

# The Increase in the Effectiveness of Controlling University Activities



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**Abstract:** This article is based on the characteristics of the control system of the universities in Russia and provides an analysis of existing procedures, forms, and the components of external and internal control. The subjects and objects of control are systematized and the object matrix of the control system of the activities of Russian universities has been developed. The authors offered recommendations on the compilation and use of university ranking, and on the implementation of procedures for the evaluation of university educational program. The implementation of activities proposed by the authors will contribute to the Performance improvement of controlling activities of both Russian and foreign universities.

**Index Terms:** competitiveness, educational program, efficiency, internal and external control, QS-Stars methodology, university ranking

## I. INTRODUCTION

Associated with knowledge sharing, the innovative nature of the modern market and tendency of transition to the information society put forward new requirements for the assessment and control of the activities of the world's leading and national universities [4, 11, 12, 16, 20]. These processes are relevant for Russia as well since it is the competitive system of higher education that forms the outlook and prepares personnel for the implementation of the strategic goals that the country is facing. In this article, the authors developed methodological tools for monitoring the effectiveness of educational programs, and student and employer surveys, on the assessment of the quality of education in universities [5, 15].

The current system of control over the activities of Russian universities includes external and internal control over the activities of educational organizations.

In accordance with the legislation of the Russian Federation, external control of the activities of the universities is an integral part of the management of the education system and includes the following procedures for external quality assurance [1]:

1. State regulation of educational activities:
  - a. Licensing of educational activities;
  - b. State accreditation of educational activities;
  - c. federal state quality control of education;
  - d. federal state supervision in education;
2. Monitoring in the education system;
3. Independent assessment of the quality of education;
4. Public accreditation;
5. Professional public accreditation.

In our point of view, internal control of the university includes:

1. internal control of the university as an economic entity;
2. university self-examination;
3. internal assessment of the quality of education with the use of elements of independent assessment.

The rest of this article explores these elements.

## II. METHODS AND MATERIALS

### A. GENERAL DESCRIPTION

In the process of research, the following methods were used, such as literature review, classification, comparison, grouping, use of averages, coefficient analysis, graphical and tabular presentation of data, induction, and deduction. The development of recommendations on the compilation and use of university rankings, as well as on the implementation of procedures for the evaluation of educational programs of the university was carried out on the basis of a study of current Russian legislation and previous research on this topic [6, 7, 9, 17, 19].

### B. ALGORITHM

The current system of control of Russian universities is presented in table 1.

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Table 1. The existing system of control of the Russian universities

Control objects		Control subjects				
		Internal control		External control		
		University		Professional community	Society	State
Individual projects (educational programs)				Professional accreditation of educational programs	Public accreditation of educational programs (certification)	State accreditation of educational programs. Federal State Quality Control of Education
Activities	Activity results	University self-examination		Internal control of university activities as the effectiveness of self-examination		Federal State Education Supervision
	Terms of activity implementation			Internal assessment of the quality of education	University Ranking	Independent external assessment of the quality of students Independent assessment of the quality of the conditions for the implementation of educational activities Monitoring of the education system

Characteristics of the system of controlling the activities of universities in the Russian Federation by key subjects of control.

For the purpose of this analysis, the objective matrix of control over the activities of Russian universities (Table 2) has been compiled in order to identify common (fortified) relationships.

Table 2. The subject-object matrix of the control system of university activities in Russia

Subjects of control	State (1.0.0)	Society (2.0.0)	Professional community (3.0.0)	University (4.0.0)	
Objects of control					
Educational programs (0.1.0)	State accreditation of educational programs (1.1.0) Federal state quality control of education (1.1a.0)	Public accreditation (certification) of educational programs (2.1.0)	Professional public accreditation of educational programs (3.1.0)		
Target	Federal			Internal control of the university as an ES (4.2.0)	University self-examination (4.1.0)
Quality of training students (0.3.0)		Independent external assessment of the quality of training students (2.3.0)			
Terms of activity implementation (0.4.0)	Monitoring of education system (1.3.0)	Independent quality assessment of the conditions for the implementation of educational activities (2.4.0)	Ranking of universities (3.3.0)	Internal assessment of the quality of education (4.3.0)	

The state control of university activities based on the fact that, historically, Russia has been and remains committed to the state-regulated model, the main subjects of control in modern Russia are the state authorities: the Federal Service for Supervision in the Field of Education and Science (Rosobrnadzor) [2], the Ministry of Education and Science of Russian Federation (for monitoring the education system). The control of these government bodies covers all aspects of the activities of universities: separate educational programs; results and conditions for the activities of universities. In accordance with the legislation of the Russian Federation, specific forms of state control over the activities of universities are:

- state accreditation of educational activities;
- federal state quality control of education;
- federal state supervision in the education field;
- monitoring in the education system.

