The Impact of marketisation processes on Russian public universities since the 1990s

Vladislav Popov

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University of York

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Abstract

The aim of this thesis is to investigate the impact of marketisation processes on Russian public universities since the 1990s. The key issues informing this research were: identifying the main forms of marketisation; understanding the response of Russian Universities on marketisation processes; and how such processes affected the senior academics and managers within universities.

The thesis offers a content analysis of the roadmaps of 21 RAEP 5-100 universities, their websites and 11 semi-structured interviews with senior managers and academics. Such triangulation has allowed an exploration of the interaction between public universities and government, the specifics of state higher education (HE) funding processes in Russia, the variety of ways universities position themselves for the general public and stakeholders and the impact on the daily work of the university members of staff.

The findings of the research demonstrate that marketisation has had a significant impact on public universities. The hybrid nature of the Russian welfare regime (including HE) retains features of the Soviet past and the unique top-down marketisation processes. Public universities, instead of complying with the market demands, have adapted to government demands. This may be due to the strong dependence on the federal funding as well as the historical legacy of the Soviet Union period, when HEIs were deeply integrated into the planned economy and closely co-operated with the relevant state agencies.

This research adds to the current academic debate on how public universities have adapted to the market contexts and explores the narrative of Russian universities not always being successful within the HE market. The evidence suggests that they are not interested in the market activities and consequently do not dedicate a lot of attention to such issues. Universities participate in the HE market to attract more funding from the government and to follow the obligations of the state.

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Author's declaration

I declare that this thesis is a presentation of original work, and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

1. Chapter. Introduction

The impact of marketisation processes on Russian public universities since the 1990s is the focus of this research. Marketisation processes will be considered and interrogated with reference to broad theoretical frames, including new public management (NPM) and neoliberalism. Many public services around the globe have been privatised, including some areas of medicine, public transport, and secondary education. Where public services have remained publicly owned, they have been forced to emulate the private sector. The study focuses on the impact of marketisation on higher education (HE) in general and the specifics of such processes in Russian public universities. The radical transformations of Russian higher education since the 1990s will be investigated along with their possible causes and impact.

Many countries around the globe have sought to marketise their public services and privatised their state owned enterprises over the past three decades (Blöchliger, 2018; Lynch, 2006, p. 2), but nowhere has the speed and depth of change been so dramatic as in Russia. This has also affected "public goods" including education and, in particular, higher education. Marketisation describes a process whereby private, often for-profit companies, are brought into hitherto public services and/or, public services are made to emulate private markets (Barnett, 2005, 2010). Five main types of marketisation can be established from the literature (Clarke et al., 1997; Le Grand et al., 1993):

- 1. The selling off of state services (wholesale or in part) or assets to for-profit providers;
- Outsourcing through allowing new providers to win contracts to run public services. This may include voluntary or private (for profit) providers and other public sector providers.
- Forcing public sector services to adopt private sector techniques of competition and/or forcing them to compete against other service providers in the public, voluntary or private sectors;

- Forcing public services to adopt standardised ways of working which facilitates standard performance measures (including "efficiency and success measures"), cost-based efficiency measures and the adoption of targets;
- 5. Facilitating the collapse and replacement of failing service providers with more successful ones.

In all instances, there has emerged a clearer demarcation between the funding of services and providers of services, where the funder and the provider may come from a mix of public (state), private (consumer, company) and third sector.

According to critics, these trends have had an impact on state control and accountability in the public sector. Within the higher education (HE) sector, they argue, the adoption of market-based principles has encouraged a reduction in the number of rules and restrictions, as well as weaker state governance and more university autonomy (Ferlie & Andresani, 2009). The high role of the state in the management of public services leads to excessive bureaucracy, inefficiency and reduces access to governance of higher education by all stakeholders (Zajda, 2006, p. 7). However, there is also evidence for more complex development. The growing importance of liberalisation of higher education often does not lead to a decrease in state control with governments establishing new forms of control and new rules instead of old ones (Brennan et al., 2004, p. 24; Dill, 2003). There is also evidence, supported in this thesis, of new standardised procedures for exerting control over national higher education in Russia. Evidence of the impact on service delivery have been mixed and thin, gaps that will be tackled in this work.

1.1. The Marketisation of Higher Education in Context

Since the late 1980s, universities in a number of developed economies have been confronted with increased external requirements of governments, as higher education has become a more socially and economically significant. A massification of higher education has occurred "where, each year, more and more people begin to study at universities and the demands of applicants and their parents are growing" (Banya, 2010, pp. 61-71). The presence of a bachelor's or master's degree is becoming more essential within the labour market, and the social significance of

universities is growing (Zajda, 2015). From an economic point of view, higher education has become a fully-fledged business and a source of income for many developed countries (Altbach, 2013; Temple, 2012). Universities have become part of the new international knowledge economy; therefore, government, international organisations and private businesses are influencing universities (Jongbloed et al., 2012; Waite et al., 2015). Governments are trying to use marketing mechanisms for greater accountability and efficiency (Blöchliger, 2018; Gryaznova, 2018). One of the aims of this thesis was to examine the impact of such mechanisms on Russian HEIs (see Section 6). As will be shown in Chapter 2 of this thesis, various states have adapted to market requirements and implemented these principles in the management of public universities. Market relations today affect student numbers, curriculum content, and resource allocation between research and teaching (Ahmed, 2016; Berman et al., 2016; Levidow, 2005). Economic pressure and globalisation have contributed to the marketisation and reduction of public spending on higher education (Berman et al., 2016, p. 10). Universities are beginning to act as sources of additional income for many national economies (British Council, 2012; Shattock, 2009).

Such reforms were pioneered in a number of developed welfare states, not least the UK and the US (Brown et al., 2013; Foskett, 2010; Zajda et al., 2016b). But they have also been extended to other state forms, including the Russian Federation which is the subject of this thesis. There, a similar line of reforms has been rolled out.

Russia in the 1990s experienced a dramatic transformation. The government carried out reforms in all sectors of the economy and public life, on the one hand trying to preserve the legacy of the USSR and on the other trying to introduce reforms that would pave the way for a different politics and economy. The collapse of the Soviet Union in 1991 created significant changes in many state-run services, which included higher education (Gaidar, 2010; Platonova et al., 2018, p. 350). After the end of communism in Russia, the Russian Federation announced a new political regime, which had a great influence on higher education in 1991 and in the following decades (Morgan et al., 2012, p. 3).

With the collapse of the Soviet Union came the development of a new independent Russian society, characterised by a new ideology and a revolutionary economic system (Azimbayeva, 2017, p. 7). The new regime marked the end of centralised planning, state control and the beginning of independence from government funding. Such changes had particular implications for HEIs. In this case, new legislation was introduced (Law of the Russian Soviet Federative Socialist Republic (RSFSR) of December 12, 1990), which allowed private ownership of institutions that originally belonged to those specified during the communist regime. Privatisation had a number of changes in relation to higher education in Russia (see Chapter 3). It established new, private higher education institutions (HEIs), which began to actively use market methods in their activities (Froumin et al., 2014, p. 223).

These changes in Russia meant that the marketisation processes that had unfolded since the 1980s in developed countries were adopted and expanded far more rapidly. In the Russian case, after 1990, the government appeared to be more heavily influenced by the "marketisation of public services" experiment taking place elsewhere than the principles of Russian public or private enterprises (Gounko et al., 2007; Kaplan, 2007). For 70 years, private business had been banned in the USSR. The Soviet government developed a planned economy and enterprises did not have experience in market conditions. Given the strong Soviet tradition of universal free higher education funded by the state, it is important to understand how and why market mechanisms appeared in Russia in the 1990s. The details are discussed in Chapter 3, but from the outset it is useful to stress that marketisation processes have become deeply embedded in the public sector in Russian as part of a wider social transformation. Economic liberalisation, internationalisation and globalisation have all had an impact over the past 30 years, and comprehensive changes were promoted through state reforms that are broadly captured in the ideas of New Public Management (NPM) which have driven the "pursuit of economy, efficiency and effectiveness" (Hood, 2000). I turn to these ideas in the following Section 1.2.

1.2. Marketisation as a Part of the New Public Management

Although the focus of New Public Management (NPM) has primarily been on developed economies, the processes identified by it hold useful and important lessons for this thesis. In particular, the NPM literature identifies multiple processes as being important to political and economic change and it makes clear that marketisation processes themselves are part of a bigger strategy to change the way that public services are run, funded, managed and delivered (Clarke et al., 1997).

New public management describes a departure from the expansionary period of the welfare states in developed economies, and the period of the mixed economy towards the preferencing of market-focused approaches. To achieve this, governments borrowed management methods from the private sector and placed quality and efficiency at the heart of public services (Blöchliger, 2018; Schulze-Cleven, 2020).

NPM has 3 key characteristics, mirroring some of the broader marketisation processes identified above. Firstly, the government creates and relies on public service markets, rather than traditional planning. Secondly, there is greater accountability, a measurement of efficiency, and an audit of public services. Thirdly, more authority is gained by field managers, who must act as entrepreneurs, and not as public sector administrators (Ferlie, 1996; Ferlie, Musselin, et al., 2009). As a result, the goal of reform is to reduce the public sector and increase its effectiveness. Business concepts and management logic reinforce the goals of productivity and efficiency, while equal access to public services, compliance with law, and democracy go by the wayside. The government is creating the rules of the game and the strategic framework, moving to "steering, not rowing" (Duyvendak et al., 2006; Paradeise, Reale, & Goastellec, 2009). Moreover, NPM reforms are often carried out "top-down" (Tolofari, 2005) and are imposed by the central administration on ministries and departments.

Many administrative reforms in Western countries have been influenced by NPM ideas. In the context of this study, NPM in the public sphere can be described using several related concepts: commercialisation, privatisation, liberalisation and marketisation. Proponents of this approach emphasise that NPM has facilitated

positive changes, among them increased managerial flexibility, greater autonomy in decision-making and quality control (Ferlie, 1996; Hood, 1995). Through such reforms, higher education institutions have been empowered and increased their autonomy. On the other hand, this approach has been criticised for excessive interference in universities, reduced academic freedom and reduced independence (Barker, 2009; Fusarelli et al., 2004). In relation to higher education, NPM has a significant impact on the operation of universities, both in terms of setting goals (educational market functioning, competition, commercialisation) and in terms of impact on staff. NPM principles help to intensify and standardise the work of academics, reducing opportunities for initiative (Barker, 2009, p. 177).

The specifics of using NPM in higher education include four main factors. The weakening of public funding is forcing universities to focus on finding new sources of income to offset the costs of teaching and research. Universities are trying to control measurable results and implement metrics, rather than supporting academic freedom and independent research. To achieve the first two goals, HEI used new technologies (ICT), a quantitative analysis and monitoring of the activities of academics, which leads to an invasion of the personal lives of professors. Another cause for concern is the comprehensive competition for students, financial and time resources both between universities and between scholars within some higher educational institutions (Clarke et al., 1997).

New Public Management and the broader conceptual and theoretical framework outlined above will be used to shed light onto the changes in the relationship between the state and the private sector, as well as structural transformations within the state and public institutions within Higher Education in Russia. It is these concepts and theoretical tools which are most useful for the purposes of the research, as they correlate well with the ideas of overcoming the Soviet state bureaucracy and building a new public management on the foundations of private sector principles, including the field of public higher education in Russia.

1.3. The Impact of Marketisation Processes on Russian HEIs

Prior to the collapse of the Soviet Union, all universities were state-owned and controlled. They received all their funding directly from central government;

Soviet authorities determined the number of students, study programmes, and was also the main employer (Froumin & Kouzminov, 2018, p. 46). From the 1990s the government began the process of marketisation in higher education with the introduction of tuition fees and privately owned universities (Boutillon, 2018, p. 28). This was followed by the adoption of NPM reforms (see Chapter 2 below) which transformed university governance structures and decentralised decision making within HE institutions (Zajda et al., 2016c, p. 183) (see also Chapter 2 below) as well as creating financial independence and paving the way for competition among service providers. From 2002, the Russian Government approved the national strategy for higher education promotion abroad and since then has been actively working on development incentives and measures to support Russian universities to better market themselves in a globally competitive market place of higher education (Mushketova et al., 2018, p. 46).

