate the quality of teachers and researchers work. (Kuz'minov, Ja. I., 2011)

The system of the Effective Contract is one of the instruments which are used to increase faculty members’ wages in order to increase occupational prestige to increase the level of salary by fulfilling concrete key performance indicators.

4.1.4. The comparison of indicators in BSTU and in NArFU

Ministry of Education and Science of the Russian Federation uses much about the same indicators for evaluation of different universities by Higher Education System’s Performance Monitoring. We are going to understand if different universities use the same indicators for the Effective Contracts.

Indicators of the Effective Contract in Voenmeh are provided below:

Educational and methodical work	Points	**Scientific activities**	Points	**Work with students and career guidance**	Points

1. The number of developed electronic educational publications in the discipline, counted in the library of the University (according to the Regulation on electronic educational publishing in the discipline).	2	1. The number of articles in journals RISC (according to the printout from the database of Russian science citation index or registration number of the contract). Publications in journals approved by Higher Attestation Commission (HAC) (the table of contents of the journal and title sheet). Publications, registered in international citation databases (Web of Science, Scopus) (printout from the database). Duplicate publications are not allowed. The number of patents, the copyright of which is BSTU.	1 2 3 2	1.Guide students became winners and prize-winners of Olympiads, sports competitions and creative contests (measured by number of events, not the number of diplomas): - International level - National level - The regional level	3 2 1
2. The number of projects in the field of e-learning and distance educational technologies, the implementation of which was attended by the lecturer (according to the Regulation on electronic educational publishing in the discipline).	3	2. The number of monographs published, recorded in the library of the University.	3		
3. The number of developed electronic educational publications in the discipline by a lecture	2	3. The number of dissertation councils in which the lecturer is a member (only councils of University or cooperative councils).	1	2.Participation in career guidance activities for high school graduates and students (creation of profile classes, the organization of regular classes in schools, industrial tourism – not less than 20 hours).	1-5
4. Publication of a manual, tutorials, posted in the library of BSTU; - textbook, workbook, texts of lectures; - methodical instructions for laboratory works and practical classes; - other academic publications.	 3 2 1	4. Doctoral thesis (scientific supervision, the applicant)	6 10	Organization of activities with the students, students and schoolchildren of educational, sports, cultural-mass character (according to the agreed task of the rectorate)	1-5
5. Expert status (taken into account only Federal experts).	1	5.Ph. D. (scientific supervision, the applicant)	6 6		

6. The membership in the Federal educational-methodical Association.	1	6. Reviews of dissertation and master's thesis: - review on the thesis (the official opponents, the leading organisation), - review on the author's (indoors), addressed to the rector in the prescribed manner. - review on the author's (outdoor) addressed to the rector in the prescribed manner.	2 0,4 0,2		

Table 8. Indicators of the Effective Contract in BSTU

The short description of indicators of the Effective Contract which is used in NArFU is provided below:

1) Publications

    a. Publications of monographies (published in Russian and foreign publishers; in publishers from Russian Science Citation Index system; published on foreign language by foreign publishers)

    b. Scientific papers (registered in Russian Science Citation Index; in Scopus; in Web of Science)

    c. Books and study guides.

2) Innovations in science and education

    a. Supervision of winners of local, regional, all-Russian competitions, festivals, exhibitions and etc.

    b. Scientific research supervision

    c. Commercial scientific projects

    d. Sole and nonexclusive licenses, patents, intellectual property certificates.

    e. Funding of research and educational projects

    f. Educational modules based on e-learning technologies.

3) “Brand-building”

a. Participation in forums, conferences.

b. Networking cooperation.

c. Participation in Higher Attestation Commissions, editorial boards of leading academic journals, expert boards.

d. Pedagogical work (Act №92 of February 9, 2017 about amendments of Compensation and Benefit Policy №767 of October 1, 2015; 2017)

In order to compare between Indicators of the Effective contracts in BSTU and in NArFU we are going to use 4 groups of faculty members' employment duties which were defined in of the previous section where we analyzed employment duties of faculty members.

Group	BSTU	NArFU
Teaching activity	There is a group of indicators which is called "Educational and methodical work" but there are no indicators which are connected with teaching activity	There are no indicators which are connected with teaching activity at all.
Scientific activity	Voenmeh pays attention to such indicators as - number of publications in RISC and articles registered in citation databases (Web of Science, Scopus).	- Scientific papers (registered in Russian Science Citation Index; in Scopus; in Web of Science) - Supervision of winners of local, regional, all-Russian competitions, festivals, exhibitions and etc.

Scientific activity	- The number of monographs published, recorded in the library of the University. - The number of dissertation councils in which the lecturer is a member - Doctoral thesis (scientific supervision, the applicant) - Ph. D. (scientific supervision, the applicant) - Reviews of dissertation and master's thesis - The number of patents, the copyright of which is BSTU.	- Scientific research supervision - Commercial scientific projects - Sole and nonexclusive licenses, patents, intellectual property certificates. - Funding of research and educational projects - Participation in forums, conferences. - Networking cooperation.
Methodological activity	- The number of developed electronic educational publications in the discipline, counted in the library of the University - The number of projects in the field of e-learning and distance educational technologies - The number of developed electronic educational publications in the discipline by a lecture	- Publications of monographies (published in Russian and foreign publishers; in publishers from Russian Science Citation Index system; published on foreign language by foreign publishers) - Books and study guides. - Educational modules based on e-learning technologies.

Methodological activity	- Publication of a manual, tutorials, posted in the library of BSTU - Expert status - The membership in the Federal educational-methodical Association.	- Participation in Higher Attestation Commissions, editorial boards of leading academic journals, expert boards.
Non-teaching work with students	- Guide students became winners and prize-winners of Olympiads, sports competitions and creative contests. - Participation in career guidance activities for high school graduates and students - Organization of activities with the students, students and schoolchildren of educational, sports, cultural-mass character	- Pedagogical work (is measured only by participation in annual competition “Tutor of the year”

Table 9. The comparison of indicators

First of all we want to define that teaching activities are not measured by the Effective Contract in both universities. It seems to be very abnormal because this type activity is the most important according to the employment duties.

Methodological activities are measure in the common way. There were defined no significant differences.

Northern Arctic Federal University uses more indicators in order to motivate faculty members to:

- Participate in Commercial scientific projects
- Get sole and nonexclusive licenses, patents, intellectual property certificates.

- Compete for Funding of research and educational projects
- Participate in forums, conferences.
- Participate in networking cooperation.

BSTU uses much more indicators in order to motivate faculty members for non-teaching work with students. Their administration uses indicators which are connected with career guidance activities, organization of sport and cultural-mass events and event connected with the recruitment of schoolchildren and school graduates.

4.2. Effects of the Effective Contract in BSTU

In this subsection will be presented results of interviews with university's employees from BSTU. And some analysed secondary data from official website of the university.

4.2.1. The Motivation for the Faculty Members in BSTU

Non-financial Motivation

It's difficult to admit but for some reasons the intellectuals in our country have never been duly appreciated. It is an educated segment of people but usually having a humble wage. So, people who works at schools and universities don't wait that they will get a good salary or will get a status in public. The respondent 1.1 said:

> *«A total dedication, morality, desire to teach the skills you have obtained what are our motivation. The material side is secondary». The respondent 1.3 said: «The main motivation for me is to see how the student uses the knowledge which they learnt from me, keen interest into their eyes, what gives me strength to be a lecturer».*

The respondent 1.5 highlighted that for him the motivation is the desire to share the knowledge, to grow comprehensively educated people, which are capable of taking the ethical decisions and bringing benefit for society and ecology.