C. FLOW CHART

The state accreditation of educational programs is carried out by experts and expert organizations that are accredited by the Federal Service for Supervision in Education and Science. It aims to confirm the compliance of educational activities in the main educational programs declared by the university, the requirements of federal state educational standards, and/or the requirements of their own educational standards of leading universities in Russia. The federal-state quality control of education is carried out by Rosobrnadzor employees with the aim of assessing the compliance of the content and quality of training students on the state educational program that are accredited by the federal state educational



standards through the organization and conduct of audits of the education quality. The federal-state supervision in the education field is carried out by the Rosobnadzor employees to detect and prevent universities from violating the law requirements and regulatory act of the Russian Federation in the process of implementation of their educational activities. Taking into account the specifics of verification of educational activities established by the federal law, this control is carried out according to the rules common to check all economic subjects [1]. Additionally, every year, on the basis of federal statistical monitoring of the results and conditions of educational activities, educational organizations (including universities) monitor the education system.

Public control for Russia is a new developing type of control over the activities of universities. It is conducted by various Russian and international public organizations and, unlike the state control, does not cover the target (statutory) results of universities. In accordance with the legislation of the Russian Federation, specific forms of public control over the activities of universities are:

- public accreditation (certification) of educational programs;
  - independent assessment of the quality of education.
- Public accreditation (certification) of educational programs for the universities is voluntary. It can be conducted by Russian, foreign and international public organizations. The subject of control in public accreditation of educational programs is the recognition (determination of compliance) of the level of activity of an educational organization that meets the criteria and requirements of Russian, foreign and international organizations. Independent assessment of the quality of education includes:

- independent assessment of the quality of training students;
  - independent assessment of the quality of conditions for the implementation of educational activities.
- So, the field of education in Russia is the only industry where independent assessment can be carried out in two forms. One of them is the assessment of the quality of conditions for the implementation of educational activities coincides with those procedures that are used in relation to other institutions of the social sphere (culture, healthcare, and social services). In this case, the service component is analyzed directly. The second type of independent assessment that is aimed at studying the quality of training of students in other industries is not applicable. In fact, the professional component of the service, which is the level of mastering the educational program by its parts by students, is being monitored here [3].

Independent assessment of the quality of student training is conducted by a public council that is formed by the education management body in order to prepare information about the level of students' mastery of the educational program, the quality of student training, and the implementation of educational programs by the university.

Independent assessment of the quality of the conditions for the implementation of educational activities is carried out by the public council in order to provide participants of relations in the field of education information about the level of work organization on the implementation of educational programs based on publicly available information. Professional control is also a relatively new type of control over the activities of universities in Russia. It is conducted by the representatives of business, employers and professional associations. In accordance with the legislation of the Russian Federation, specific forms of professional control over the activities of universities are:

- professional public accreditation of educational programs;
  - university rankings.
- Professional public accreditation of educational programs is carried out by the employers, their associations, as well as organizations authorized by them in order to recognize the quality and level of graduate student training who have mastered educational programs in a particular educational organization and met the requirements of professional standards, and the requirements of the labor market for professionals, workers and employees of the corresponding profile. Based on the results of professional public accreditation, ratings of educational programs can be formed with an indication of the organizations implementing them.

The results of an independent assessment of the quality of education can be presented in various forms, such as the form of university ratings that is based on publicly available information, as well as the information received from universities, compiled, and published by the specialized rating agencies. In addition, the university rankings are based on special indicators. Internal control over the activities of universities is carried out by the educational organization itself.

In the process of self-examination, the assessment is conducted in various areas such as educational activities, the organization's management system, the content and quality of students training, organization of the educational process, the demand for graduates, the quality of personnel, educational and methodological, library and information support, material and technical base, and the functioning of the internal system for assessing the quality of education, as well as the analysis of the university's performance indicators. The main elements of the internal control of the activities of the university as an economic entity are the control environment, risk assessment, internal control procedures, information and communication, and internal control assessment.