With some time lag in Russia, attempts have been made to radically reform public administration in order to restructure the legacy of the Soviet planned economy (Jakobson, 2001; Sigman, 2008). The Russian government used market reform methods to solve various economic, political and social problems in public policy. NPM involves changing attitudes toward students, renaming them "consumers" or "customers" (Brooks et al., 2016; Joseph et al., 2012; Tomlinson, 2017), for which public universities compete. Also, new principles of university work affect managers and academics, increasing accountability and workload, reducing academic freedom and independence from the authorities (Hansen, 2010; Jongbloed, 2003; Natale et al., 2012). Chapter 2 will take a closer look at market mechanisms (such as competition and performance management) that have affected public universities. Chapter 3 will examine the positive and negative features of the use of marketisation and NPM-style reforms in Russian higher education.

What does emerge from the literature review is that the market and NPM approach in higher education did not develop organically or out of democratic processes. Rather, marketisation in Russia was driven both by the collapse of state communism and by great international pressure (Bain, 2015). These processes have influenced how the government interacts with universities, as universities now

function as public institutions under market conditions. Another key feature that characterises the marketisation of public universities in Russia is the dual position of the Russian government. On the one hand, the government carried out market reforms, on the other hand, authorities are trying to maintain control over public universities and use a combination of the state-centrist approach and market mechanisms to administer the work of the higher education system as a whole.

As part of the reform agenda that accompanied the rise of the new Russia, the Russian government began a comprehensive reform of state services that had parallels with the NPM methods outlined above (Avis, 1990). Russia in the 1990s experienced the most dramatic changes.

While part of the old system still exists, the new system has become complex and is fraught with such needs that demand marketisation in order to follow government directives, provide quality education based on government rules, and to maintain government standards and policies set in place (Fursova et al., 2014, p. 25). Today, Russian HEIs must apply market methods to survive. Universities compete for students, for professors, for positions in rankings, and additional funding from the government. Universities are making their own money from extrabudgetary funds, and in this system, there are universities that the government support. These universities appear to be more successful, and other universities have to fight for admissions, funding, and other sources necessary for business practices. To do so, many have enlisted in the same practices as the for-profit universities, namely marketisation.

There are a large number of studies devoted to transformations in modern Russia, including social changes (Walker et al., 2010), civil society transformation (Morgan, 2014) and globalisation influence (Banya, 2010). And only a few authors have drawn attention to the process of marketisation at Russian universities (Majone, 1997; Maximova-Mentzoni, 2009; Pratt, 2016). Marketisation is seen not as main research topic but rather as part of a larger transformation of the landscape of higher education in Russia (Smolentseva et al., 2018) or as one of the phenomena affecting higher education in general, along with the massification and emergence of private universities (Pachuashvili, 2008; Repneva, 2011). Many current studies focus on describing reforms, the impact of internationalisation and

globalisation on Russian universities (Boutillon, 2018; Chigisheva et al., 2017; Stukalova et al., 2015). Marketisation is outlined along with other processes that affect higher education (massification, ICT, private universities, etc.) (Pachuashvili, 2008; Repneva, 2011). Maximova-Mentzoni (2009) studied marketisation on the example of one regional Russian university, and Marginson (2017) touched on the market mechanisms topic in an article about the public good created by Russian universities. A more detailed analysis of publications on market transformations in Russia will be carried out in Chapter 3 (Russian Case), which touches on the specifics of the legacy of Soviet higher education, the market reforms of the 1990s and 2000s, the emergence of private universities, the introduction of tuition fees in public universities and the operation of Russian public universities in a market environment.

1.4. The Gaps in Current Knowledge

There remain significant gaps in the research on the topic of marketisation of the public sector, which this study will attempt to fill. Firstly, most studies are relevant to Anglo-Saxon universities and universities in continental Europe. Secondly, most articles on the transformation of Russian society have only partially addressed the marketisation of public services. Thirdly, there are no studies using mixed methods (interviews with staff and analysis of university documents) to find out the extent to which market mechanisms affect higher education in Russia. Some of the gaps in the research will be outlined in more detail below.

The processes of marketisation of the public sphere began in the Anglo-Saxon countries and most researchers study the causes, characteristics, and consequences of market technologies application in public processes based on the data from Western countries. Changes in higher education under the influence of marketisation have been well studied in countries with well-developed private universities. As will be shown in Chapter 3 of this research, the foundations of the modern Russian higher education system were laid in the Soviet Union era. The reliance on a planned economy, the absence of tuition fees, complete dependence on government funding, and deep integration with the related ministries have conditioned the specifics of Russian public universities. The Russian higher

education system has retained unique features even after the transition to a market system, so the conclusions of international researchers cannot always be extrapolated to the Russian realities.

Studies on the transformation of the Russian public sphere over the past 30 years have only partially addressed the impact of marketisation of Russian public universities. Only one study focused exactly on the topic of "Marketisation of the Russian University" (Maximova-Mentzoni, 2009). The author attempted to analyse marketisation based on the data from only one regional university. The rest of the studies only partially touched on the marketisation topic: within the framework of the Russian higher education landscape (Platonova et al., 2018), overview of the higher education system (Oleynikova et al., 2017), studies of university traditions (Froumin et al., 2014; Froumin et al., 2017), internationalisation of the Russian education system (Chigisheva et al., 2017; Kuraev, 2014; Stukalova et al., 2015), quality of education (Gurova et al., 2015), university autonomy (Bain, 2015) and other topics (will be explored in more details in Chapter 3). It has therefore become necessary to understand how market mechanisms have affected the work of Russian public universities.

There is a lack of research on the impact of marketisation processes on the university staff in Russia. Western researchers have identified a large group of marketisation factors affecting the work of academics and senior managers. Basically, scientists emphasise the negative impact of market techniques and increased pressure on university staff. Management by key performance indicators, the need to attract grants to the university, changing research areas to ones that are more in demand by the market, increased teaching load and reduced opportunity to influence the management of their university are a partial list of the main problems of marketisation affecting university staff (the situation will be explored in more detail in Sections 2.5 and 3.7). So far, no studies have been published that confirm or refute the relevance of the above conclusions for employees at Russian public universities. This thesis tries to explore the impact of marketisation on academics and senior managers in Russian universities.

The following research questions will help to fill the described knowledge gaps.

1.5. Research Questions

As will be shown in Chapter 2, marketisation processes, mirroring the processes identified in the NPM literature, have promised to affect higher education institutions (HEIs) in four keyways (these dimensions will be expanded on in Chapter 2):

- 1. University funding. The HEIs income structure has changed: in addition to state funding, universities have begun to use extra-budgetary sources of income;
- Transformations in university management, including varied types of contracts,KPI management and outsourcing of staff;
- 3. Competition between universities has increased and now includes rankings, standardisation, student recruitment and retention;
- 4. The positioning of universities has become an important new area of work among educational organisations, which has led to the creation of independent marketing departments, special university brand activities and a change in the perception of universities as service providers.

(Bleiklie, 2018; Fusarelli et al., 2004; Pollitt et al., 2011; Roberts et al., 2002; Tolofari, 2005)

What is less clear is how these processes have played out in Russia. One of the aims of the present research will be to characterise and assess the impact of these processes on Russian state universities by analysing the universities' responses to market challenges and governmental demands, supported with indepth interviews with senior members of seven major Russian public universities. This will include university executives, managers and members of academic staff.

The overarching goal of this research is to examine and provide original findings on the **impact of marketisation processes on Russian public universities since the 1990s.** As part of this analysis, I seek to investigate the ways marketisation processes are perceived by senior management and academics in a small number of elite public universities in Russia. To achieve this goal, the following research questions guided the research:

- 1. RQ1. What are the key forms of marketisation that have been introduced into Russian universities, and how they have interacted with other policies, eg funding, and influenced the direction of provision, strategic development and growth?
 - Market mechanisms were introduced into Russian higher education in the 1990s which greatly affected university development and strategy. Documentary analysis of government and key public university policies, and the universities' response to government demands, will be examined in detail. Evidence of agreement/disagreement, policy recommendations and change will be investigated in particular.
- RQ2. How have Russian Universities responded to marketisation processes?
 Russian Public Institutions have developed working practices and policies in response to the national policy context and framework.
 - This research will focus in particular on the way in which marketisation has driven, or is driving, change in the Russian HE setting during the last 30 years. It will examine official documentation and university policy documents in order to reveal which government policies are having the biggest impact on public higher education institutions in general and how. Semi-structured interviews with senior university managers will also inform this part of the investigation.
- 3. RQ3. How have marketisation processes affected the views, work and outlook of senior academics and managers within universities?
 - There is an ongoing debate in the literature on the extent and nature of the marketisation on teachers and managers. Some researchers point to the inevitability and comprehensiveness of this process. Other researchers underline the positive and negative impact in the higher education marketisation process. Based on semi-structured interviews with Heads of departments and senior managers, an attempt to answer this question will be undertaken.

The structure of the thesis is as follows. Chapter 2 draws on relevant literature to examine the processes of marketisation within different societies, with a particular focus on higher education. It will outline in detail what marketisation means and what has driven it in different contexts. It also reviews the NPM literature to frame the analysis and review competing methods to examine marketisation processes within HE and the implications for different stakeholders (students and

teachers, as well as for international bodies and government). Chapter 3 focuses on the country case study: Russian. This chapter examines relevant literature to shed light onto the development of marketisation in Russia after 1990s. The general processes of market transformations in the economy and public institutions will be investigated. Key stages of the marketisation of Russian higher education are examined alongside important policy development within HE includes changing funding, management, competition conditions between universities.

The empirical chapters provide the original research. Since the methods vary by chapter, the methodology is outlined at the start of each of the empirical chapters. Chapter 4, the first of the empirical chapters, will examine relevant literature on how HEIs have responded to the marketisation processes by analysing the roadmaps. The government obliged the leading Russian universities to publish and defend detailed development and marketing plans. Based on these documents, universities received additional federal funding. This analysis will determine how universities have responded to government requirements and market challenges. The following Chapter 5 will answer the research questions based on the analysis of universities' websites. This analysis allows us to see how universities position themselves to external audiences and applicants, and to understand to what extent this image differs from that planned in official documents (roadmaps). Chapter 6 will be devoted to answering the research questions based on the analysis of interviews with the heads and lecturers at Russian state universities. The purpose of this Chapter is to find out how the processes of marketisation in public universities are actually implemented.

1.6. Chapter Summary

The marketisation of public universities in Russia has become part of the global trend of market mechanisms penetrating public services. The introduction of neoliberal ideology in public sector management in Western countries have had a strong impact on the content of higher education reform in Russia. New Public Management will be used as a theoretical research framework to explain the impact of marketisation processes on Russian public universities since the 1990s. In order to achieve the research objective, 3 research questions were formulated and the main areas of research were briefly described.

2. Chapter. Global Public Policy Trends and the Marketisation of Higher Education

2.1. Introduction

Higher education (HE) has expanded rapidly in most countries over the past three decades. Governments have recognised the importance of higher education to fostering a broader and deeper range of skills for citizens and to increasing national productivity, competitiveness and wealth. Competitiveness between HE institutions has also expanded. These changes have occurred within a particular international context which has pushed, not just state universities, but public services generally, in particular directions. The following chapter seeks to make sense of these pressures, trends and developments. It is planned to outline in this chapter the impact of globalisation on public services and the neoliberal turn in public administration. The chapter will demonstrate how the relationship between the state and the market has changed over the past 30 years: from the opposition, through the New Public Management to the creation of markets in the public services sector. The above processes have led to the marketisation of higher education, the positive and negative aspects of which will be explored in the final Section 2.6 of this Chapter.

The higher education sector has undergone significant changes across various countries in recent decades and Russia is no exception to this. Driven by economics, politics and ideology, many governments have put in place measures to transform their public sector governance and reduce costs (Calderone et al., 2010; Cummings, 2010; Hursh, 2006). Such changes were made to overcome the economic crisis and to manage the public sector of the economy more effectively. This has not been universal, but where such reforms have been most enthusiastically embraced, governments have tended to inject market mechanisms and borrow management methods from the private sector (this issue will be discussed in more detail later in this chapter). The transformation of public institutions has both been influenced by, and in turn has influenced, the processes of neoliberal globalisation (Banya, 2010; Olssen et al., 2005). The main features of neoliberalism and its applicability to this thesis will be identified later in this chapter,

including perspectives on free markets, regulation and perspectives on individual motivations and interests.

As a result, neoliberal ideas came to play a dominant role in many states, including Russia, but the implementation of specific lines of development had its own specifics. The marketisation of public services in particular has significantly affected the principles, results and methods of state activities. Within this, higher education has been subjected to market principles in various ways, including funding, management, development goals and directions. These issues will be discussed later in the chapter.