Financial Motivation

To gain money being an academic stuff in Russia you need to work sometimes really hard, may be even obtain several jobs, i.e. the respondent 1.2 said:

> *«Personally for me to get enough money for life in a such big city like St.Petersburg with education of teacher of english and french one job is just not enough for me. So, I work at two universities, have additional courses at private school and several pupils and students for private practicing like a tutor".*

Such situation when a person has to have several jobs is normal in Russia, we faced with similar situation with several another representatives of academic stuff among them were a professor of economic science; and engineering and mathematics sciences. That proves the insufficient level of wages in our universities.

The EC as a Motivation

Whether the EC is a tool helping to motivate the academics or not - is a controversial question. Some respondents agreed that the system stimulates them on writing the research papers but there were others who disagreed with this statement. Thus, the respondent 1.6 said:

> *«I know a lot of professors who start to write more, I do not belong to them. I think these research papers to be needless. If talk about benefit it's much better to publish manuals and methodical publications. Besides I think that it is unfair that the publication of articles and methodical publications which further are used by students equally valued».*

The respondent 1.4 noticed:

> *"To print a research paper I need to pay almost the same sum of money which I could gain after my work will be published. But there is a loophole in the system the paper can be written by several authors thus we have chance to gain. Moreover, the rangers who can success alone doesn't like in our society".*

4.2.2. Indicators of the EC in Voenmeh

In this subsection we will introduce and analyse three groups of indicators being used by Voenmeh (the source is the official website of the university):

1. Indicators of educational and methodical work.
2. Indicators of scientific activities.
3. indicators of work with students and career guidance.

Teaching Performance Indicators

In this subsection we will introduce the indicators of teaching performance and which indicators should be on the opinion of the lecturers. It is not really easy to measure or evaluate teaching performance i.e. the quality of service that academic staff provides. We suppose that is the reason why there is so little attention paid for the indicators of teaching activities in the Effective Contract of Voenmeh.

There is the list of *indicators of educational and methodical work*:

- the number of developed electronic educational publications in the discipline by a lecturer;
- the number of projects in the field of e-learning and distance educational technologies, the implementation of which was attended by the lecturer;
- the number of prepared and implemented by a teacher of programs of additional professional education;
- publication of a manual, tutorials, posted in the library of Voenmeh;
- the status of expert;
- the membership in the Federal educational-methodical Association.

There is the list of *indicators of work with students and career guidance.*

- guide students became winners and prize-winners of Olympiads, sports competitions and creative contests;
- participation in career guidance activities for high school graduates and students (creation of profile classes.

Our respondents hope that indicators of teaching performance will be aded to the Effective Contract, the respondent 1.5 said:

> *«As the assessment of teaching activities can serve the future employment of the students, if their future activity after graduating from university related to the speciality they got, thus, we made a good work. But in this case it's difficult to realise what contribution did made each of academic stuff have been teaching that student. Also to evaluate the teaching activity may be need to provide private talk with students. But this way is very time consuming and not objective one. If for example a lecturer who very strict can teach well, his students will show good results, but most of student could dislike him for his manner of teaching, and another situation when a lecturer kind and soft, and it's easy to pass his exams but what knowledge will get students from a such lecturer?»*

Other respondents notice the same problem - the lack of the indicators measure the teaching performance. The respondent 1.6 added:

> *«High marks are not the result of good teacher's work or a deep approach of teaching, more often it indicates an unwillingness to check the real level of knowledge. Because it's much easier to put a good estimate and stay a "good"teacher for students unlike being a a fair teacher who will put the grade that you really deserve».*

Scientific Work Indicators

In this subsection we will introduce the indicators of scientific work and which indicators should be on the opinion of the lecturers. The Effective Contract estimates the scientific work with help of the following indicators:

- the number of the articles published in Russian Science Citation Index (RSCI); publications in Higher Attestation Commission (HAC);
- the number of dissertation councils in which the lecturer is a member.
- the number of monographs published, recorded in the library of the University.
- Doctoral thesis (scientific supervision, the applicant);
- Ph. D. (scientific supervision, the applicant);
- reviews of dissertation and master's thesis.

Our informants pointed the following indicators like patents, scientific discoveries, publications in popular magazines. Respondent 1.2 also added such indicators as taking part into the conferences to the list. Respondent 1.5 highlighted scientific supervision as well.

Utilisation of the Indicators

If we compare the answers with the indicators represented in the Effective Contract we can see that they are the same. So, this indicators really estimate the scientific performance of academic stuff. The respondent 1.5. said:

> *«Indicators are really used by the university. My colleagues and I try to follow the list and as a result we get an increase in wages».*

4.2.3. Beneficial Groups of Academic Stuff

As it was mentioned above primary heads of departments and PhD professors gained the highest points. Lets see what our respondent think about that. The respondent 1.3 said (an ordinary lecturer):

> *«I can hardly devote about 20 percent of my time to write a research paper. Because besides I have graduate students, work programs, a number of other duties which take a lot of time».*

The ordinary lecturer usually have much more time sheet than PhD professors, plus nobody considers that professors could delegate their duties on research students, thus, they really got more time for writing. The respondent 1.6 and 1.5 said:

«The Effective Contract is beneficial for all, but it's silly to deny that professors have great experience in writing the research papers. So, it'll be better if the system includes different demands for different groups of professors». «The implementation of that system is beneficial to senior lecturer and PhD professors, while the ordinary lecturer have not the opportunity to be published in the popular magazines».

4.2.4. Disadvantages of the System

During the interviews it was noticed that the lecturers who are not related to administration know about the Effective Contract as well as about the assessment of their work is public. Most of them were really surprised and were glad to see the regulatory documents within the system. The respondent 1.6 said:

«I have heard something about monetary bonuses for writing research papers, but nothing about the whole system, that it has name the Effective Contract and that there are public assessment of my activity on the official website of the university».

Nevertheless, there are the professors who are familiar with it find it very ineffective measurement performance tool. A respondent 1.2 said:

«Today we have so much paper need to be filled. Several years ago we have much more time to prepare for lectures and time for research work, well, anything were more effective time spending than nowadays with these endless paperwork ».

There is a similar work written by Henk J. ter Bogt and Robert W. Scapens (2012). Our European colleges analysed the system like the Effective Contract in Netherlands and the UK. According their survey, "almost 96% of the respondents thought that the level of work-related stress is intermediate or high, almost 73% thought stress had increased since they joined the University of Manchester and only 36% do not perceive this stress as a problem". In their

situation academics worried a lot about their assessment of work is public. They stressed a lot, it's very important for them what people would think about them. According Henk et al. (2012, p.475) one of the director of teaching program said:

> *« It is not a pleasure to have a bad evaluation of your course, especially as everybody in the faculty can see it. The talks I have with people about their teaching performance can be very difficult sometimes. People some- times really cry here in my room».*

In BSTU nobody cares if someone will see the assessment of his work. No one of respondent from BSTU thought it is a problem and that it should cause any stress for them. Partly, it caused to people don't take the EC seriously and partly due to our culture. Thus, we can see as people of different cultures react on the same things absolutely in different ways.