The main objectives of the internal assessment of the quality of education are:

- the formation of the most objective assessment of the quality of students training according to the results of the development of educational programs;
- Improvement of the structure and update of the educational

programs content implemented by the university;  
-Improvement of the resource support of the educational process at the university;  
-Increase of the competence and skill level of university teaching staff.

This type of internal control (along with the introduction of internal evaluation procedures for the effectiveness of the implementation and mastering of educational programs) is a priority in their strategic development for Russian universities. So, since April 2018, monitoring is provided for the implementation of the mechanisms of internal independent assessment of the education quality in the activities of universities. The following mechanisms will be independently assessed:

- 1) quality of students training;
- 2) quality of teachers work;
- 3) quality of resource support of the educational process.

It is recommended to carry out the internal independent assessment of the quality of students training within the following framework:

- intermediate certification of students in the disciplines (modules);
- intermediate certification of students based on the internship;
- intermediate certification of students based on the coursework and projects, as well as participation in project activities;
- conducting input control of the preparedness level of students at the beginning of the discipline (module) study;
- measures to control students learning outcomes in previously studied disciplines (modules);
- analysis of the portfolio of educational and extracurricular achievements of students;
- holding competitive events in individual disciplines (modules);
- state final certification of students.

It is recommended to carry out the internal independent assessment of the quality of teachers works in the framework of:

- holding competitions of pedagogical skills;
- systemic monitoring of the teachers' qualifications;
- analysis of the portfolio of teachers' professional achievements;
- procedures for assessing the quality of the teachers and students work.

It is recommended to implement the internal independent assessment of the quality of material and technical, educational and methodical, and library and information support within the framework of the university's annual self-examination.

### **Characteristics of the monitoring system of the universities' activities in the Russian Federation on key objects of control.**

The main control object of the universities activities in Russia, as well as in the world, are the implemented educational programs. This control is conducted in the form of accreditation of educational programs. Without any exception, the accreditation of educational programs of universities is conducted by all subjects of control. All university stake holders are interested in the results.

The specificity and, at the same time, the main problem of the process of accreditation of educational programs of Russian universities is the following: Unlike for other countries, where the accreditation of educational programs is carried out either by the professional business community or by the government organizations, in Russia, there has been a tendency of "parallel" accreditation of educational programs of universities by the state, society, and business. As shown in the analysis of domestic regulatory requirements, all types of accreditation of educational programs (state, public, professional) are based on similar methodological principles, and are often conducted according to the same programs. In practice, this causes the eternal Russian problem of duplication of types of control, when a university is checked on the same issues several times by different authorities. The solution to this

problem is the convergence of control types, mutual use, and recognition of the results of accreditation of educational programs by the inspectors of different levels.

The next most important object of control of the universities activities in Russia is the quality of student training. The issue of assessing the quality of the main product is a priority in monitoring the activities of any economic entities. Therefore

it is not surprising that in the field of education, the Russian legislation allocates this object of control separately. It is checked by all subjects of control and interests of almost all university stakeholders. At the same time,

in the public control and internal control of universities for this object, special types of control are established, such as an independent external and internal assessment of the quality of

student training. During the state and professional control, this object is assessed by special indicators of monitoring the education system and the rating of

universities. But the precise adequacy and correctness of monitoring indicators and university rankings in relation to the "quality of the main product" of universities require additional adjustment, the proposals for which will be presented in the following chapters.

The next object of control of the activities of universities in Russia is the conditions for the implementation of educational activities, which is very specific. In the direct statement as an "independent assessment of the quality of conditions for the implementation of educational activities,"

this object is controlled only during public control. In other types of control (state, professional and internal), this object is assessed indirectly in the form of special indicators for monitoring the educational system, rating of universities, and self-examination of universities.

Another object of control over the activities of universities in Russia is the target (statutory) performance results. Formally, it is subject to control only under state and internal control of the

university's activities. At the same time, these types of control are carried out according to the rules common for checking all economic subjects.

### III. RESULTS AND DISCUSSION

**Recommendations on the compilation and use of university rankings that take into account their national specifics.** The problem of most ratings is the combination of indicators in one composite index, therefore, further, it will be quite difficult to interpret it [8, 18]. The inclusion of all variables that have an absolute value in the composite-relative indicator is not appropriate. It is proposed to revise the application of the multiplicative approach and the method of aggregation of indicators or to abandon the composite index. This will solve the problem of interpreting different groups of indicators.