The operationalisation of neoliberal ideas has been through the transformation of public sector management. New Public Management scholars have argued that we can see patterns of policy change achieved through state-imposed management changes in a range of public services, including higher education. Processes such as commodification and marketisation have been identified as key elements in change (as Section 2.5 below will illustrate).

2.2. The Impact of Globalisation on Public Services

This Section will explore the three main types of globalisation that contribute to the emergence of marketisation in the public sphere, including higher education. The role of universities as both subjects and objects of globalisation will be explored. Some of the reasons for universities' participation in the global knowledge economy contribute to the processes of marketisation of the educational environment.

In the context of this study, globalisation is a process of interaction and integration between universities, companies, and governments around the world. As was mentioned by Altbach (2013, p. 20), globalisation "through information technology, better communications, the worldwide circulation of highly trained personnel, and other factors — permits everyone to participate in the global marketplace of science, scholarship, and ideas".

Globalisation processes unfold unevenly and affect a large number of areas related to public policy, public administration and certain ideas of the welfare state.

Each country has its own specific in implementing the ideas of welfare state in the public sphere. According to O'Hara et al. (1999), the welfare state can be seen as a type of mixed economy in which governments both provide separate benefits for higher education to citizens and fund higher education institutions. Welfare policies in Russia and some other post-Soviet countries can be seen as transitional to Western European models (Esping-Andersen, 1990) under the influence of neoliberal ideology (Polese et al., 2014). The responsibility of the state for social welfare is changing. Citizens are directly involved in financing the social benefits they use (Tambor et al., 2011). These trends are occurring in many regions of the world.

NPM as an approach that has become widespread in parallel with globalisation has its own characteristics in different states. According to Bleiklie (2018), in English-speaking countries, NPMs are focused on introducing market mechanisms in the public sphere and are primarily conducive to privatising public sector services. While the countries of continental Europe focus on improving the public sector and improving the effectiveness of public institutions (Paradeise, Reale, Bleiklie, et al., 2009). Pollitt (2011, p. 117) emphasizes a similar pattern, dividing the countries that carried out NPM reforms into two large groups. On the one hand, 'marketizers' (the UK, Australia, the USA, and New Zealand) use the methods of private companies in reforming public institutions, including higher education. On the other hand, the 'modernizers' (Italy, France, the Netherlands, Finland, etc.) continue to maintain strong statehood and do not reduce public institutions to private sector discourse on efficiency, accountability and customer satisfaction. The impact of NPMs on public services and the higher education sector will be explored in more detail in Section 2.4 of this study.

According to Held et al. (2000) there are three main dimensions of globalisation: political, cultural and economic. Political globalisation helps to reduce state sovereignty and increase dependence on international decision-making centres. The role of international organisations as agents of the global agenda has grown. National values are being supplanted by the growing influence of global values. Russia was especially exposed to globalisation processes after the collapse of the Soviet Union, as the new government was focused on borrowing political

practices in developed Western countries (Berkowitz et al., 2003; Silova, 2010). The recommendations of international organisations made it possible to compensate for the lack of experience in conducting market reforms and cultural pluralism. The International Monetary Fund and the World Bank are good examples of international institutions modulating the economies of national states around the world (for example, experts from these organisations advised the Russian authorities on reforming the planned economy and provided financial assistance in return) (Canning et al., 1999; Farnsworth et al., 2018; World Bank, 2004). International organisations issue recommendations on the development of higher education based on the economic rationality of neoliberalism. As a result, the state guarantees the possibility of developing neoliberal values and reduces its support for public institutions.

Cultural globalisation has had a significant impact on the public sphere in Russia in the 1990s. Cultural globalisation allows religious and cultural organisations to go beyond states and spread their influence across different territories. The general culture begins to play an increasingly important role, national cultural boundaries are blurring (Van Vught et al., 2002). New information and communication technologies (ICTs) contribute to the rapid dissemination of information (Cordella et al., 2009). The time has come for universal tourism and freedom of travel (Munar, 2007). The global Western culture attitudes in the 1990s in Russia have become popular, in part because the USSR was associated with cultural isolation, censorship and the shortage of household goods. Orientation towards "Western values" facilitated the adoption of managerial practices in Russia from Anglo-Saxon countries. The government opened borders and supported intercultural communication, including in the field of higher education through international projects like TACIS (Gänzle et al., 2009).

The third type of globalisation is economic, which is of particular importance in the context of this study. Economic globalisation is associated with accelerated growth of the world economy due to international trade in goods and services, freedom of international capital and the widespread dissemination of technology (Shangquan, 2000). National markets remove barriers to global trade. Marketisation and the growing cross-border economic transactions have become the foundation

of economic globalisation. The rapid development of science and technology has a synergistic effect on the development of the economic market system of the participating countries. Reducing the cost of transport, communications and telecommunications allows companies to create production and supply chains and organise cross-border distribution of labour. Universities become both suppliers to the global economy and actors in the international knowledge economy alongside private corporations (Part 2.8 provides more detail on the negative impacts of universities' participation in the knowledge economy).

Globalisation as a set of political and economic changes has impact on the various spheres of public services and affects decision-makers in the field of higher education, as well as influencing methods of university work. Borrowing management practices and reducing the importance of borders contribute to increased competition both within individual companies and government institutions, and in the international arena (Slaughter et al., 1997, p. 31). In order to remain competitive, public institutions are forced to intensify the innovation process. Thus, innovation and competition become a response to globalisation. Successful competition, in turn, is possible only with a high level of economic development. Higher education is part of the knowledge economy and occupies an important place in the production of innovation.

Universities play a special role in the processes of globalisation, acting simultaneously as subjects and objects of this process in several ways. Firstly, higher education institutions are involved in global competition and act as a link between globalisation and the production of knowledge (Banya, 2010). Often, universities are the only public institutions producing knowledge in the country, so they become participants in global competition. This process involves universities in the international higher education market. Secondly, the traditional research function of universities creates competition between groups of academics trying to find the best solutions to certain problems. Universities compete in a cross-border space (De Wit, 2011), where global fringes appear to evaporate (Teichler, 2004, p. 22). The operation of HEIs in a market environment and competition with each other contributes to the marketisation of higher education, in some ways, as a consequence of globalisation processes.

HE has also contributed to the establishment of a knowledge economy which has helped to drive globalisation. Higher education began to be exported to other countries along with other global processes (capital market, labour market, etc.). Modern higher education has become a fully-fledged industry with multi-billion-dollar turnover and the demand for tertiary education continues to grow. For example, student mobility has grown several times from 800 thousand in the 1970s to 3.5 million in 2009 (British Council, 2012, p. 14), alongside the overall number of students which has also significantly increased. In the OECD countries alone, the number of international students studying abroad increased from two million in 1999 to five million in 2016 (OECD, 2018, p. 219). The global knowledge economy has affected higher education as a public service and has changed public policies in this area.

Globalisation has affected many areas of public policy and has led to a decrease in the importance of state borders, an increase in the role of international organisations and international competition. The role of the government as the main provider of public services has changed: the authorities have begun to borrow management methods and practices from private companies. Higher education has also begun to change and turn into a product or service that can be profitably sold on the international market. Thus, globalisation has contributed to the emergence of a new public management.

2.3. The Neoliberal Turn

This Section makes the link between globalisation and neoliberalism, which postulates the need for market relations to structure state interventions. The impact of neoliberal ideas promoting market mechanisms in higher education will be explored. Five common effects of neo-liberalism on higher education will be rehearsed (Banya, 2010; Calderone et al., 2010): the impact on the relationship between higher education institutions and governments, the difficulties of funding public higher education institutions, the reduced role of the state in teaching, the changing governance structure of higher education institutions and the impact on the content of higher education institutions.

Neoliberalism as a global public policy trend demonstrates a positive conception of state power, in contrast to classical liberalism, which postulates the need for complete liberation of the individual from state intervention, thereby creating a negative conception of state power (Banya, 2010, p. 57). Classical liberalism implies human freedom as the highest value, and neoliberalism through the reform of public institution supports citizens as entrepreneurs (Parker, 2013). The neoliberal government creates new markets, laws, and the necessary conditions for this (Thorsen et al., 2006). Thus, the state plays an important role in neoliberal rhetoric, not least through radical transformations of the management and delivery of higher education.

The spread of globalisation over the last three decades cannot be separated from the spread of neoliberalism over the same period. Each has fed the other. As will be shown later, the neoliberal turn in the social and political life of Western societies began in the 1980s following a series of reforms related to public sector finance that impacted on social foundations, including the guidance structure. The ideas of the "free market" penetrated the public services sector and changed the way institutions of higher education work.

Neoliberalism describes a broad set of social and economic transformations based on the ideas of the free market, which has become dominant since the 1980s around the world (R. Connell, 2010, p. 23). Gradually, to implement such changes, institutional mechanisms were formed considering the characteristics of each country. Neoliberalism was created in parallel with the procedures of decentralisation and globalisation (Daun, 2015; Lubienski, 2009). Subsequently, neoliberalism rose as an arrangement, philosophy and a type of government (Turner et al., 2013, p. 76). Since the 1980s, a large number of Western countries have begun to use neoliberal ideology and reduce control over capital flows and the banking sector as a whole. Brenner et al. (2010, p. 329) identified three key dimensions of neoliberalism: "regulatory experiments; transfer of policies between jurisdictions; and the formation of transnational rules".

Neoliberalism has affected all public services where it has been applied, including higher education. The neoliberal approach adjusts the way institutions work by promoting marketisation and the establishment of marketable forms of

public life. The spread of market practices was limited under classical liberalism until the 1970s, when, after the oil crisis, neoliberalisation became one of the grounds for restructuring the management of the capitalist economy.

Neoliberalism has had an impact on higher education sector as part of public policy in five main ways:

FIRST, ideology reduces the role of the state as a provider of education. The state has fewer working mechanisms to ensure equal access for all thanks to the emergence of private educational providers (Hill et al., 2012, p. 1). Private capital uses the education sector to generate additional income amid privatisation of public services and the marketisation of public services (as will be shown in the Chapter 3, this does not apply to Russian higher education, as the vast majority of public universities have not been privatised). Free market and minimal governing intervention should occur in the overall economy including HE (Palley, 2005, p. 22).

SECOND — the diminished influence of the state during neoliberal reforms has created difficulties for public universities, which are mainly funded and subsidised by the government (Pratt, 2016, p. 891). Universities lose their opportunity of independent educating and self-driven research (Rhoads et al., 2005). Likewise, the countries are experiencing an internationalisation procedure whose effect will be diminished social duty regarding the arrangement and the executives of public assets. Neoliberalism diminishes the impact of states on educational strategy while expanding reliance on market components. The hidden supposition to the neoliberal belief system is that costs convey educational administrations under least government intercession in association and arrangement of such administrations subsequently prompting a decrease in government spending (Zajda et al., 2009, p. 87). As will be shown in Section 2.5, the marketisation of higher education has enabled public higher education institutions to overcome these difficulties but has created new challenges.

THIRD — although neoliberalism primarily affects the global economic system, it affects higher education more than many other industries (Ball et al., 2010, p. 135). The educational system formed from the neoliberal ideology conjectures that an institution of higher education should market for their funding by

increasing holdings within such areas as admission increases, funding cuts for employees, fundraising efforts, and other known constructs to assist in competing with other universities. According to neoliberal ideology higher education institutions are transforming their service delivery to focus more on meeting the interests of the clients (who are the students and sometimes businesses) than working on the value of research (Johnstone et al., 1998, p. 17). All these changes are forcing universities to seek additional funding in an attempt to maintain a high-quality education and realise the urgent needs of the educational institutions themselves in the face of reduced budget funding and increased state control (Hursh, 2006; Lynch, 2006).

FOURTH — when a public HEI subscribes to neoliberalism they adhere to a shift in power for decision making. Administrators move away from the democratic forms of educational governance and embrace a sizeable global wave which consists of deregulations and the destruction of social welfare systems (Braun, 1999; Sleeter, 2008). This is contrary to the goal of ensuring social equality, which traditionally has been served by public education. Universities begin to focus on students who can generate additional income for them, often ignoring the need for equal access to educational opportunities. To considering the higher education as a public good, everyone should have the opportunity to study at a university. At the same time, the market structures do not allow low-wage people to study at universities. Low-income families reproduce positions in education and maintain their own identity (Marginson, 1995, p. 302) therefore disadvantage is also reproduced. Forcing public HEi to advertise their educational efforts to obtain additional funding has a significant impact on such universities.