4.3. Effects of the Effective Contract in NArFU

4.3.1. The Motivation for university's employees in NArFU

Firstly it was necessary for us to understand what motivates current faculty members to work as faculty member, what motivates for high-quality teaching and science activities. It is necessary to understand sources of motivation because it can help to understand how indicators of the Effective Contract are connected with these sources of motivation.

Non-financial motivation

All respondents mentioned that nonfinancial incentives are the main motivation of modern academic staff for teaching. Respondent 2.1 and respondent 2.3 mentioned that the best rewards for them are students which are curious about their subjects; the process of teaching because they feel that they are real professionals in their disciplines; that is why they enjoy to impart knowledge to students and to their colleagues.

According to respondent 2.2 it is very important incentive for high-quality teaching to have good working conditions: well-equipped classrooms and laboratories, modern software, well-organized time-schedule end etc.:

> *"As for me, it is impossible to work in classrooms when it is too cold, hot, noisy or dirty. I don't want to teach students when I come in classrooms and I see broken furniture. I'm*

really angry when I have no opportunity to use computers or projectors in order to show presentation to my students. I don't understand how it is possible to organize time-schedule for lectures when lecturers do not have time to relax because they spend all break on running from one building to another in order to be on time."

Respondent 2.1 and respondent 2.3 defined that it is very important for them that this job gives access to the most relevant primary and secondary sources of information. This knowledge allows them to improve their qualification, it helps to improve the quality of teaching activities. All respondents consider that perspectives of professional growth are extremely important for them.

All respondents said that it is important for faculty members to participate in international exchange programs. First of all it helps them to get new knowledge and to build new networks which can help them in their future career. They are sure that there are a lot of countries where conditions for people who work in universities. Respondent 2.1 mentioned that it is the reason why he is looking for chances to work in a university in other country.

Respondent 2.4 said:

"If the students' results influence on the opportunity of lecturers to go abroad than these lecturers are the most motivated for high-quality teaching in university".

Financial motivation

At the same time the biggest part of respondents defined financial incentives as a good motivation for people to work as academic staff.

Respondent 2.1 mentioned that his salary is higher in comparison with people with the same education who work within specialty. He said:

"There were a lot of students who studied with me on my specialty. I know that a part of them work within specialty and my salary is one of the highest among them. That is why I'm happy that I preferred to work in university."

Respondent 2.3 said that the level of salary is quite good in comparison with regional average salary, but academic staff needs to work a lot for it. Respondent 2.4 said, that a lot of academic staff work in two or more universities, colleges and etc., t helps to earn enough money.

According to respondent 2.4's point of view this opportunity is one more advantage of this job. Respondent 2.2 mentioned:

> *"I don't have an opportunity to have bonuses for scientific activity because there are no projects in my sphere where I can participate. That is why it is not possible to survive without extra-job. As I said I don't spend time on scientific activities so I have enough time to have part-time job in other universities."*

4.3.2. Indicators of the Effective Contract in NArFU

Academic staff's opinion about indicators, which should be used in order to measure their performance in teaching and scientific activities, can help us to evaluate indicators which are used in the Effective contract.

Teaching activities

According to respondent 2.1's point of view the main indicators which can evaluate the quality of teaching activity are demand for university graduates on a labor market and evaluation their level of competence at the beginning of their career.

Respondent 2.2 defined student performance as the main indicator.

Respondent 2.3 consider it is necessary to evaluate the level of student satisfaction level of completed course in order to evaluate the quality of teaching activity. Respondent 2.3 mentioned:

> *"Our students are service consumers and I think it is logical to use student satisfaction level indicator. The only thing, maybe it is better to ask students to evaluate lecturers two times: the first time – after they complete the course; the second time – in 5 years after graduation. I think it is a good idea because it is difficult for students to understand the real value of knowledge because they don't understand if it will help them in their future career or not. But I'm sure that in 5 years after graduation all people understand if they have enough skills after university or not."*

Another indicator is efficiency of using unstandardized teaching techniques.

Respondent 2.4 mentioned he doesn't believe that it is not possible to evaluate the quality of teaching activity in the current system of education. The Respondent said:

> *"I'm not sure if it is possible to evaluate the quality of teaching activity in the current system of education because according to this system the quality of teaching is high if the curriculum is well-designed; it means that if you want to evaluate the quality of teaching activity first of all you need to change a whole system."*

Respondent 2.4 added that it is very important to evaluate teaching activities because it will motivate faculty members to improve their teaching and pedagogical skills and in a result they will improve:

- The quality of teaching
- The quality of students' knowledge
- The level of students' satisfaction
- The level of employers' satisfaction

Respondent 2.3 also said about necessity of such indicators, but this Respondent mentioned another reason:

> *"These indicators can help our university to find and to fire all faculty members who dishonour all lecturers. And of course I hope that it is possible to use these indicators in the Effective contract in order to motivate lecturers for high-quality teaching."*

This respondent added that there are a lot of faculty members who are not interested in research activities but they are high-quality lecturers who educated a great number of high-quality employees for different industries and for science. According to the respondent's point of view these lecturers should have opportunities to have good salaries.

Scientific activities

All respondents defined grant proposals, publications in peer-reviewed journals, patents, collaboration with industry are indicators which should be used for evaluation of the quality of scientific activity.

Respondent 2.3 also defined such indicators as participation in conferences. Respondent 2.4 added scientific research supervision to this list.

Does the university use them or does not?

Respondent 2.3, Respondent 2.4 and Respondent 2.2 said that only a part of these indicators are used by university administration.

Respondent 2.1 thinks that these indicators are used for evaluation by university administration but according to respondent's point of view it is not always objective, for example patent of invention utility model patent are equal according to effective contract but it is not correct in real life.

4.3.3. An attitude of university's employees to the EC

In this part we will analyze if faculty members are satisfied by the system of the Effective Contract or not.

Effective Contract as motivation

Respondent 2.3 mentioned that the Effective Contract is a good system of financial incentives. Respondent 2.3 said:

> "*I like the Effective Contract because it is written what should academic staff do in order to increase the level of salary. This information helps to organize activities in such way that it allows to earn more money because you can define income-generating activities and focus on them."*

All respondents consider that it is good that results of performance evaluation are public because it motivates academic stuff to work better.

Respondent 2.4 feels that the Effective Contract give an opportunity for academic staff to be "entrepreneurs" because they need to think how they can use their resources (time, knowledge, skills) and university resources (like networks, access to different sources of information and etc,) in order to raise revenue.

At the same time Respondent 2.2 said that it is not possible in his/her sphere to fulfill these indicators because there are no financing, grants, conferences, topics for new articles and etc. so it is extremely difficult to get these bonuses.

Respondent 2.1 also think that the Effective contract is good not for all spheres. He/she said that the only opportunity for him/her to earn extra money is to win grants, but it is extremely difficult to combine with education activities because administration increases classroom load and academic staff should teach at least 75-90 hours per month. It is next to impossible because a lot of faculty members work in several organizations in order to ensure regular income

Disagreement with indicators of the EC

Respondent 2.2, Respondent 2.3 and Respondent 2.4 consider that the main problem of the Effective Contract is orientation on quantitative approach for evaluation instead of qualitative approach.