Organizing all the universities in a hierarchical order and assigning specific places to them does not allow the users of rating data to understand how "good" this place is. Equally successful in the implementation of the main tasks, the universities may be far from each other. The additional information is required to understand the benefits of a university from being in a certain place. The solution to this problem can be the union of universities into groups that have values of indicators of a given range.

The problem of the quality and reliability of the information that is used for a university evaluation can be solved by the participation of universities in the process of data collection and evidence base.

The next problem of the existing university rankings is an incomplete account in the applied indicators of information requests of the main stakeholders like applicants and students.

Based on the analysis of world tendencies and best practices that are based on the results of the study, a cluster approach is proposed as a promising way for the development and improvement of the university ranking system, i.e. ranking of universities in groups. This approach is already being implemented by the international QS rating (QS-Stars technique). Based on the ranking methods of universities in the groups used by the QS-Stars system, the universities are not assigned a specific place, but rather are placed in rating groups. This allows interested users to better determine the position of the university in the educational arena and understand which of the areas it is perfect and in which it is not good enough.

**Proposals to improve the assessment procedures of the universities educational programs.**

The definition of the concept of the effectiveness of the educational program. As an economic category, the effectiveness of the educational program reflects the significant characteristics of the implementation of the educational program and is expressed by many different parameters like quantitative and qualitative. To form the concept of "educational effectiveness", it is necessary to proceed from the definition of its two inseparable components: the "educational program" itself, which serves as the main object of control, and the concept of "efficiency".

An educational program is a set of basic characteristics of education (scope, content, planned outcomes), organizational and pedagogical conditions provided by law, forms of certification, which are presented in the form of a curriculum, a calendar educational schedule, work programs of educational subjects, courses, disciplines (modules), and other components, as well as evaluation and teaching materials.

Efficiency (lat. *Efficientia*) represents the ratio between the result achieved and the resources used [13, 14]. So, it is proposed to consider the effectiveness of the educational program as the dual concept [10]:

- the mechanism for achieving the goals of the educational program (fulfillment of its main characteristics: scope, content, planned outcomes, staffing and methodological support in the form of a curriculum, a calendar curriculum, work programs of subjects, courses, disciplines (modules), and other components, as well as evaluation and teaching materials);

- efficiency of use of invested resources (economic effect from the implementation of the EP)

It is proposed that monitoring of the effectiveness and quality of the implementation of existing university educational programs is carried out using five groups of mandatory indicators:

- 1) competitiveness of the educational program;
- 2) economic efficiency of the implementation of the educational program;
- 3) status of the educational program;
- 4) quality of the educational program;
- 5) employment of graduate students.

From the applicants' point of view, the competitiveness of an educational program is the attractiveness of and demand for it. There are two indicators that reflect this characteristic that is "the passing score for the educational program" and "competition for the educational program".

When assessing such an important indicator as to the "competition for the educational program", it is necessary to take into account the achievements of both high and average results. For this, an element of differentiation must be entered in terms of achieving the specified criteria, do not limit to only one threshold value for bachelors and masters, and increase its share.

The economic efficiency of the implementation of the educational program is its financial viability which is characterized by such indicators as the ratio "the number of contracts for paid education/ the number of budget places" and "the survival rate of graduates in the educational program". "The survival rate of graduates in the educational program" is an indicator characterizing the percentage of students from the number enrolled in the educational program who completed the education in the chosen program in the regulatory period.

The status of the educational program is its implementation in a network form or according to the "two diplomas" program. The quality of the implementation of the educational program is characterized by the three indicators,

such as student satisfaction with the quality of the educational program, international, professional public or public accreditation, and resource support of the educational program.

From the point of students' satisfaction, it is advisable to introduce two characteristics "rate the overall quality of education according to the educational program" and "would you choose this program now?" and increase the share of this assessment using differentiated scoring of these results.

It is also recommended to assess the quality of the educational program implementation using the indicator "resource support of the educational program", including availability of a complete and updated methodological support for the educational program "in the form of a curriculum, a calendar of educational schedules, work programs of training subjects, courses, disciplines (modules), other components, as well as evaluation and teaching materials" and the staff.

The employment of graduate students is the most important indicator characterizing the demand for graduates of the educational program.

As part of the additional indicators of the monitoring the effectiveness and quality of the implementation of existing educational programs it is proposed to consider:

- the availability of the co-director of the educational partner-employer- program;
- the fact of the implementation of certain disciplines in English / educational program is implemented in English;
- visiting foreign professors- specialists participation in the educational program implementation;
- practitioners participation in the educational program implementation;
- the proportion of foreign students in the educational program;
- interdisciplinary program;
- professional or other certification of students;
- rating of the educational program based on students grades;
- availability of an independent assessment of the educational program quality.