FIFTH — neoliberal ideology has significantly influenced the shape of higher education when coupled with changes in management practices (see below). Globalisation and New Public Management have contributed to the borrowing and dissemination of private management practices in state and public institutions. In spite of the fact that universities would be thought to expect more self-governance after their reliance on the legislature was cut, their overreliance on market components and marketisation in general have significantly influenced their freedom (Daun, 2015). As a result of a series of neoliberal reforms, state control over higher education was strengthened and government spending was reduced. The neoliberal

state began "steering, not rowing" (Duyvendak et al., 2006; Paradeise, Reale, & Goastellec, 2009). Issues of democratic governance, access to higher education and university autonomy have faded into the background for the sake of making more profit. Neoliberalism contributed to the penetration of market relations into the field of higher education, which reduced the autonomy of universities, changed the principles of decision-making and attitude towards students.

Neoliberalisation also contributes to the widespread creation of higher education markets. Zajda et al. (2016a) point out that educational markets often provoke an increase in national and international inequality, and government is unable to provide suitable conditions for equal access to education. As mention Calderone et al. (2010) "commercialisation, privatisation, and deregulation — the hallmarks of neoliberalism — are suitable descriptors of the university's cultural logic, as new forms of economic relations replace the university's former obligation to serve a broader 'public good', including the obligation to promote democratic forms of citizenship" (p. 4). As will be shown in the Chapter 6 with interviews with academics and managers of Russian higher education institutions, deregulation is not part of the marketisation processes in the Russian higher education system. Market-oriented reforms were initiated by the government and the authorities are using mechanisms borrowed from private companies to increase control over universities. As a result of these processes, higher education has changed under the influence of neoliberal ideology and is increasingly being marketed.

As already hinted at, international organisations have also played a role in the spread of pro-market ideas. International organisations establish international standards, indicators and recommendations on the directions of development of public services and higher education. The World Bank, for instance, reports that higher education changes are gone for market changes as opposed to government guideline and arranging: "the tertiary instruction is being focused towards market free enterprise guided by the standards of neoliberal financial aspects" (Johnstone et al., 1998, p. 3). International organisations recommend that universities should least rely upon the abilities or the educators, and furthermore treat the students as customers. Besides, marketisation enables private schooling foundations to receive to government subsidizing (Saad-Filho et al., 2005).

Thus, there is a link between neoliberalism as global policy trend and globalisation, with governments borrowing market-based management practices and adapting foreign experiences in public administration. The role of the state in the management of public services is diminishing, both in order to manage resources more efficiently and to reduce budgetary costs. In higher education, similar processes are taking place, leading to a strengthening of private education providers and a diminishing role for the state in teaching. The neoliberal approach is changing the principles of higher education funding, forcing higher education institutions to adapt to the demands of the market, and changing the governance structure of public universities.

2.4. New Public Management in Higher Education

As already noted in the Introduction, since the 1980s, many countries begun a series of public administration reforms (including higher education) based on borrowing management methods from the private sector for the sake of improving quality and efficiency.

New public management describes a set of reforms of public services and the public sector as a whole based on borrowing management methods from the private sector for the sake of improving quality and efficiency. NPM was first developed by the governments of Great Britain and the USA in the 1980s and has three key characteristics (Ferlie, 1996; Ferlie, Musselin, et al., 2009). First, the government creates and relies on public service markets, rather than traditional planning. Directive centralised government is replaced by market mechanisms when public services are provided by private companies and the state determines the rules of the game. Secondly, NPM is supposed to foster greater accountability, new ways of measuring efficiency and benchmarks against which public services might be measured. Thirdly, more authority is gained by field managers, within or outwith the public sector, who act as entrepreneurs rather than "traditional" public sector managers.

Business concepts and management logic reinforce the goals of productivity and efficiency, while equal access to public services, compliance with law, and democracy go by the wayside. The government is creating the rules of the game

and the strategic framework, moving to "steering, not rowing" (Duyvendak et al., 2006; Paradeise, Reale, & Goastellec, 2009). Moreover, NPM reforms are often carried out "top-down" (Tolofari, 2005) and are imposed by the central administration on ministries and departments. The professed goal of such reforms is to reduce the public sector and increase its effectiveness. But such reforms can be used to undermine public services and facilitate the privatisation of state services.

Among other public services, the NPM reforms have also affected higher education. HE as part of public policy has undergone major changes over the last 40 years around the world. Both the number of students and the number of universities have increased significantly. Higher education has become not only more "massive" (Altbach et al., 2017; Scott, 2005), but also more complex and expensive. Many researchers point to the connection between higher education and economic development when universities become a fully-fledged part of the economic subsystem of society. NPM reforms of higher education are being carried out in different countries of the world in the name of increasing the efficiency and productivity of academic activity (Berg et al., 2013; Paradeise, Reale, Bleiklie, et al., 2009; Stark, 2002).

NPMs reforms have tended to affect, not only the economic development of higher education, but also the goals and principles of university management. From the point of view of management, two important approaches to the definition of a university can be distinguished. Some researchers describe the university as a "republic of scholars" (Bleiklie, 2018; Bleiklie et al., 2007; Stensaker et al., 2012). In this case, academic freedom is directly related to institutional autonomy. Academics independently determine the direction of development and manage universities. Other authors suggest that universities should aspire to be "corporate enterprises" (Castells, 2017; Neave, 2012; Olsen, 2007). In this case, the university leadership makes decisions in the conditions of institutional autonomy to satisfy the interests of all stakeholders (including scientists, government, students, etc.). Academic freedom is no longer synonymous with institutional autonomy and is limited to the interests of other interested parties (Delanty, 2003; Jongbloed et al., 2012). University management is embedded in a more complex organisational hierarchy

(Banya, 2010; Enders et al., 2013). In the first case, the power belongs to scientists, and in the second — to university management and stakeholders (Barnett, 2010).

With the introduction of NPM ideas in the 1980s and 1990s, universities started to look more like 'corporate enterprises' in many Western countries. As noted in the introduction of this chapter, there are significant differences between countries in the way NPM approaches are implemented in the public sphere, including in higher education governance. The existing mechanisms for managing the university system, regional traditions and local legislation, as well as audit, financing, accreditation and control systems determine the final direction and success of the reforms. Hood (2005) identified four types of state regulation of higher education, which also affect the course of reforms, separate from NPM. For example, autonomous collegial decision-making played a more important role in universities in continental Europe, while competition was more important for countries with strong private universities. The new public management should be considered in the national context, as the prevailing political and economic traditions have a significant impact on the direction and results of the reforms.

Governments in many countries have started to use NPM mechanisms to increase control over universities to reap more benefits in the new knowledge economy and stimulated educational market. University management is also changing, and the role of Vice-Chancellors and executives drawn from business is growing. Managers gain more authority to manage and to find more opportunities to generate additional income (Knijn et al., 2006, p. 138). Employees are appointed to managerial positions, not elected. In this regard, there is a decrease in the representation of teachers in university management. Human resources management is based on temporary contracts and Key Performance Indicators (KPIs). Chapter 3 will explore what features of NPM implementation Russia has.

These findings allow us to conclude that NPM had a significant impact on higher education. Higher education institutions as part of the public services sector have been exposed to new public management practices borrowed from the private sector. The massification of higher education and the growing importance of the knowledge economy have forced governments, on the one hand, to give universities greater freedom to make decisions on the ground (decentralisation), and on the

other hand to strengthen centralised control over budget spending, the quality of education and the effectiveness of universities operations. Based on national circumstances, the NPM policy was aimed at greater marketisation and increased competition between universities or to enhance accountability to the central government.

2.5. The Marketisation of Higher Education

In this chapter, various aspects of university marketisation will be examined. The influence of market mechanisms and the general economic situation on the perception of the university will be examined. It is planned to determine the reasons for the state's increased interest in higher education and to find out how educational markets developed taking into account national specifics. Quality assessment, sources and methods of financing will be considered as important aspects of university marketisation. This Section will show the impact of marketisation on the internal management of the university and on the interaction processes between public universities and the government in general. Due to the characteristics of the market, higher education institutions engaged in branding and began to closely monitor the rankings. It is also planned to reveal how the market has affected the perception of the university by students and teachers. In the end, the emergence of international markets for higher education and the growth in the number of private universities will be considered.

The marketisation of public services and especially higher education follows naturally the processes of globalisation, neoliberalisation and NPM. The field of higher education has also turned out to be subject to marketisation and global trends, especially in English-speaking countries (Cleary, 2018; Ilieva, 2017; Zajda et al., 2016b). Marketisation rose since the mid-1970s. There were a few purposes behind the rise of this idea. Through the introduction of market technologies in the management of public institutions, it was planned to achieve greater efficiency (Dan et al., 2016; Hansen et al., 2016). After the global economic crisis in the 1970s (Barsky et al., 2004; Cahill, 2010; Davidson, 2001), the welfare state model began to lose ground. Reducing government spending, increasing accountability and

borrowing practices from the private sector have become the basis for the marketisation of public services.

For the most part, marketisation is seen as an apparatus being connected to the market systems went for expanding the generation of public products. According to Natale et al. (2012), marketisation is a procedure in which traditional elements of public administration begin to be perceived as part of market interactions. As a restructuring process, marketisation has provide government run enterprises the opportunity to manage as a for-profit business would, this does however entail certain legal facets to be changed within the enterprise's environment of business practices (Hemsley-Brown, 2011). As noted in the previous sections of this chapter, the state performs steering functions, delegating decision-making authority to the level of individual organisations. Consideration of such, called decentralisation occurs as the government steps back from providing the entity any funding, subsidies, and will often exact a reorganisation of the inner management. Many Western countries use market relations as the dominant model for higher education and the entire public services sector (Hemsley-Brown, 2011; Taylor et al., 2014). In addition to delegating authority, the government has provided new funding principles.

The financial provision of public higher education has become based on performance indicators and performance management. In the face of a shortage of funding, public institutions were forced to compete with each other both for additional money tranches from the state and to seek new sources of income (Jongbloed et al., 2002). Reduced public funding is forcing universities to change their positioning in front of applicants. Universities are convincing prospective students that a future degree will lead to better-paying jobs. Marketisation speaks to a move towards the market-situated administration arrangement or the creation of public products.

Marketisation comes in various shapes and structures. A standout amongst the best known kinds of marketisation is privatisation, which happens when the administration totally forsakes the creation of merchandise or the arrangement of a specific administration, moving it to private players (Sclar, 2001). For example, the state may transfer some of its property or functions to private companies, but retain

the right to control or limit the activities of the new owners in implementing public services.

Marketisation is related to the resources redistributing. As indicated by Cordella et al. (2009, p. 5), point out, since the 1990s the shift from a single provider of public services to multiple competing providers has begun. The government focuses on expanding markets and contracting with external service providers. The redistribution of services from government agencies to businesses promotes marketisation. The introduction of market mechanisms is the key to decentralisation, competition and greater efficiency of budget expenditures. Partially or fully public services begin to be provided at the expense of private companies and privatisation of the public sector of the economy is underway. The state transfers powers and funding to the level of individual organisations and strengthens the assessment of the quality of services provided. As outlined in the previous sections of this review, marketisation leads to certain social consequences when consumers begin to be perceived as customers. Private companies follow the logic of the market and try to maximise profits, ignoring issues of social equality, access to public services and the interests of the poor layers of the population outside the brackets.

The marketisation of higher education is, to one degree or another, observed in many countries of the modern world (Brown, 2015; Hall, 2018). As described in previous sections of this study, universities, along with other public institutions, were forced to use market mechanisms through the influence of neoliberal ideology, globalisation, and new public management reforms. The marketisation of higher education as part of the globalisation process involves the prioritisation of: "outputs, outcomes, quality, accountability, purchase, ownership, value for money, contracts, efficiency, customers, managers, etc" (Banya, 2010, p. 56). Public institutions of higher education began to compete among themselves for additional financing and for extra-budgetary resources (tuition and research for business). Private-sector management practices have led to more efficient and pragmatic approaches to the implementation of public educational services. Decisions in universities began to be taken more centrally, and power passed from academics to managers.

Based on the analysis of the relevant literature, the marketisation of public higher education is related to several key topics: privatisation, redistribution of public

funding, results-based management, competition between universities and the perception of public services as a private business (competition between universities, branding and university marketing). The following experts have complemented and elaborated on the marketisation in higher education (Barnett, 2010; Brown, 2011; Carnoy et al., 2018; Endo et al., 2019; Mavrina et al., 2018; Maximova-Mentzoni, 2012; Natale et al., 2012).