Also they mentioned that it is strange that teaching activity is not evaluated at all. Respondent 2.1 thinks that university should change the methodology of evaluation because he thinks results are not objective. Also Respondent 2.1 thinks that indicators for evaluation of e-learning disciplines should be changed because now this disciplines do not give opportunities for students to communicate with lecturer.

Negative attitude to the EC

All respondents said they feel stressed because of their work and that they can define the level of stress as a middle level. The reason is annual changes in rules of contracts, academic staff can't predict how their activities will be evaluated next year. Respondent 2.1 defined that a lot of colleagues feel stressed because "they have no opportunities to show their effectiveness according to their contracts".

All respondents told that they have no opportunities to influence on changes of indicators which are used for performance evaluation, but all of them hope that they will get this opportunity because it will give chance to administration to understand academic staff activities from different perspectives and it will help to develop better indicators for performance evaluation.

4.3.4. Beneficial groups of university's employees

Respondent 2.3 said that it is much easier for young employees to adapt to new conditions connected with effective contract in comparison with elder colleagues.

According to Respondent 2.2, the Effective contract is profitable for academic staff who work in "actual spheres": well-funded spheres, spheres with a lot of conferences, collaboration projects and etc. It allows academic staff to get bonuses with the help of the Effective Contract and as a result their salaries are much higher than salaries of academic staff who work in such spheres as pedagogical, medical, forestry and a lot of other spheres.

Respondent 2.1 consider that there are two categories of academic staff in university: a) who works a lot and b) who doesn't like to spend a lot of time on real work. Respondent 2.1 clarified his idea:

> *"People from the second group didn't get bonuses before and they don't get them now so nothing has been changed for them after implementation of the Effective Contract. The first group gets a little bit more bonuses than before but I'm sure that these rewards are not equal to a lot of time, effort and money has been spent."*

Respondent 2.3 and Respondent 2.4 defined young faculty members who are fully engaged in scientific activities as the category of academic staff which more benefits from implementation of the Effective Contract. Faculty members who are fully engaged only in teaching activities are defined as the category of academic staff which have no benefits at all from implementation of the Effective Contract because teaching activities are not evaluated by the Effective Contract.

Respondent 2.4 defined one more category which have benefits from the implementation of the Effective Contract – entrepreneurial faculty members:

> *"If you want to be successful in our profession – you should be very entrepreneurial. You should think several moves ahead. You should know how to organize your working time in the most effective way. You should be very communicative, you should understand the importance of business network and you should which people are important for your career and which are not. You should be a team player only if you can get profit with the help of it, in other cases you should play for yours own hand."*

4.3.5. Prioriy between teaching and science

Respondent 2.2 and Respondent 2.4 preferred scientific activities to teaching activities before the implementation of the Effective Contract so now they don't change their priorities because now they have opportunities to earn more for the same activities they did before the implementation of the Effective contract. Respondent 2.3 changed her priorities because she understood that it is impossible to have good salary if you spend your time only on teaching activities.

Respondent 2.1 preferred teaching activities to scientific activities before the implementation of the Effective Contract and now Respondent 2.1 doesn't feel that the Effective Contract allows him to earn more so respondent's priorities are still the same.

5. DISCUSSION PART

In this subsection we will analyse how the EC is used in universities, and what their effects are on individual academics, we outlined the changes and then discussed changes in the performance measurement tool the EC used in the universities of BSTU and NArFU and how they affect individuals within the system.

5.1. Discussions based on findings in BSTU

The Motivation

The Effective Contract was implemented with certain demands like in European countries. But what about conditions for academics, are they also of European standard or not? There are no respective labour conditions as for example in Norway, where each professor has his own office where he has an ability to write a research paper. In Voenmeh there is a public office shared between about 10-12 academic members where they supposed to do their scientific work and only a few computers in the best case. Only the head of departments and deans have their own office. So, before making demands to academic stuff and the implementing of a new performance measurement tool, may be it make sense, firstly, to provide the conditions for a high quality work.

In the empirical part were the examples of how a lot of lecturers have to work on the several jobs to gain enough. Isn't it a sign of insufficient level of salary? While the question of wages is very important because a person who gains enough will work more willingly, more effectively, with enthusiasm, as there won't be need to think about what does he need to do to earn more. Such person will certainly do his work better. So, monetary motivation makes sense and most of my respondents have answered sincerely that the salary is very important task.

In order to understand if the level of salary is really insufficient we decided to analyze Average faculty member wage to average wage (in the region) wage Ratios which are presented in Higher Education System's Performance Monitoring (2013-2016).

Indicator name	Year	Unit of measurement	University indicator value
Average faculty member wage to average wage (in the region) wage Ratio	2013	%	82,69

Average faculty member wage to average wage (in the region) wage Ratio	2014	%	109,51
Average faculty member wage to average wage (in the region) wage Ratio	2015	%	126,31
Average faculty member wage to average wage (in the region) wage Ratio	2016	%	145,91

Table 10. Average faculty member wage to average wage (in the region) wage Ratio since 2013 till 2016. Sources: Information-analytical content for operating committee Meeting about higher education institutions performance monitoring. Federal state budget educational institution of higher education "Baltic State Technical University "VOENMEH" named after D.F.Ustinov", (2013; 2014; 2015; 2016).

These information is presented in analysis of higher education system's performance monitoring (2013, 2014, 2015, 2016 years). We see that faculty member wage was less than average wage in the region in 2013 (82,69%). According to the last higher education system's performance monitoring faculty member wage was 1,46 times higher than average wage in the region.

It shows that faculty members' salaries are on the good level and it is difficult to understand why academic staff is not satisfied by it. At the same time we need to remind that a lot of faculty members of Voenmeh have extra-jobs, it means that their monthly income is even higher.

The Indicators

We are interested in two groups of indicators: measuring scientific activities and teaching one. The Effective Contract does stimulate some academics on scientific activities. It is not a secret that the amount of research papers increased but who does care about its quality? There are several commissions in Russia which can serve as an independent expert i.g. Russian Science Citation Index (RSCI) or Higher Attestation Commission (HAC). But this year 344 magazines were deprived the status of RSCI which they had before.That makes RSCI not the most reliable status. While HAC is an expensive commission and not every teacher can afford to be published at HAC with an ordinary salary.

While with scientific activities everything is transparent and ok, if the academic members named the same indicators which are listed in the Effective Contract, there is not so easy with teaching activities. Because it's really difficult to measure. There are only three indicators related directly to work with student in the EC. But even among them there are no evaluation of the process of teaching.