**The assessment indicators for the competitiveness of planned (new) educational programs.** To assess the competitiveness of the new educational programs, the following system of indicators is proposed:

- Duplication of core disciplines within one area of training/duplication of competencies of the program focused within one area of training;
- demand for the educational program;
- potential economic efficiency of the educational program;
- status of the educational program;
- availability of the co-director of the educational partner-employer- program;
- possibility of implementing the educational program (individual disciplines) in English;
- resource support of the educational program;
- possibility of obtaining accreditation (international, professional public, public);
- possibility of certification of students.

When planning for the opening of new educational programs, an important point is the assessment of two indicators "duplication of competencies in the orientation of the program within one area of training" within the

framework of the educational program already implemented at the university.

When analyzing the competitiveness of a new educational program and deciding whether to open it, it is necessary to evaluate the "demand for the educational program" from the point of view of the already existing supply in the educational services market (the presence of analogs or its uniqueness) and the demand for such specialists in the labor market (number of vacancies and average wages).

When planning to open a new educational program, an important characteristic is the assessment of the "potential economic efficiency of the educational program implementation" (the cost of training for the educational program, the planned number of contracts for paid education, the availability and size of discounts).

The most important direction of the development of educational programs at the university is the opening of new educational programs in the network form (with the participation of partner organizations), "two diplomas" programs (status of the educational program), as well as educational programs (individual disciplines), implemented entirely in English.

For the new educational program, it is important to have a co-manager of the educational program, a partner-employer, and his recognition in the professional community.

When deciding whether to open new educational programs, it is necessary to conduct an analysis in terms of the "resource support of the educational program", including the availability of methodological support of the educational program, such as a curriculum design project, textbooks and teaching aids on profile disciplines, as well as assessment and teaching materials and the appropriate teaching staff.

When opening new educational programs, it is necessary to take into account "the possibility of obtaining accreditation (international, professional public, public)" and "the possibility of certification of students".

Implementation of the procedure "self-examination of the educational program." Self-examination can be carried out as within the framework of external quality assessment procedures (accreditation of any kind, international expertise), well as the initiative of the educational program manager for the purposes of planned quality control procedures. The subject of self-examination of an educational program may be the readiness of an educational program for external assessment procedures, the quality of various documents within an educational program (for example, curricula programs, work curricula and individual curricula, practice programs, assessment funds, and etc.) and completeness of the necessary documentation in the framework of the educational program, etc.

Implementation of the procedures for informal assessment of students' satisfaction with the quality of the implemented educational program.

Evaluation of the effectiveness and quality of the implementation of educational programs should be included in the list of thematic sociological surveys conducted at the university, for example, adding to such studies as: “Monitoring students' satisfaction with the quality of the educational program being implemented (for undergraduate)” and “Monitoring students' satisfaction with the quality of the educational program being implemented (for master).”

The specificity of educational activities is taken into account by identifying as independent objects of the verification of “educational programs” and “the quality of training of students.” Therefore, state control in the field of education and internal control of the university’s activities are practically reduced to financial control and control over the effectiveness of the budgetary and extrabudgetary funds use by an economic entity. This unnecessarily narrows the object database of controls. At the same time, the expansion of the object of state and internal control of the university’s activities to all target (statutory) performance results will inevitably lead to duplication with the other types of control.

A significant circle of researchers involved in university rankings notes the existence of significant methodological problems in measuring and evaluating indicators that are used in recognized ratings

The need to develop procedures and internal regulations for the evaluation of educational programs of the university is due to global and national trends to improve the management and control system in the field of education.

#### IV. CONCLUSION

In this chapter, presented a characteristic of the controlling system of the activities of universities in Russia, including external and internal control of educational organizations. There has been carried out the systematization of procedures for external quality assurance of the educational system. For the purpose of this analysis, the objective matrix of control over the activities of Russian universities has been compiled in order to identify common interconnections. The main elements of the internal control of the university as an economic entity have been summarized. Based on the study, the authors proposed the following recommendations for the implementation of procedures for the evaluation of university educational programs:

- The definition of the concept “effectiveness of the educational program” is formulated;
- The indicators for monitoring the effectiveness and quality of the implementation of existing educational programs of the university are proposed;
- The indicators for assessing the competitiveness of planned (new) educational programs to open are proposed;
- The necessity of the “self-examination” procedure introduction of the educational program was justified;
- The necessity of introducing a procedure for informal assessment of students’ satisfaction with the quality of the educational program being implemented is justified.