Marketisation of higher education is characterised in various ways; first, it is viewed as a coordination of the market rule for expanding the creation of public products. Natale et al. (2012, p. 188) characterise it as a procedure in which public entities (including universities) start to act as market units. As indicated by Maximova-Mentzoni (2012, p. 6) marketisation of higher education happens when the universities utilise the monetary hypothesis of the market in giving their administrations. It involves the presentation of the standards of private markets into the exercises of public establishments (Mavrina et al., 2018, p. 135).

Academics, university managers, and students are involved in market relationships, and interact with private and public institutions during their studies. All of them use market mechanisms in work and in everyday life (Schutze et al., 2012, p. 163). Higher education ceases to be a "public good" and begins to be perceived as a "private good" even by the universities themselves, which are trying to charge tuition fees, conduct paid educational projects and use market management, instead of just doing research and teaching (Etzkowitz et al., 2000, p. 313).

Many students have ceased to perceive higher education as a public good and are guided by their personal educational interests. Young people consider university studies as a prerequisite for a good future. Universities adapt to the wishes of future students and offer individual learning paths, not just general educational programmes (Tomlinson, 2017, p. 464). The universities are increasingly centred around building up the character of the students by changing them into clients (J. H. Newman et al., 1996, p. 78). Governments in many countries have shifted the responsibility for funding higher education from central government to individual students, so the student as consumer has become an important theme (Maringe, 2010, p. 142). In addition, the growth in population in various countries has been associated with increased educational private needs. In the USA, China

and India, 50% of the population aged 18 and 22 were expected to be enrolled in tertiary education by 2020 (British Council, 2012, p. 32).

Increase in university enrolment has implications for accommodation facilities as well as the demand for more teachers. The growing number of enrolments is termed as massification of higher education, a scenario that has forced governments in different countries to make changes in the regulation of university management and funding. For example, authorities have introduced consumer structure in higher education in an effort to enhance quality and efficiency amid the likely challenges of running universities resulting from massification (Naidoo, 2007, p. 8). Also, a higher number of students applying for university education has prompted the institutions to modify programmes while reallocating resources to meet the requirements of the learners (Enders et al., 2013, pp. 7-8). These processes have led to an increased workload for managers and academics in universities, which in turn has prompted the introduction of new management practices and performance indicators for university staff. Some state governments have challenged the universities to look for alternative sources of funding (tuition fees as one of the most important example) which promoted marketisation concept as the higher education institutions sought ways of sustaining higher demands for university education.

Scholarly private enterprise is an extra advance towards the marketisation of higher education. It is showed in the day by day work of teachers and researchers, as verified by the expansion in instances of researchers expanding awards due to declining financing; this has prompted a reduction in the degree of independent research opportunity (Calderone et al., 2010, p. 10).

Across the world, higher education has begun to fulfil the functions of supporting an economy that requires new knowledge. The World Trade Association (WTO) more often refers to higher education in the context of a service or product (Altbach, 2015). Countries can use universities as sources of additional income and export higher education. Today, universities operate as part of a huge market and the number of universities around the world is growing rapidly (Chavanich, 2007). The creation of an international educational market was another consequence of the marketisation of higher education. Dearing (1997) states, the higher education

framework cannot exist without worldwide challenge in the information economy. Private educational companies create university networks, some public universities have branches in other countries, double degree programmes appear, student mobility has increased (Altbach & Knight, 2007). English-speaking countries dominate the international educational market and accept a large number of students from developing countries. Transnational education creates certain problems associated with the accreditation of foreign universities and the standardisation of degree programmes. The international knowledge economy would not be possible without the active involvement of the various governments that boost, develop and regulate the marketisation of higher education.

Therefore, marketisation of higher education is taking place in close connection with NPM and neoliberal ideas. Public universities are actively competing with each other, operating in the international education market and competing with private providers of educational services. All this leads to a shift in the perception of higher education from a public service to a private one. Universities, their individual units and staff, as well as students and applicants, are beginning to act as market players. New funding opportunities (tuition fees, interaction with private companies) pose new challenges for public higher education institutions. Governments give more freedom of action and use new ways of quality control and accountability for educational centres. Higher education in general is becoming an important part of the knowledge economy and a source of additional revenue for public budgets.

2.5.1. The State as a Provider of Marketisation in Higher Education

The reduction in public spending during 1980-90s had a great impact on the marketisation of universities in Western countries. Universities were forced to find additional sources of funding and earn in the educational market and in many cases the role of national governments was important. In the 1990s, the World Bank proposed that countries should adopt the American-style model of higher education (Williams, 2011, p. 173): high integration into the knowledge economy, competition between HEIs, competition to attract students, monitoring of student satisfaction. During this time, the knowledge economy and human capital theories were also

gaining traction. The universities became a central focus for fostering the development of human capital as well as enriching the knowledge economy. Higher education budgets, as well as the number of students, increased leading to transformations in the running of the higher education institutions. Consequently, the universities became popular and attracted attention from state governments among other policy makers and implementers (Majone, 1997, p. 139).

Many states have paid close attention to the work of universities and began to introduce market mechanisms to control and manage higher education. Marketisation and the activities of governments were affected: the principles of managing public universities were changed, the authorities introduced management based on quality and efficiency assessments, reduced direct participation in research and education, and switched to management on the basis of contracts and KPI. Some countries have quasi-markets as a tool of marketisation, others have emphasised privatisation or, on the contrary, have tried to maintain control over the higher education system using market methods.

Marketisation generally led to the standardisation of services and the increased participation of private companies in higher education. More stakeholders have emerged in the university environment, including executives from private universities, research companies, managers of regional and federal authorities, and even parents and students as clients. Governments began to consider the sphere of higher education as part of the knowledge economy (Altbach, 2013; Olssen et al., 2005) and stimulate national universities to compete in the international educational market (Mushketova et al., 2018; Temple, 2012).

The state played an important role in the marketisation of higher education. It was the state reforms of the NPM that contributed to a change in the principles of work of the relevant ministries and departments responsible for determining educational policy. Reforms affected the management mechanisms of public educational institutions, changed the ways of financing and the level of autonomy of universities. Higher education has become part of the fundamental reforms carried out under the influence of globalisation and neoliberalisation.

Governments in different countries have had several reasons for introducing market mechanisms in higher education. First, some general factors determining public sphere reforms have been described in the previous parts of this study. Second, the global trend towards the massification of higher education has required an increase in public expenditure on universities which could not be achieved by previous methods. According to British Council (2012, p. 11), there has been a high relationship between the quantity of students in universities and welfare of the populace (estimated by GDP) and per capita at Purchasing Power Parity (PPP). In order to increase the well-being of the population, governments stimulate the development of higher education. These factors increase the number of local and international students, and as a consequence require new approaches to university management (Ferlie, Musselin, et al., 2009, p. 19).

The crisis of the welfare state has forced the governments of different countries to seek new ways to provide public services in HE. Zajda et al. (2006, p. 19) illustrate the gap between the state and higher education, stating that the transition process is often achieved through deregulation, organisational restructuring, decentralisation, government subsidies, and in some cases privatisation. The relevant state bodies begin to play the role of intermediaries between various stakeholders in the university environment and act as advocates of public interests, and the nation-state as a whole is more flexible in managing the higher education system as a "facilitatory state" (Ferlie, Musselin, et al., 2009, p. 17). The government stimulates competition between public universities for a more efficient allocation of resources. The authorities expect to use the market methods to offer the citizens more cheaper and better options for higher education. Governments are changing the way universities are funded, so tuition fees are becoming important. Students are turning from recipients of government grants into consumers of services (along with their parents). For example, Russian state universities have received the opportunity of double funding through the provision of paid educational programmes. Tuition fees have changed the way students and their parents become perceived as clients.

The state not only creates, but also opposes and limits the educational market. Despite the position of many international organisations promoting the free

market as a panacea for all social problems, the state retained most of its functions. Many governments have limited the education market in order to maintain higher education as a public good and equal access to it. Understanding the relationship between the market and the state as a confrontation between the two systems gave way to the idea of mutual penetration. Different actors interact within the framework of general rules and are united by a single social structure, although they may have different economic opportunities and different access to information. The state occupies a special place in the market of higher education: at the same time, it acts as a supplier and consumer of services, finances individual universities and levies taxes and fees, helps national universities compete in the international arena and stimulates competition between universities for resources within the country.

Despite the pessimism of some authors (Brown et al., 2013; Eikenberry et al., 2004; Steinklammer, 2012), market relations have not completely replaced academic traditions, and the state continues to fulfil its traditional functions of providing and guaranteeing the public good. Market reforms affect forms of university governance and perceptions of universities. As outlined in the Sub-section 2.3, neoliberal processes are very heterogeneous and lead to a combination of old and new ideas depending on the national context. Instead of a fully market approach, mixed models of tertial education governance prevail. The institutional limitations of higher education as a public service sector have deep national traditions that are difficult to reform in the market. Therefore, market-based modernisation is mixed with established university models.

2.5.2. Marketisation Influence on Public Universities

Public and private universities have their own characteristics of funding and management. Private universities tend to be more autonomous in their decisions and more flexible to operate in the higher education market. Public universities are the most characteristic example of the preservation of traditional management, research and teaching approaches. Market reforms make public universities look for extra-budgetary sources of funding, compete with each other and in the international arena for students, orders from private companies, and develop their own marketisation strategies. At the same time, educational organisations are not

fully subordinate to the logic of the market, as they pursue primarily social and academic goals; profit maximisation, as in private companies, remains a by-product of their activities. Despite the decline in state funding, many public universities are heavily dependent on government grants and are unable to independently exist in the free market, regardless of the differences between them.

Competition between public and private universities is constantly increasing. The number of private educational institutions in different countries has grown significantly due to the emergence of educational markets. Partially, this process was associated with the privatisation of public universities; on the other hand, new educational institutions independent of the state were created. English private universities have begun to attract more international students over the past 30 years (Becker, 2009). The number of private educational institutions in Latin America has grown several times (Altbach & Balán, 2007). Asian countries have developed private higher education. China has reformed the principles of financing public universities using market mechanisms (Yeo et al., 2011). Russia allowed the creation of private universities and launched competition processes between state educational institutions (see Chapter 3).

Marketisation has contributed to the creation of private universities and the penetration of private capital into higher education. The state did not always cope with the growing demand for higher education; therefore, private educational markets developed either due to state non-interference or even with the support of the government. Private universities began to offer programmes that are in demand on the market, although many young educational organisations are exclusively engaged in teaching and do not have sufficient resources for research. Private sector investment in higher education (including public universities) has steadily grown: on average, the share of private resources in OECD countries increased from 24% in 2000 to nearly 32% of total expenditure on tertiary institutions in 2019 (OECD, 2019, p. 293). Public funding of higher education in relative terms remains stable or even declining, which is why universities use private sources to cover their costs. In many countries, tuition fees are becoming an important part of the revenue structure of public universities, including Russia. Some European countries, such

as Germany and Switzerland, remain an exception, since education at state universities there is mostly free.

Marketisation reduces differences between public universities by striving for standardisation (the influence of the state in this process has been described in the previous sections). Consumers are trying to choose the best university, governments provide funding for the most successful universities, and finally, the leaders of educational organisations are forced to look for advantages over competing universities. The emergence of rankings has a negative impact on the freedom of public universities to choose directions for their development. "The rankings catch" (Bollag, 2007; Bougnol et al., 2015; Hazelkorn, 2007) forces universities to standardise their educational and research programmes: "By offering a one-dimensional answer to the need for transparency on the high-status vertical dimension of research excellence, they [rankings] in fact reduce the perspective on diversity and lead to horizontal homogeneity" (Van Damme, 2009, p. 51). Unified assessment criteria do not provide an objective idea of the situation at the university. The government has pushed universities toward standardised indicators in order to get an 'objective' basis for assessing the quality of public higher education institutions and allocating budget funding. To achieve necessary results universities mimic market behaviour by adopting the proposed models of educational programmes and research profiles (Van Vught, 2008). Market competition also contributes to the emergence of more successful models of university leadership and promotion, which are copied by laggards.

Improving positions in various rankings has become an important part of the life of public universities. The use of KPIs, student orientation and competition inevitably lead to the use of rankings or league tables (Altbach, 2006; Bougnol et al., 2015; Hazelkorn, 2007). The government wants to see their universities in first place in international rankings, parents want to send their children only to the best universities, advertisers and businesses are ready to work with universities from the first lines of rankings. League tables not only present the situation between the number of universities, but also have some negative consequences. Bougnol et al. (2015) indicate that rankings are often unresolved, which leads to a distortion of the real situation in the university. An imperfect methodology may include both factual

and logical errors and may contain a lot of subjective judgments (including expert opinions). On the other hand, rankings lead to standardisation of research (Altbach, 2006). Universities are trying to adapt their programmes to meet the criteria for evaluating international and local rankings. Hazelkorn (2007, p. 107) outlined that rankings increase their influence and go beyond the boundaries of original audiences (students, public opinion and parents). Increasingly, ranking positions are becoming an important success criterion for university management. Governments also use league tables to allocate funding.