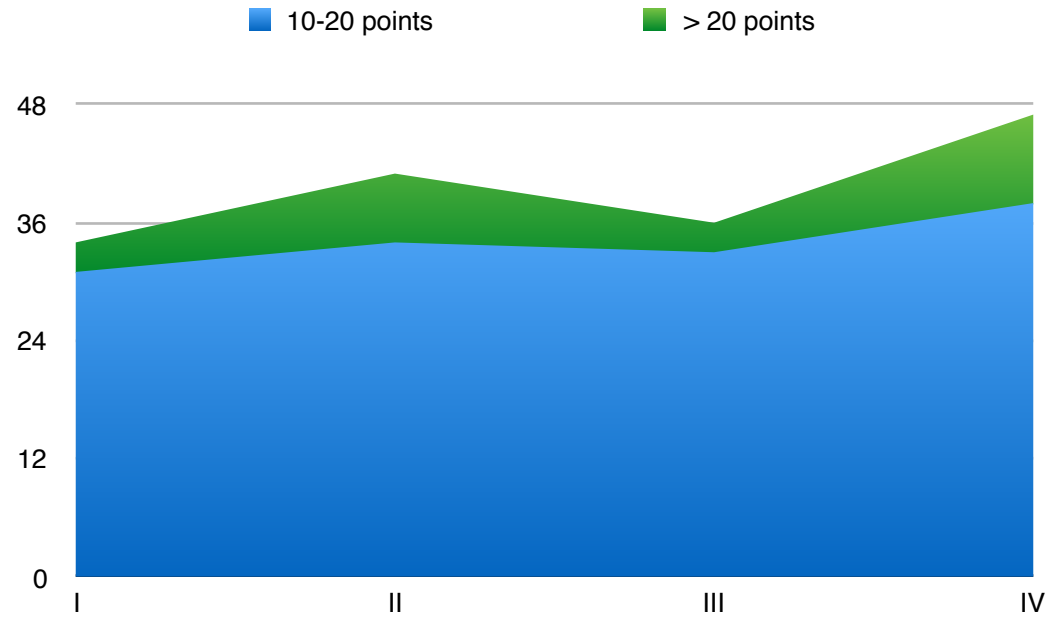
Moreover the system is young enough may be in the nearest future there will be added some extra indicators which will help to improve the quality of teaching performance. Our respondents hope for that also.

The idea of the EC to improve the quality of individual work, not collective one. But as our respondents noticed and according Hofstede theory, there is collectivistic society in Russia. So, to achieve a good result the goals should be collective ones, not individual. Current system could perfectly works in USA as their society is individualistic but not in Russia.

Also may be if the assessment of teaching performance will be collective it will be easy to evaluate, rather when individual one.

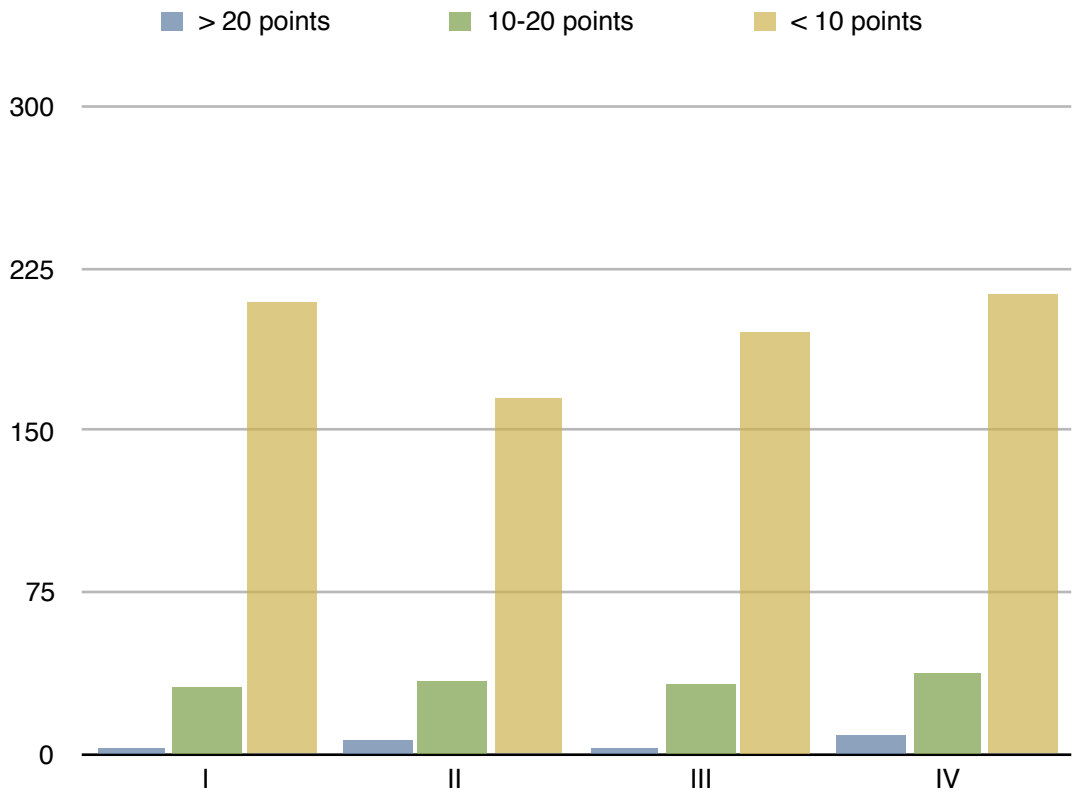
Analysis of the last results of EC

Most of our respondents considered the system to be ineffective. But we analysed data from the indicators of quality scientific and teaching work of employees for 4 periods (each of them lasted for one semester).



The diagram 2

On the diagram 2 we can see that the number of academics who obtained points from 10 to 20 gradually increased as well as the number of academics who obtained points bigger than 20. Also it was noticed that the biggest points have obtained heads of the department and PhD professors.



The diagram 3

Lets have a look at the diagram 3 there is the comparison with additional item - the number of academic staff who obtained points *less then 10.* There is the overwhelming number of academics who do not take part into the system.

The thing is that the system has the equal demands from all categories of academic staff, while they have different opportunities, conditions and free time. The Effective Contract doesn't take into account that professors could publish their works much easier due to their status and knowledge. Usually they have a relevant background that helps them to have their's work published. While the assistants don't have time for that, moreover as a rule they need much more time to write an article.

The disadvantages of the system

After we collected secondary and primary data from BSTU we revealed the following issues in the Effective Contract:

1. There is a problem of an imbalanced indications for academics from different categories in the Effective Contract. Phd Professors and senior lecturer have more experience and accesses to be published in a good journals. The writing of research paper or a methodological publications take a lot of time from an ordinary lecturer. Besides they do not have the opportunity to be published at the same magazines as professors can. As a result it is easy to sum up that the Effective Contract is much beneficial to senior teachers and professors than for beginners in that sphere.

2. Next obvious minus of the system is that it wasn't represented the right way at last in BSTU. The system hardly can work as it was supposed to work if not every body knows about it. It is a mistake of administration, that they did not bring the information to the attention of the academic stuff. Each faculty members should be familiar with the normative documents of the EC, to get know where he or she could find the assessment of their work.

3. An absence of the appropriate work conditions for academic stuff. Each faculty members should have his own work place not only the deans and head of departments which by the way don't show hight results in writings research papers.

4. There is no assessment of teaching performance. Scientific activity is an important part of any university. But the first thing a university is supposed to do is to teach students well. There is a need to develop the Effective Contract in that direction, to add indicators which are really capable of measure and evaluate the teaching performance of academic stuff.

5. The evaluation of individual performance instead of collective one. During the research it was noticed that measuring of individual performance can be harmful. Moreover measuring the collective performance could facilitate in evaluation of teaching performance. Because an education of a student it is a complex of knowledge, it is difficult to success being good in only one subject.