#### REFERENCES

1. Education in the Russian Federation. Federal Law(2012). No 273-ФЗ
2. About structure of federal executive authorities. Decree of the Russian President (2018) No 215
3. Zaitseva, G. (2015) Independent assessment of the quality of education: understanding the details. Educational institutions: accounting and taxation. № 7, 2015.
4. Nikiforova, E. Paradigm of public reporting of economic entities (2014) World Applied Sciences Journal. 29 (5). pp. 667-670
5. Burtseva, K., Vokina, E., Shnaider, O. (2015) Interconnection between internal control and the assessment of risk of financial stability loss by educational institutions. Current problems of economy. 172 (10). pp. 410-418.
6. Zorina, V., Melnik, M., Tsyarkin, A. (2018) Peculiarities of the coherence time of a spectral supercontinuum generated in microstructured fibers with two zeros in the group-velocity dispersion. Journal of Optical Technology. 85 (9). pp. 535-540.
7. Ragulina J., Suglobov A., Melnik M. Transformation of the role of a man in the system of entrepreneurship in the process of digitalization of the Russian economy. (2018) Quality - Access to Success. 19. (S2). pp. 171-175.
8. Burtseva, K. Y. (2015). Ranking of universities by group in international ratings. Audit and financial analysis, 2, 415-420.
9. Quality management system. Fundamentals and vocabulary. (2015). GOST R ISO 9000-2015. Moscow, Russia: Ministry of Industry and Trade of the Russian Federation.
10. Research company RADAR. (2011). Efficiency evaluation experience of training programs. Moscow, Russia: RADAR report
11. Bodiako, A., Bulyga, R. P., Bondarenko, A. A., Rogulenko, T. M., & Ponomareva, S. V. (2018). Identification of an intracorporate accounting system in modern conditions. International Journal of Civil Engineering and Technology, 9(7), 1774-1784.
12. Nikiforova, E. V. (2014). Paradigm of public reporting of economic entities. World Applied Sciences Journal, 29 (5), 667-670.
13. T.P. Karpova, A.M. Petrov, O.V. Antonova. Directions of Accounting Development in the Conditions of Digitalization / Jour of Adv Research in Dynamical & Control Systems, Vol. 10, 07-Special Issue, 2018, pp.(117-125)
14. Lymar, M.P., Kevorkova, Z.A., Petrov, A.M The convergence of national and international accounting standards: Chinese experience. / International Journal of Civil Engineering and Technology. Volume 9, Issue 13, December 2018, Pages 82-94
15. Kevorkova, Z.A., Petrov, A.M., Savina N.V. Towards liabilities of corporate systems. International Journal of Civil Engineering and Technology. Volume 10, Issue 2, February 2019, Pages 1582-1593
16. Akhmadeev, R.G., Bykanova, O.A., Philippova, N.V., Vashchekina, I.V., Turishcheva, T.B. (2018) Macroeconomic indicators and their impact on the foreign debt burden: The case of BRICS countries. International Journal of Economics and Business Administration, 6 (2), pp. 68-82.
17. Akhmadeev, R.G., Bykanova, O.A., Morozova T.V., Safonova E.G., Turishcheva, T.B., Lehoux, L. (2018) Evaluation of Financial and Analytical Activities of the Biggest Car Makers of the Russian Federation. JurnalPengurusan, 54, pp. 18 -36
18. Philippova, N.V., Akhmadeev, R.G., Bykanova, O.A., Chaykovskaya, L.A. (2018) Social equity: A route to progressive taxation of individuals. European Research Studies Journal, 21 (4), pp. 317-330.
19. Akhmadeev, R.G., Kosov, M.E., Bykanova, O.A., Korotkova, E.M., Mamrukova, O.I. (2016) Assessment of the tax base of the consolidated group of taxpayers in Russia using the method of polynomial interpolation. Indian Journal of Science and Technology, 9 (12), 89533
20. Bogoviz, A.V., Mishchenko, V.V., Zakharov, M.Y., Kurashova, A.A., Suglobov, A.E. Strategy of provision of wireless future's security Studies in Computational Intelligence 826, c. 941-947

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