Unlike other public services, the emergence of market conditions in public higher education may lead to a decrease rather than an increase in diversity. Governments are responding to this challenge in different ways. For example, Russia has created a multi-tiered system of public higher education (leading universities, specialized institutes, regional universities, etc.), which allows targeting different audiences and diversifying funding. On the other hand, the state can facilitate the introduction of market mechanisms at different levels that limit the freedom of public universities: from the coordination of universities and the creation of special state structures for the accreditation of universities, to the introduction of market practices in the management of universities themselves. Criteria were developed for evaluating the effectiveness of universities, ways of obtaining extrabudgetary revenues and the grounds for obtaining additional investment from the state.

Providing quality assurance for public universities has become one of the consequences of marketisation. Governments in different countries are creating accreditation systems for universities and study programmes, as well as introducing standardised criteria for evaluating research (Gurova et al., 2015). Quality assessment may include assessing the best ways to manage it, as well as meeting the standards of teaching and the content of university courses. The Bologna process (will be discussed in lore details in the Section 3.5.2) assumes the existence of quality assessment mechanisms in each country. The government may use accreditation to provide core or additional budget funding. High quality research allows universities to improve their positioning in the international market (Blöchliger, 2018). All sorts of rankings are revealed by world-class universities that

are focused on basic or applied research in various fields. The struggle for high places in the rankings leads to a widening gap between elite universities and other universities, which are forced to satisfy the growing demand for higher education and solve regional problems of economic development.

University funding has also experienced a strong marketisation impact. The traditional form of financing public services used fiscal methods without taking into account the possibility of attracting the resources of private companies or families of students. Reduced government spending and increased demand for higher education have led to a change in the financing system of public universities. Gounko et al. (2007, p. 533) indicate that the economic advantage is the main aspect that forces the university to move to the market. With the development of market reforms, private investment in public higher education has appeared. Public universities in Eastern Europe, Asia and South America got the opportunity to charge tuition fees and attract private companies to generate additional income.

Lifelong learning has become another way to receive additional funding in the education market. Modern technologies are developing very quickly and often the skills acquired while studying at the university, lose their relevance after a few years. From the society's side there was a request for additional educational courses for adults. Universities used lifelong learning as an additional way to attract funding from both individuals and enterprises (employee courses). For example, in Australia, has been a massive change in 1990s when has begun "a movement from a mass post-compulsory system to a near universal system, and the beginnings of lifelong learning on a wide scale" (Marginson, 1997, p. 192). In European countries, 15% of the population aged between 25 and 64 years would be enrolled in lifelong learning in 2020 (European Commission, 2012, p. 13).

Jongbloed (2004) identified ways of distributing funding for public universities under the influence of marketisation based on two criteria: the presence of competitive mechanisms and financing based on the results of work. Firstly, the traditional method of financing public universities on the basis of university costs (planned financing). Secondly, universities can receive funds from the government based on the results of their work, which allows to increase competition, stimulate the efficiency and productivity of educational organisations. The government can

purchase university services for specific purposes and conduct competitive procedures for this, conclude contracts. Finally, the latter type represents financing for clients who independently decide which university suits them best. In this case, educational institutions begin to compete for customers, offering a greater variety of quality programmes at a market price. All these funding methods appeared under the influence of market processes in countries where the state has a great influence.

Countries, such as Germany or Russia with a developed system of public universities are experiencing the impact of marketisation on the issue of HEI management. The traditional model of university work organisation presupposed the existence of state management of the higher education system (specialised ministries, financial and accreditation bodies), and also a certain autonomy and self-government of universities (Zgaga, 2012). A driving force in marketisation is financial resources which led to emulating business models in universities (Hall, 2018, pp. 35-41). The introduction of market mechanisms has changed the ways of monitoring the activities of universities, based on quality assessment, standardisation and results management.

Marketisation also influenced the principles of university management, reducing the influence of collegial forms of control within educational organisations. University leaders were given the opportunity to create administrative authorities that could act without taking into account the views of academics (Dill, 2012). Universities gained greater autonomy in decision-making in exchange for the need to compete for resources of the state and private sector. Public higher educational institutions have the right to create and approve educational programmes, invite foreign teachers and create their own managerial structures. As noted earlier, the state continued to control universities and establish the rules of the game, therefore, the processes of increasing institutional autonomy and strengthening the influence of the state often proceeded in parallel and led to the creation of hybrid university management regimes (Magalhães et al., 2007).

Given financial constraints, universities are forced to develop new areas of work in the educational markets: create marketisation departments, attract students and take care of their positioning for different audiences. Brand building of the university is key in recruiting and selecting student enrolments (Chapleo, 2015).

Non-public universities have demonstrated better use, flexibility and knowledge of technology compared to public universities, which has improved their marketisation efforts and decision-making. According to Van Vught (2009, p. 9) universities must have a sufficient number of external assets for sustainable operation. Lack of assets provokes additional rivalry between universities. Many European universities have increased spending on branding and promotion in the 2000s compared with the 1990s (Van Damme, 2009, p. 53). Universities are forced to expand their sources of income and work in a market situation in order to guarantee independence related to money.

Educational markets adopt many features of the classical market approach and begin to create simple educational products. Attempts by universities to maximise their profits in accordance with market logic can lead to the threat of increasing inequality and a reduction in access to higher education for all (Blöchliger, 2018, p. 4). The government controls this by applying minimal measures, administration obligations, and subsidising educational co-operation. In some cases, the government finances certain territories for political reasons; this makes it difficult to review the educational market from a financial point of view (Niklasson, 1996, p. 7).

Marketisation has penetrated into all spheres of public life, including higher education. Market relations have influenced the perception of the university by students, university management and the government. Economic crises and the massification of higher education have forced governments to rethink the principles of working with public universities. The state has created the conditions for the introduction of market mechanisms in the public sector as part of the reforms of the new public management. The role of the state has also changed and now the government has acted as a helper, determining the direction of development of the higher education system as a whole. The government not only creates educational markets, but also controls them, imposes restrictions on public and private universities.

To sum up, marketisation has had a strong influence on the various areas of operation of public universities. Firstly, pressure from the private sector has increased: there are more private universities, which are less dependent on

government decisions and impose competition on public universities. Private capital is penetrating public universities and influencing decision-making principles. Secondly, the ways of managing public universities have changed: quality assessment, results-based management, and private company methods are emerging. Thirdly, marketisation promotes the standardisation of research and pushes public universities into the trap of rankings. Fourthly, the revenue structure of public universities has changed: universities charge tuition fees, co-operate with private companies and launch fee-based educational programmes demanded by the educational market (including lifelong learning for adults). The significance of these and other marketing-related factors will be discussed in more detail in the next section 2.5.3.

2.5.3. Positives and Negatives of Marketisation Processes in HE

Marketisation has had a significant ambivalent impact on universities around the world. This section will examine the positive and negative aspects of the intervention of market relations in the work of the university. As shown in previous sections of the research, market mechanisms affected the principles of university management, the activities of academics, and the relationship of universities with the government and students. Pressure on academics, increased bureaucracy, excessive control, overwhelming rankings and limited access to higher education are among the most common marketisation problems. On the other hand, marketisation contributes to the diversification of funding sources of higher education institutions, to attracting more students, as well as to accountability and engagement in the knowledge economy. The positive and negative aspects of these processes will be discussed later in this section.

Some effects of the marketisation of higher education can be assets as positive. For public universities to operate under market conditions, the authorities offer greater autonomy in decision-making. Decentralisation and borrowing management principles from the private sector lead to a more efficient use of resources. Another argument for positive change has been the diversification of revenues of public higher education institutions. The education market has enabled public universities to tap into new sources of income in the form of tuition fees and

contracts with private companies (Zajda et al., 2016a). New powers delegated by the government have enabled educational programmes to be tailored to student demand (Joseph et al., 2012). Marketisation has pushed universities to actively participate in the international knowledge economy, therefore "it is impossible to imagine any real university as an 'ivory tower' existing outside its historical and social context" (Anderson, 2010).

Marketisation helps standardise educational programmes. To cope with the increased demand for higher education, universities provide higher education as a sales service. The state promotes the organisation of "sales" due to the growing number of controlling specialised units. The government regulates minimum standards for the quality of education, as well as regulates access to higher education through assessment and accreditation procedures. The activities of public institutions, including higher education, boil down to a large number of rituals of standardisation and verification (Power, 1997). Standards apply to both teachers and students to reduce costs and increase efficiency. The use of ICTs and online courses serves the same purpose. Directively enforcing standards that are beneficial in terms of attracting students and are suitable for government requirements restricts academic freedom and reduces the diversity of academic programmes. Furthermore, the "performance of academics is now more readily scrutinised" (Carey, 2021, p. 1).

Views of universities as ivory towers for elites that are unaccountable and self-sufficient are often contrasted with a neoliberal approach with transparent performance indicators and accountability for the mass consumer (Jones-Devitt et al., 2010, p. 96). Marketisation as part of the neoliberal agenda may contain positive consequences, for example, increase the accountability and transparency of educational institutions. Raaper et al. (2015) point to the demand for greater control over the activities of the academy by society. On the other hand, the "early liberals" advocated greater accountability in order to ensure that government spending was not wasted and the academic community did not become "slothful indolence" (p. 158). However, market competition has become unlimited, and the demands of continuous competition are constantly growing. For example, (Deschamps et al., 2015, p. 128) pointed out that university management puts pressure on staff "to

engage in more market activities (e.g. fund-raising, seeking donors, creating advertisements), sometimes at the expense of assisting students directly".

Marketisation has a significant negative impact on academics. In market conditions, universities are interested in attracting professors who can positively influence the brand of the organisation (S. Newman et al., 2009). Educational institutions adopt market practices for working with staff and implement oversight and accountability mechanisms (Dill, 2012). As a result of such changes, the burden on teachers increases and opportunities for creative development are reduced, in addition, low salaries are maintained. Academics are required to create new courses, attract additional funding and grants, while maintaining the level of expertise in their field.

Marketisation leads to increased pressure on academics due to increased expectations about the quality of teaching, search for funding and publication activity. The result of this pressure is a change in professional identity. Collegiality has replaced by competition for resources, trust within the academy has declined, and stress levels have constantly grown. In pursuit of greater transparency and quality, the understanding of academic work has changed. The influence on individual scholars has increased, their professional autonomy has been in jeopardy. Creative self-realisation, freedom of research and academic freedom are subject to market processes, such as targets and performance criteria (Olssen et al., 2005). University managers impose management procedures on scientists that go against the principles of self-improvement and collegiality.

Through the growth of accountability procedures, marketisation leads to increased levels of bureaucracy and less autonomy (Cordella et al., 2009; May et al., 2007). The NPM approach not only gives greater independence to universities to make specific decisions (increases autonomy), but also increases accountability to governments, which can use the approach to increase oversight of public HEIs (reduces autonomy). Governments monitor university performance indicators, forcing management to create additional reports on their work. University leaders demand the same from the scholars. The number of reports, documents and forms has been increased. Scientists are not interested in replacing creative approaches to teaching and research with a set of formal procedures with standardised

indicators. Ideas about the best way to organise research and the most effective working mechanisms may differ from university managers and scientists. Not all methods of generating scientific knowledge can be formalised. Market mechanisms meet the resistance of the academic community. According to Kleijnen et al. (2011, p. 149) "faculty were positive about the effects of quality management in terms of improvement and negative about its effects in terms of control".

Despite bureaucratisation and external pressure, market mechanisms can contribute to university development. Academics have a set of knowledge and skills that play a key role in the development of the university. Negative motivation in the form of a decrease in salary or loss of status will lead to the observance of new working conditions but will retain the dissatisfaction of scientists. According to Stensaker et al. (2012) providing opportunities for participation in decision-making will help academics overcome the crisis and independently develop standardised processes where possible. The freedom of research can be combined with teaching, which has become more regulated. Universities have to find a balance between private-borrowed monitoring mechanisms and volatile academic freedom. Resistance of scientists can be reduced through inclusion in the decision-making process.