5.2. Discussions based on findings in NArFU

The Motivation

It is important to understand that all interviewed faculty members mentioned that it is not enough to have only financial or only non-financial incentives.

First of all every respondent said about non-financial incentives. “Academic reward” (was described in previous parts) is very important for all of them. They are interested in teaching, communication with colleagues and students. They are fond of this process of teaching. They feel satisfaction from their job when they can impart knowledge to their students because they feel they are real professionals in their fields.

At the same time it is very important for all of respondents to have an opportunity to improve qualification and to climb career ladder. They want to have an access to different sources of information, to have modern equipment and software and they want to have chance to participate in different projects.

We can assume that if there are two opportunities, such as:

1) To work in university with good library, access to different scientific journals, books, databases. To work together with real professionals. To have a chance to participate in different projects (both non-international and international), international internships, different conferences and seminars, and etc.

2) To work in university where faculty member don’t have benefits from 1st opportunity but where faculty member will earn salary a bit higher.

The biggest part of faculty members who work in Northern Arctic Federal University will choose the first opportunity. The biggest part, but not 100%.

We were surprised and it was great to hear that high salary was very good motivation for them to choose job in the university. One of respondents said that his salary is higher in comparison with people with the same education who work within specialty. This fact surprised us and we decided to check this information.

Indicator name	Year	Unit of measurement	University indicator value

Average faculty member wage to average wage (in the region) wage Ratio	2013	%	122,94
Average faculty member wage to average wage (in the region) wage Ratio	2014	%	132,63
Average faculty member wage to average wage (in the region) wage Ratio	2015	%	132,13
Average faculty member wage to average wage (in the region) wage Ratio	2016	%	163,34

Table 11. Average faculty member wage to average wage (in the region) wage Ratio since 2013 till 2016

These information is presented in analysis of Higher Education System's Performance Monitoring (2013, 2014, 2015, 2016 years). We see that faculty member wage was 1,23 times higher than average wage in the region in 2013. According to the last higher education system's performance monitoring faculty member wage was 1,63 times higher than average wage in the region.

We can see that Average faculty member wage to average wage (in the region) wage Ratio is on the rise and it seems it is possible to meet one of target of Edict №597 of the President of the Russian Federation - Average wage of faculty members should be increased till 200% from the average regional wage till 2018.

It is necessary to mention that the biggest part of faculty members have extra-job. It means that their monthly total income is more than 1,63 times higher than average regional wage. A part of respondents said that opportunity to have extra-job is one more advantage of working as faculty member.

At the same time we need to remember that rise of wages can have negative consequences: it can increase the number of people who don't value "academic reward" and who want to work as university teacher only because of money (Kuz'minov, 2011). And the results of our research that now it is possible to find such faculty members in Northern Arctic Federal University.

Indicators

Interviews showed that faculty members of Northern Arctic Federal University are interested in indicators which can be used to evaluate their performance. The main reason is that university administration uses different indicators and these indicators influence on the level of faculty member's wages.

Issue about indicators which can evaluate the quality of teaching activity is the most hotly debated topic. All respondent are sure that it is extremely important to evaluate teaching activities and they don't understand why university administration doesn't use such indicators for performance evaluation.

Respondents believe that this indicators can help to improve the quality of teaching and the quality of students' knowledge, the level of students' satisfaction and the level of employers satisfaction. This can help university to be more prestigious.

Another point is that lecturers should have motivation for teaching. Now they understand that it is much more profitable to be involved in scientific activities and they spend less time on teaching. But one of the main aim of university is to educate high-quality specialists. Scientific activities of faculty members can't help students to become good specialists, that is whu it is extremely important for university to motivate faculty members for high-quality teaching.

Also it was defined that using of such indicators can help university administration to find and to fire who are not good in teaching. It will improve the level of knowledge and will give an opportunity to high-quality lecturers to have more lectures in order to have higher salary.

We assume that the main problem of faculty members is that they are sure that it is necessary to evaluate teaching activities but they don't know how to do it. We can assume that university administration has the same problem, that is why they don't use such type of indicators.

Of course, respondents offered different indicators during our interviews but we think that it is impossible to implement and to use these indicators.

Suggested indicator	Our comment
Student performance	That makes sense to use this indicator because students ‘ results should show their knowledge and skills. If students have very good grades therefore they were high-quality educated. BUT! Lecturer is a person who teach students and a person who evaluate students. It means that lecturer can influence on the results of students’ performance evaluation in order to show better level of his own teaching.
demand for university graduates on a labor market and evaluation their level of competence at the beginning of their career.	The main question is HOW? How is it possible to evaluate this indicator? There is tendency that a lot of graduates don’t work in the specialty they were educated. Does it mean that education help them to get this job? How is it possible to associate their level of competence with their knowledge from university? The example of other problem connected with this indicator: How can this indicator be connected with the quality of teaching of PE instructor?

1) the level of student satisfaction of completed course 2) the level of student satisfaction of completed course in 5 years after graduation	1) We agree that this indicator should be used for evaluation the quality of teaching activity. BUT! It is necessary to understand that different students have different reasons for satisfaction. Some students are satisfied if it was not difficult to complete course. Other students are satisfied if lectures were interesting. Some students can be not satisfied because of bad grades or because they had too much homework. Do these factors show the quality of teaching activity? 2) It makes sense to use this indicator because students can evaluate the quality of their knowledge in practice. If they are satisfied by their knowledge therefore we can assume that the quality of teaching activity was good. BUT! There are a lot of courses which can be not connected with their job. How is it possible to evaluate these courses? Another issue is: What can motivate students to give feedback in 5 years after graduation?
efficiency of using unstandardized teaching techniques	We agree that lecturers should use modern teaching and pedagogical techniques. BUT! Which teaching techniques can we define as unstandardized? Is it correct to use such type of techniques? And the main question: How is it possible to measure efficiency of using unstandardized teaching techniques?

We agree with idea of one of respondents that first of all system of education should be changed and only after it is possible to develop systems of performance measurement evaluation. Russian education system passed through two “academic revolutions” and it is still the same. Nowadays research activities and capitalization of knowledge are extremely important for all universities but teaching activities are still one of the most important part of university activities. There were done a lot for new development of new types of university activities but system of teaching wasn’t changed at all.

Indicators which should be used for evaluation of the quality of scientific activity were also discussed during interviews. Respondents named the same indicators as indicators which are used by university now:

- publications in peer-reviewed journals
- patents
- collaboration with industry
- grant proposals
- scientific research supervision
- participation in conferences

But it is necessary to mention that respondents think that some indicators are not always objective.

The attitude to EC

The biggest part of respondents mentioned that the idea of the Effective contract is good because the system of financial incentives allows academic staff to increase the level of salary. But at the same time all respondents consider that current system is not ideal and it should be optimised in order to satisfy its objectives.

We are going to describe the main issues connected with the Effective Contract.

1) Representatives from different spheres have different opportunities.

Respondents consider that representatives from different spheres are not on an equal footing because of the current system of the Effective Contract. The reason is that university has focus

areas according to the “business environment”. That is why there are spheres which are better financed by university, government and industries.