The free market contributes to the growth of inequality in higher education and society as a whole. The availability of scholarships for low-income citizens does not solve the problem of equal access and is not comparable with a fully-fledged social reform. Often the problems of access to higher education are only declared, but not solved in a wide context. Universities are still competing for positions in educational rankings. For this, educational institutions are forced to attract more talented students and complicate entrance examinations. To enter a top university, an applicant must show excellent academic performance, which is easier for children from wealthy and privileged families. These negative effects "might be economic imbalances between institutions, competition denying education access to specific social groups" (Boutillon, 2018). The high cost of education and the high requirements for students again make higher education elitist. As Buras et al. (2005) predict, not all social groups with low access to higher education will be satisfied

with the competitive market logic and choices. Market processes lead to another stratification of society.

Market relations affect the content of the educational process and the expectation of its results. Not all university study programmes are equally in demand among students. Classical liberal arts education and the study of philosophy, social sciences, and cultural studies go by the wayside. Difficulties in recruiting students arise even in STEM disciplines with a focus on basic research (Raaper et al., 2015). Modern students carefully choose educational courses that will facilitate their further employment in the labour market. Top quality and recognised qualifications attract more students (Bache, 2006, p. 239). The democratic ideals of student self-government, reading and personality development can now be perceived as a waste of time, since the cost of higher education has greatly increased.

New market forms of governance do not always meet the needs of universities. Sarrico et al. (2012) note that "what gets measured gets managed, but what gets rewarded gets done" (p. 82). Higher education has forced to emulate market activity, meet new performance indicators, but real achievements in teaching and research can be achieved in other ways. The organisational culture of many universities remains inert and slowly changes under the pressure of market mechanisms. New management strategies are only partially used by universities. The government's demands for efficiency improvements through the collection of performance and cost analysis are partially implemented.

Marketisation leads to pitfalls in university league tables. Students and their families choose universities with high rankings because they believe that studying there will give them a quicker return on their investment. The government offers standardised monitoring mechanisms and an assessment of the performance of various universities on a common basis. Finally, Vice-Chancellors of educational institutions are interested in strengthening the brand and the position of their universities in local and international markets. University rankings satisfy the needs of several stakeholders at once. In pursuit of leading positions, universities are forced to develop standard teaching programmes and adjust research to the criteria of league tables.

The leadership of universities has interested in attracting more students and obtaining additional funding. Raaper et al. (2015, p. 159) offers the following scenarios for the development of a market system of higher education: "The real response, and the eventual change, will come, I think, at a political level, when hopefully universities are once again established as autonomous centres of enquiry and research freed from the constraints of externally imposed performative audits". This movement can be facilitated by a certain inertia, the university's resistance to changes, the ability to withstand market processes in order to preserve traditional academic values and the development of the humanities, as a means of ensuring the quality of life of the whole society (Richard Scott et al., 2016).

Economic and political crises, accessibility problems, and the fundamental impossibility of conducting economically viable basic research can lead to increased government regulation of public services and a decrease in marketing. Higher education has become widespread, universities have begun to play a more prominent role in the national economy, so the government will be forced to control the activities of universities and limit market competition, which ultimately strengthens social and political problems.

Thus, marketisation has had more negative than positive effects on universities. Mechanisms borrowed from the private sector have led to the standardisation of research. Guarantees of a minimum level of quality and content of educational programmes reduced diversity and contributed to reduced autonomy of HEIs.

Market reforms launched by the government included a reduction in government spending and the use of mechanisms borrowed from the private sector to control universities through standardisation. The government guaranteed a minimum level of quality and content of educational programmes, which ultimately led to greater dependence and the loss of some autonomy of universities (looser in operational decisions, but stronger control at middle and upper levels). Universities were forced to imitate the methods of market management and join the race for league tables. Opportunities for free creativity and research for academics have declined. University management has come to demand greater accountability, regulation, and standards compliance. Attempts to impose new principles for the

organisation of educational and research activities cause resistance from scientists who are developing educational programmes. Courses began to be adapted to market demands rather than to a better understanding of the subject. The demand of future students for applied educational programmes led to a crisis in humanitarian education and caused certain difficulties with the enrolment of students in basic research programmes. The idea of universities as the agents of the public good has been replaced by market ideas of the private good and learning as a service or product: "Universities that were once regarded as 'ivory towers' of ultimate knowledge have to become customer oriented" (Beliakov et al., 1998, p. 21). To overcome the consequences of marketisation, universities have to balance their own interests, bureaucratic pressures and market demands.

2.6. Chapter Summary

Over the past 30 years, several global trends in public policy have been implemented, including globalisation, new public management, neoliberalisation and marketisation. The economic crisis of the 1970s caused a number of changes in government and public services around the world. The development of new information technologies, international organisations and the devaluation of national borders have led to an increase in globalisation processes, borrowing technology and practice in various areas of society and spreading these new methods in different regions of the globe. Western governments have begun to borrow private sector management practices to overcome the effects of the economic crisis. In pursuit of greater efficiency and accountability, in order to improve the quality of services provided and reduce the financial burden, the authorities have changed the way they sell public services. The state reduced its powers, carried out large-scale privatisation and began to fulfil the functions of a helmsman, not a rower. The processes described above, and management practices borrowed from business have come to be called the New Public Management. The NPM influenced not only government organisations, but also subordinate institutions, including public universities.

The ideas of neoliberalisation had even greater influence on higher education and other public services. Unlike classical liberalism, which was more likely

associated with the denial of state power in order to achieve individual freedom and guarantees of private property, neoliberal theory suggests that the state acts as a guarantor of individual freedom and protects markets from monopolies. With this approach, the state has limited functions and does not independently fulfil its obligations but use market mechanisms to provide the best opportunities for individual freedom and personal choice of citizens. The traditional contrast between the market and the state has been replaced by symbiosis. Market relations seem to be the best way to reduce government spending, realise the right of citizens to free choice and overcome the effects of economic crises. Neoliberalism remains extremely heterogeneous; its penetration into all spheres of public life depends on the specific formal and informal public institutions in each country.

Marketisation has become a logical continuation of the ideas of a new public management and neoliberalisation. Market mechanisms and principles have used by both the government to manage the public sphere and individual social institutions. Higher education is most susceptible to the penetration of market ideas. Universities have become the foundation of the global knowledge economy, and the widespread massification of higher education and the decline in public funding necessitate the search for new ways to generate income. Government-initiated reforms also affect intra-university management practices. The authorities want to see greater accountability, efficiency and quality assessment of the work of educational organisations. To achieve the necessary results, universities standardise educational programmes, introduce additional bureaucratic procedures for researchers and teachers. The increased demand for higher education from students, coupled with increased tuition fees, has forced universities to create new study programmes for the needs of a growing labour market. All these processes lead to a change in the perception of the university: from the source of the public good, educational institutions become service providers for student clients, and higher education turns into a commodity.

The widespread marketisation of higher education, along with the positive consequences (expanding the number of programmes, greater local management capabilities, additional sources of income), generates many negative trends. The government uses additional market-based instruments to control universities and

limits university autonomy. To meet government requirements, the influence of managers within universities has been grown and the value of the collegial power of academics has been declined. Academic freedom and teaching are subject to external factors, such as demand for particular educational programmes, competition in international markets, or orders from businesses. Scientists experience additional stress, work on short-term contracts and are forced to adapt to the requirements of management. University Vice-Chancellors, students and authorities are interested in economically successful universities, which occupy leading lines in league tables. Academic rankings are becoming a trap for universities and forcing them to standardise programmes and areas of research, to invest heavily in marketing and branding.

Many of these trends are reflected in the activities of Russian public universities, which will be discussed in the next Chapter 3.

3. Chapter. The Russian Case – Public Higher Education Institutions

This chapter seeks to contextualise the thesis by considering key developments in Russia in recent years, especially in relation to its higher education system. The structure is as follows. First, a brief overview of the features of the higher education system in the USSR will be presented and the main direction of educational reforms in the 1990s and 2000s will be considered. Secondly, the institutional landscape of modern Russian higher education and identify the main features of this system will be studied (the number of different types of universities, mass numbers, popular areas of study, etc.). Thirdly, the increasing competition between universities (including private and public universities) will be investigated, as well as changes in the assessment of teaching quality, state accreditation, costs and content of new educational programmes. Fourth, the main channels of the impact of marketisation on Russian public universities and the problems associated with the financing and management of educational institutions will be studied. To consider the impact of marketisation on equal access to higher education and the social functions of universities. As a result, the summary will be presented on the impact of market reforms on Russian higher education and the problems to be investigated.

3.1. Introduction

Russia experienced dramatic changes in the 1990s. The collapse of the USSR and the deconstruction of the planned economy left many public institutions, including universities, without clear direction, funding steams and purpose. From 1990, the country rapidly opened its borders, adopted democratic principles after "perestroika and glasnost" processes (Avis, 1990; Zajda, 2007b, 2010), introduced private property, and privatised many previously public services. Such a rapid transformation meant that the economy was not unprepared, and this almost led to total economic collapse. GDP fell 40% between 1991 and 1994 (Azimbayeva, 2017, p. 10) and inflation rose dramatically (Berkowitz et al., 2003; Kaufman, 1994). Russian citizens, business leaders and public services did not know how to work in such market-oriented conditions. Meanwhile, the government was less able to undertake important social functions. There were also opportunities for some. In

addition to private domestic and international finance gaining traction, international financial organisations also gained greater influence in the country.

The World Bank (WB) and the International Monetary Fund (IMF) politically and financially "supported" the young state through this transition¹. It sponsored a programme of radical market reforms (Oplatka et al., 2010; Platonova et al., 2018). The deep economic crisis forced the government to take loans from the IMF and the World Bank to fulfil its social obligations. These international organisations offered political and economic recommendations, assessed the effectiveness of the government to introduce advanced market approaches set the conditions for the allocation of the following financial tranches. The free market and open borders allowed many large international companies to quickly launch their business in the territory of new Russia.

Russian public service reforms were also exposed to the new global and market way of operation: cross-border co-operation programmes, directives of international organisations, and cultural exchange have had a significant impact on both reformist governments and public perceptions about the development of public services, including higher education.

3.2. The Higher Education System of the USSR

Modern Russian universities inherited some legacies from the former Soviet system of higher education. To understand the impact that marketisation processes of higher education institutions have had, it is necessary to find out the characteristic features and methods of managing university education in the USSR (Avis, 1990). The planned economy, arms race and the lack of political freedoms led to the creation of a special system of higher education. The good development of STEM disciplines, ideologised study process and low level of social sciences were key features of the Soviet education system (Cohen, 1986; Hough, 1997). In the last years of the existence of the USSR before its demise, a "restructuring" of most areas

¹ The influence of these organisations is now minimal. The government is trying to pursue a policy that is independent of international organisations in the public sphere and in higher education in particular.

of economic and political life was carried out. These reforms were the forerunner of significant market transformations in the new Russia.

The USSR used the methods of a planned economy to manage all types of public services, including higher education. The USSR created a higher education system that ignored individual choice and academic freedom, and was, in many ways, the opposite of the Western model of HE during the same period. The state not only controlled higher education but was also the only one supplier of prospective students and the only employer for future graduates. Froumin and Kouzminov (2018) define the Soviet system as a "quasi-corporate higher education". HEIs were part of a unified planning system created to change the structure of society. The Communist Party emphasised the need for close ties between various public services. Universities obeyed the general logic of the development of a planned economy and were primarily suppliers of labour for the state. The organisational structure of higher education was based on limited academic autonomy and tight planning, with no place for the preferences of students.

Key characteristics of the Soviet system promoted the centralisation of management, ideologisation (the educational process was subject to official ideological concepts and guidelines of the communist party) and a narrow specialisation of student training (Froumin & Kouzminov, 2018; Johnson, 2008). Universities taught students based on common principles and standards to a primarily centrally determined curriculum. Academics used pre-prepared materials verified by government agencies (Kaufman, 1994), in part to allow the Communist Party to use higher education to instil ideas sympathetic to the regime, train future leaders and spread its ideology. The narrow specialisation of educational programmes made it possible to prepare future workers for the needs of a planned economy. Soviet universities were perceived to be "public goods" (in the sense that they catered primarily to public and state interests), with little consideration given to the individual needs of individual students.

All universities in the USSR were public, centrally managed and fully funded by the state. Students could choose the direction of study but could not affect the content of the educational programme or draw up an individual training plan (Savelyev, 1990). As Froumin and Kouzminov (2018) note, academics were highly

dependent on the political will of the Communist Party and were supposed to help build a communist society. The government allocated quotas for the training of future university academics. All educational programmes were created centrally based on the perceived needs of various sectors of the state economy. Regional authorities, local enterprises and universities had minimal opportunity to influence the content of educational content. The higher education system had a strict hierarchy and was top-down controlled. The government saw universities as producers of a labour force for the state. Centralised funding allowed the creation of qualified specialists for all sectors of the economy and public services.