Academic staff who work in these spheres have much more opportunities to perform in such a way as to fulfill indicators from the Effective Contract. They have more opportunities to:

- take part in commercial scientific projects
- get funding of research and educational projects
- supervise participants in competitions, festivals, exhibitions and etc.
- get sole and nonexclusive licenses, patents, intellectual property certificates.
- participate in Educational modules based on e-learning technologies.
- participate in forums, conferences
- participate in Higher Attestation Commissions, editorial boards of leading academic journals, expert boards.
- Participate in international projects
- Etc.

That is why there are groups of academic staff who are really satisfied by the system of the Effective Contract. But at the same time there are a lot of faculty members from other spheres who haven’t got the same amount of opportunities to increase the level of wages.

2) Orientation on quantitative approach for evaluation

Respondents consider that it is not correct to orient only on quantitative approach for performance evaluation. According to the current system of the Effective contract it is much more profitable to increase the number of activities (publications, participations in different conferences, participations in projects, number of licenses and patents, etc.) instead of working on quality of activities. It means that, for example, it is 3 times better to have 3 “small” research papers than one “big” research paper.

This orientation is the reason why academic staff don’t need to work on quality of their activities.

3) Academic members need to be entrepreneurial.

The system of the Effective Contract give a new opportunity to academic staff – to be like entrepreneurs. It seems to be a positive aspect of new system because now faculty members have an opportunity to organize their activities by themselves in order to raise their salary. They need to analyze how they can use their resources (time, knowledge, skills) and university resources (like networks, access to different sources of information and etc,) in order to get bonuses.

But the problem is that a lot of faculty members are not ready for "entrepreneurial" style of job. Not all of them are ready to think several moves ahead. It can be difficult to organize by themselves their working time, to build business network, to compete with colleagues and to prefer their own interest to the collective interest. It is the reason why a lot of high-quality faculty members can meet problems with building of their career and fulfilling of indicators of the Effective Contract.

4) The indicators of the Effective Contract can be changed every year.

It is really very difficult for a great amount of faculty members to adapt to new systems. That is why the biggest part of academic staff feel stressed because of the system which changes every year. People are afraid that they can't plan their activities and career for a long term.

5) Faculty members can't influence on the development of indicators

Faculty members can't understand why university administration doesn't take in consideration their opinion about indicators which should be included in the Effective Contract. They are sure that it is necessary to use their experience in order to make the system more effective.

That makes sense because they know the system inside out and they can explain why some indicators should be used (or shouldn't be used) and why.

6) Teaching activity is not evaluated

One of the main activities of faculty members is not evaluated at all by the Effective Contract. It means that academic staff is not motivated for high-quality teaching. At the same time faculty members understand that it is more profitable to spend more time on scientific activities, that is why a lot of them spend less time on teaching, preparations for lectures and improving teaching and pedagogical skills. That is why we can assume that the level of teaching is decreasing and this trend will be continued.

5.3. The Comparison of Consequences in BSTU and NArFU

The same list of questions was used to interview representatives from BSTU and Northern Arctic Federal university. It allows us to compare results of interviews of both universities.

We defined the problems connected with the implementation of the Effective contract which are:

- Totally the same for faculty members of both universities
- Quite the same for faculty members of both universities
- Defined by the representatives of one university.

1) Teaching activity is not evaluated.

This problem was defined in both universities. They consider it is very abnormal because most of them believe that teaching is the most important activity of faculty member and of university in whole.

Respondents consider that they are not motivated for high-quality teaching. It is the reason why they prefer to spend more time on more profitable scientific activity. We assume that it negatively influences on the level of teaching and this trend will be continued.

One of the reasons is that it is really difficult to measure quality of teaching activity. But we assume that the main reason why indicators for evaluation of teaching activities are not used for Higher Education System's Performance Monitoring. It means that the Ministry of Education and Science of the Russian Federation and as a result universities are not motivated to spend money on faculty members' motivation to increase the quality of teaching.

2) Orientation on quantitative approach for evaluation

This issue is defined by the representatives from Northern Arctic Federal University.

They consider that the current system motivates to increase the number of activities (publications, participations in different conferences, participations in projects, number of licenses and patents, etc.) instead of working on quality of activities.

We assume that this issue is directly connected with indicators which are used for Higher Education System's Performance Monitoring. Universities need to fulfill indicators which are

used to measure their performance and they use the Effective Contracts in order to motivate their faculty members to help universities with fulfilling of these indicators.

3) The Effective Contract provides unequal opportunities for different groups of faculty members

This issue is defined in different ways by the representatives of two universities.

The representatives of Voenmeh consider that the implementation of the Effective Contract is much beneficial to senior teachers and professors than for beginners because faculty members with higher academic degree have much more opportunities to be published in peer-reviewed journals.

The representatives from Northern Arctic Federal University consider that the implementation of the Effective Contract is much more beneficial for faculty members who work in well-financed spheres because they have much more opportunities to fulfill indicators from the Effective Contract and as a result to increase the level of salary

4) Faculty members can't influence on the development of indicators

This issue is defined by the representatives from Northern Arctic Federal University.

They pay great attention to the fact that they don't have an opportunity to influence on the indicators which are used in the Effective Contract. They are sure that their opinions should be taken into consideration.

We assume again that Higher Education System's Performance Monitoring is the reason why university administrations do not need to "ask advices" of academic staff because the most important aim of university administration to fulfill indicators of Higher Education System's Performance Monitoring.

5) Faculty members are not well-informed about the Effective Contract

This issue is defined the representatives of Voenmeh.

They consider that the new system wasn't represented in he right way and as a result a lot of faculty members do not understand how to get benefits from the new system. It is the reason why the level of performance of a lot of faculty members is not high and why the level of their salaries is still the same as it was before the implementation of the Effective Contract.

6) The indicators of the Effective Contract can be changed every year.

This issue is defined by the representatives from Northern Arctic Federal University.

They consider that the trend of regular changes in the indicators of the Effective Contract creates the turbulent environment because every year they need to adopt for new requirements.

We assume that it is connected with changes of indicators which are used in Higher Education System's Performance Monitoring. These indicators were changed every two years (in 2014 and 2016) and we can assume that these changes influence on the university administration to change indicators which are used in the Effective Contract.

Another possible reason is that university administration analyze the effectiveness of usage of different indicators and they can modify or stop using some indicators which are not effective for them or they try to use new indicators which are seems to be potentially effective.

7) Entrepreneurial style of job

This issue is defined in different ways by the representatives of two universities.

The representatives from Northern Arctic Federal University consider that it is a positive aspect of new system because now faculty members have an opportunity to organize their activities by themselves in order to use their resources (time, knowledge, skills) and university resources (like networks, access to different sources of information and etc,) in the best way and as a result they can raise the level of their salaries.

But at the same time they defined very important issue which is connected with this new style of job: not all faculty members are ready for entrepreneurial style of job. They had skills which were good for the previous system but now they feel that they are not ready to work effectively in such turbulent environment and as a result a lot of high-quality faculty members can meet problems with building of their career and fulfilling of indicators of the Effective Contract.

The representatives from Voenmeh feel that new system is oriented on the evaluation of individual performance instead of collective performance and they consider that such type of evaluation can be very harmful.

8) Low level of faculty members' wages.

Some representatives from both universities mentioned that the level of faculty members' wages is low and it is the reason why they need to work on extra-jobs. Some of them said that it doesn't motivate them for high-quality activities.

Our research showed that such statements are abnormal because the level of wages in both universities are much higher that the average wages in their regions. Average faculty member wage in Northern Arctic Federal University was 1,23 times higher than average wage in the region in 2013; the last higher education system's performance monitoring showed that average faculty member wage is 1,63 times higher than average wage in the region. Average faculty member wage in Voenmeh was less than average wage in the region in 2013 (82,69%), but the last higher education system's performance monitoring showed that average faculty member wage is 1,46 times higher than average wage in the region.

6. CONCLUSIONS

In this section we will answer the following research questions, make conclusions based on our main findings and make a suggestions for future research.

1. **What has led the Universities to adopt a new performance measurement tool?**
2. **What are the challenges faced by Universities after the implementation of the Effective Contract?**

NPM had a focus on improving efficiency, a client-based methods, a private-sector management style, explicit performance standards and output-outcome control. Under NPM government had a strategic, goal-setting role, and civil servants are supposed to be autonomous managers who follow their instructions.

NPM entailed an increasing level of competition for funding, employees and students between Universities, changes in state university structure influence on internal and external processes of teaching and scientific activities of academic staff.

As a result in 2012 Russian government developed a strategy of reformation of higher educational institutions. We defined two main priorities of this strategy:

1) To develop control tool which allow government to evaluate performance of all universities. It was very important because there were no audits of quality of higher education and it was impossible to understand how universities function. In other words it was extremely important to define non-effective universities in order to help them to improve the quality of their activities or to suspend licenses or accreditations of universities with the worst quality of rendered services. The results of first Higher Education System's Performance Monitoring showed that it was right decision to start audits of universities performance because there were defined hundreds of non-effective universities.

2) To increase the level of faculty members' wages. This aim was extremely important because a great number of faculty members had salaries much lower than the regional average wages and as a result the level of faculty members' motivation for high-quality activities, the level of occupational prestige and the number of people wishing to work as faculty member were progressively decreasing.

In order to achieve performance targets two tools were developed: Higher Education System's Performance Monitoring and the Effective Contract.

The state monitoring of the university's efficiency forced the higher educational institutions to satisfy the monitoring indicators, otherwise licenses and accreditations oof universities can be suspended. In order to help universities with fulfilling of monitoring indicators connected with faculty members' activities the government offered university to use the Effective Contracts. The idea is to motivate faculty members to conduct activities which can help universities to fulfill monitoring indicators. In other words, the main object of the Effective Contract is to encourage the university's employees to focus their performance on the university purposes.

At the same time the implementation of the Effective Contract is a reason why faculty members' average wages increased in comparison with regional average wages. For example, Average faculty member wage to average wage (in the region) wage Ratio in Voenmeh increased from 82,69% in 2013 till 145,91% in 2016; Average faculty member wage to average wage (in the region) wage Ratio in Northern (Arctic) Federal University increased from 122,94% in 2013 till 163,64% in 2016. Such great results allows to assume that it is possible to meet one of target of Edict №597 of the President of the Russian Federation - Average wage of faculty members should be increased till 200% from the average regional wage till 2018.

We defined challenges faced by Universities after the implementation of the Effective Contract. First of all there are challenges which are the reasons of the relationship between the Effective Contract and Higher Education System's Performance Monitoring.

The main of them is the fact that teaching activity is not evaluated by the Effective Contract at all. That is why faculty members prefer to spend more time on more profitable scientific activity instead focus on increasing of the quality of teaching activities. We assume that it negatively influences on the level of teaching and this trend will be continued if the system will be the same.

Another issue is orientation on quantitative approach for evaluation instead of qualitative approach. It is much more profitable for faculty member to focus on several middle-level scientific projects instead of one high-level project.

A lot of faculty members are not agree with indictors which are used in the Effective Contract and they want to participate in the process of development of more correct indicators, but they have no opportunity to do it. We assume that this issue is also connected with the relationship between the Effective Contract and Higher Education System's Performance Monitoring because university administration develop this indicators in order to fulfill indicators of Higher Education System's Performance Monitoring. It means that university administration is not interesting in development of indicators which can't help them to achieve their aims. Also this relationship between the Effective Contract and Higher Education System's Performance Monitoring is the reason why the university administrations regularly change indicators of the Effective Contract. It creates turbulent environment for faculty members because they need to adopt to new requirements every 1-2 years.

Also we defined challenges which are not connected with relationship between the Effective Contract and Higher Education System's Performance Monitoring. The main of them if that The Effective Contract provides unequal opportunities for different groups of faculty members. In some universities there is a trend when faculty members with higher academic degree have much more opportunities to fulfill indicators of the Effective Contract. In some other universities there are faculties (or spheres) which are much better financed and as a result faculty members who work in these faculties (spheres) have much more opportunities to fulfill indicators in comparison with faculty members who work in other spheres.

Another issue is that there is not enough information support about the Effective Contracts in some universities. It is the reason why a lot of faculty members do not understand how to get benefits from the Effective Contract and as a result the level of their salaries is not higher than it was before the implementation of the Effective Contract.

One of the main issue for a great number of faculty members is that they are not ready for entrepreneurial style of job. A lot of faculty members worked for many years according to the rules of previous system and now it is too difficult for them to adopt to the new style of job. Others feel that they are not ready to work effectively in such turbulent environment. As a result both these categories can meet problems with building of their career and fulfilling of indicators of the Effective Contract.

6.1. Suggestions for future research

As with any study, this thesis has its limitations. Due to limited time we interviewed 10 representatives from two universities and there are faculties of these universities which are not included. We defined that challenges faced by faculty members after the implementation of the Effective Contract are not the same for two universities, moreover these challenges are not the same even for 2 faculties of one university. That is why it makes sense to interview much more faculty members from all of the faculties. It is better to interview as much faculty members from each faculty in order to get more correct data. Also it is possible to compare not only two different universities, but also different faculties from one university.

Another suggestion is to compare the same faculties of different universities, for example it is interesting to compare economic faculties of two (or more) universities. Also it can be interested to analyze the relationship between the Effective Contract and Higher Education System's Performance Monitoring.

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APPENDIX

Appendix 1. Interview guide for the master thesis:

1. What can motivate academic staff for high-quality teaching?
2. Are there any financial incentives for academic stuff in the modern educational system?
3. How do you think, which indicators can evaluate the quality of teaching activity?
4. How do you think, which indicators can evaluate the quality of scientific activity?
5. Does university administration use these indicators in order to evaluate the quality of scientific activity and teaching activity?
6. Are there any indicators in the Effective Contract which you don't like and why?
7. How do feel about (the fact that) the universities stimulate only scientific and
8. How do you feel about the fact that results of performance evaluation are public?
9. How can you evaluate the level of stress associated with your work after implementing of the Effective Contract?
10. Can you influence on changes of indicators which are used for performance evaluation?
11. Which categories of academic staff have more benefits from implementation of the Effective Contract and why?
12. Which categories of academic staff have more problems from implementation of the Effective Contract and why?
13. Do you prefer scientific activities to teaching activities after implementation of the Effective Contract?
14. What do you think about the implementation of the Effective Contract?
15. How was your time management approach changed after the implementation of Effective Contract?
16. It is the last question. Here you can tell information about effective contract that you do want other people to know.