The government created a complex system of higher education institutions to implement state tasks. Universities were also seen as an instrument of regional development: new educational institutions were created in the eastern regions of the country; some universities were transferred from Moscow to the regions (Sachs et al., 1994; Savelyev, 1990). Highly specialised universities conducted research for individual sectors of the economy. The government used evening and correspondence courses to meet the needs of enterprises for staff retraining. There were three main types of public university in the USSR: regional, industrial and classical. By the end of the 1980s, there were 898 public universities in the Soviet Union, of which 6% were classical, 17% were specialised, and 77% were regional universities (Huisman et al., 2018; Kuraev, 2016).

In terms of funding and access, higher education in the USSR was quite widespread and affordable. There were no tuition fees and "broad access had been one of the major ideas of the Soviet master plan from its very beginnings" (Froumin & Kouzminov, 2018, p. 60). To ensure high levels of "accessibility", party leadership bodies were created at each university, which in fact had a strong influence on the work of senior managers. Career progression was difficult unless the lecturer was a member of the Communist Party, the Vice-Chancellor was appointed by decision of government structures, professors and department heads had little opportunity to influence the management of the university as a whole. To meet the growing needs of the economy, the number of students increased significantly over the Soviet Era: in 1987, five million students studied annually in the USSR out of a population of 286 million people (Avis, 1990). At the same time in the RSFSR (Soviet Russia was

the largest republic in the USSR) 2.285 million people studied at 514 universities (Platonova et al., 2018, p. 339). The Soviet state operated universities and guaranteed free education; in exchange, students had to comply with all government orders. Students did not pay tuition fees, but were required to perform harvesting work, went to "practice" in government organisations, where they worked for free. After graduation, the state decided on the distribution of students to various regions and to various positions.

Table 3-1. Differences between the Soviet and Russian higher education systems (Source: author).

	USSR (Russia only, i.e., RSFSR) in 1987	Modern Russia in 2020
Number of universities	514	710
Number of students	2.29 mln	4.04 mln
Private universities	no	yes
Programmes with tuition fees	no	yes
Unified State Exam (USE)	no	yes
Two-level system of education (undergraduate and graduate programmes)	no	yes
State funding	100%	partial
State accreditation	yes	yes

The Soviet higher education system was part of a planned economy and fulfilled the tasks of social engineering of a communist society. There was no private property and private universities, so the government guaranteed free higher education for all in the interests of the state. High ideologisation of teaching and bureaucratic procedures made it possible to solve large-scale problems, but did not take into account the interests of students and individual universities (Johnson, 2008). Higher education institutions were deeply integrated into the economy of the Soviet Union through a system of state line ministries and departments. Universities did not have the opportunity for independent decision-making either in self-government or in influencing social and economic development. Academic freedom and self-government were virtually non-existent and were replaced by top-down government control. The public higher education system which was created for work in a socialist country and was not adapted to market conditions underwent significant changes with the collapse of the USSR.

3.3. Reforming Public Services

The collapse of the USSR coincided with the growing popularity of neoliberal ideology and the application of new public management thinking in leading Western countries (see above Sections 2.3 and 2.4). The Russian government adopted neoliberal ideas and tried to emulate public sector reforms of the type captured by NPM scholars. The reformers acted according to the Western model and tried to restructure the planned economy as quickly as possible. It was expected that after the removal of legislative restrictions, the market would naturally emerge and ensure strong economic growth. The state ceased to regulate prices and pursued a new monetary policy (Beissinger, 2002, p. 435). The result of radical reforms was a protracted economic crisis: "the transition process, which has involved democratisation as well as marketisation, has thus far led to a substantial economic decline" (Kim et al., 1999, p. 467). Such transformations led to severe shocks and a significant drop in the standard of living of the population. At the end of 1991, a presidential decree on price liberalisation was signed to address the shortage of goods (Yeltsin, 1991b). This decision caused a significant increase in prices and negatively affected the economy as a whole (Berkowitz et al., 2003).

An extensive privatisation programme was implemented in the new Russia under the direction of the International Monetary Fund. As a result of radical reforms, ways of communication between enterprises were destroyed, the state ceased to be the main consumer of industrial services, and production decreased significantly, which ultimately led to a sharp decrease in tax revenues (Benedictow et al., 2013, p. 5). The World Bank and the IMF gave large loans to the government to offset a growing budget deficit. Researchers attribute the reasons for the failure of the reforms to the inexperience of the reformers (Stoner-Weiss, 2006), the influence of international organisations (McMillan et al., 2010; Sachs et al., 1994), and the resistance of informal public institutions that have retained their influence since the USSR (Bain, 2010). Furthermore, many of the reforms were carried out within the framework of neoliberal ideology and the marketisation of public services, including higher education.

As already noted, the Russian government was guided by the experience of developed capitalist countries to reform public services. The state adopted policies that mirrored new public management strategies, most notably NPM is the way to use private company management practices for the public services sector (Osborne, 2010; Pollitt, 2011). This was useful for the Russian government since its own market mechanisms had been curtailed during the period of the USSR. As noted in the previous Chapter 2, to overcome the consequences of the severe economic crisis, the government allowed public institutions to use private business services and gave greater financial independence for individual organisations performing public functions (including in higher education). At the beginning of the 1990s, reformers had high hopes for marketised self-government and were forced to reduce state participation to maintain the necessary minimum public spending.

Since the 1990s, a hybrid welfare state regime based on a combination of elements from the Soviet past and liberal market ideas began to take shape in Russia (Cook et al., 2019; Levitsky et al., 2010; Petrov et al., 2014). As will be shown in Chapter 3, the Russian government acts as the main top-down provider of modernisation (Levitsky et al., 2010; Shibanova et al., 2021). As Cook et al. (2019, p. 4) notes "policymaking is a top-down process strongly dominated by bureaucratic actors", in which two government groups play a prominent role: the social block supports social welfare policies, and the financial and economic block seeks to reduce public spending. On the other hand, Russia has developed quasi-corporate institutions, which exert control over and gather feedback from the society. Thus, the hybrid character of the Russian regime includes a particular mix of authoritarian (including electoral and competitive) and democratic elements (Cook et al., 2019; Petrov et al., 2014). As Gel'man (2016, p. 499) notes, the post-Soviet state-led character of modernisation consisted in "achieving major economic and social advances in Russia without free and fair political competition".

The hybrid nature of Russian higher education "as a social right and a commodity with high instrumental and positional value" (Shibanova et al., 2021, p. 273) is based on a combination of state obligations to finance universities and the introduction of marketisation. The balance between state regulation and market mechanisms reflects the extent to which higher education is perceived as a private

or public good. As will be shown in Chapter 3.5, the role of public universities is changing under the influence of marketisation: HEIs receive up to half of their funding from private sources and more than half of students pay their own tuition fees.

By the end of the 1990s, Russia was undergoing a full transition towards neoliberalism especially with regards to the key functions of the state. As mentioned in Chapter 2, thanks to the influence of globalisation processes and NPMs, the role of government institutions and government functions had already been transformed in most nations, especially the wealthy North, by the 1990s (Ferlie, 1996; Fusarelli et al., 2004). While Western countries proposed making the government a helmsman rather than a rower in order to achieve greater efficiency, in Russia it was a necessary measure, since the authorities did not have enough financial resources to support the work of public institutions (Sigman, 2008). The government thus created a public services market and actively promoted the marketisation of higher education.

In Russia, there was no traditional opposition between the market and the public spheres described in Chapter 2. The Soviet Union did not have public services market, and also any kind of legal market (Collier, 2011; Eklof et al., 2004). Therefore, the change from a planned economy to a market economy coincided with the marketisation of all spheres of society. The government turned out to be the main actor in this top-down process. This happened, among other things, because state institutions were the only form of organisation of public life throughout the entire period of the existence of the USSR. The state was hegemonic in politics, economics and public life (Hough, 1997; Savelyev, 1990). This determined the institutional landscape of the Russian higher education system. It was the government that always determined the direction of development of public institutions, including higher education.

3.4. The Marketisation of Russian HE

As outlined in Chapter 2, marketisation refers to a few main areas of work of universities: privatisation, funding, management, competition with other universities, as well as branding. Higher education institutions remained heavily dependent on

decisions and government funding; however, they had to adapt and learn to work in market conditions and act much more independently than before the start of market reforms (OECD, 1999; Rastopshina, 2006; Smolentseva, 1999). Market requirements began to be considered when choosing directions for the development of public universities. Marketisation had a noticeable impact on university managers and academics, who received new opportunities for cross-border co-operation and the generation of additional income. On the other hand, the opportunities for control over their work by various state ministries have greatly increased.

The introduction of market mechanisms in higher education in Russia began in the early 1990s. New laws on education introduced in 1992 and 1996 allowed the creation of private universities and dual funding for public higher education institutions at the expense of tuition fees (Russian Government, 1992, 1996b). Until then, Russia's public universities had no right to provide paid educational services, and all students there were educated at the expense of the federal budget. To compensate for the drastic decrease in budget funding, public universities were forced to conclude additional agreements with private and state companies, offer paid educational programmes and monetise their services.

Russian universities independently developed strategies for working in the new conditions of market competition with private universities and, together with the authorities, developed proposals for further reforms (Platonova et al., 2018; Smolentseva, 2017). As will be shown later, by the beginning of the 2000s, the government managed to overcome the economic crisis and tried to regain control of public universities using market mechanisms (quality control, performance indicators, accountability, etc.). Instead of giving greater authority to work in the free market, the government began to use private business technology to strengthen control over public universities. For example, many universities have established supervisory boards, which should be focused on "compensating for the perceived slow and inefficient forms of university governance with business-like decisions and instruments imported from the private sector" (Gryaznova, 2018, p. 44). Such market-type governance mechanisms were supposed to make universities more responsive to consumer demands. At the same time the number of private

universities was drastically reduced (Zajda, 2016), and state universities received additional funding from the budget.

3.5. Reforms in Russian Higher Education

Researchers identify three main stages in the development of higher education in Russia. The Soviet legacy became the starting point for the reformers in the 1990s, therefore, the tertiary education system that developed in the USSR by the end of the 1980s will be further analysed. By the end of the 1980s, the USSR was experiencing a severe economic crisis caused by a range of domestic and foreign economic problems. To overcome the situation, the Soviet government launched a series of reforms in public life ("Perestroika"). The reforms concerned most spheres of society, including higher education. The abolition of censorship led to increased criticism of government decisions and radicalisation of demands from new social institutions. The failure of the government to take sufficient measures to overcome the protracted economic crisis and the incomplete political reforms eventually led to the collapse of the country.

The reforms of higher education in modern Russia were divided into two periods: before and after 2000. In the 1990s, the government conducted "shock therapy" and large-scale market reforms, providing universities with significant autonomy. The role of the state in managing public universities declined in the 1990s. The reforms of the 2000s were designed to strengthen control over the sphere of higher education, solve the problems of the quality and accessibility of education, and stimulate universities to work in market conditions.

Reforms of higher education in Russia have been ongoing since the collapse of the Soviet Union. Until the 1990s, the Russian university system was based on close ties between universities and the state, a strong ideologisation of higher education, a lack of experience in the education market, and strong development of technical disciplines against a background of weak development of social sciences (Morgan et al., 2012). The market reforms of the 1990s were an attempt at a global reorganisation of all public institutions, including higher education. In order to cope with the effects of the severe economic crisis, the government pursued a top-down marketisation policy. The authorities delegated authority to the local level, using

NPM mechanisms, inviting universities to compensate for the lack of public funding themselves. The government acted in a directive manner and did not take into account the interests of the universities themselves or society (Stoner-Weiss, 2006). In the 2000s, the government embarked on the centralisation of higher education: a unified state exam was introduced for admission procedure, Russia joined the Bologna process (in more detail this European Initiative will be outlined in Section 3.5.2), and the landscape of higher education changed.

3.5.1. Russian higher education reforms in the 1990s: towards marketisation

The collapse of the Soviet Union led to major changes in the politics, economy and social life of Russia. Old communist public institutions have been dismantled or abolished. The Russian Federation declared its commitment to new democratic values: freedom of speech and freedom of the press, democratic elections and pluralism of parties, decentralisation and self-government. Political institutions were radically changed: the country's constitution was adopted, the institute of presidency and a bicameral parliament were created, regional authorities were elected in direct elections, and mass demonstrations took place. The country underwent strong economic changes. The programme of radical market reforms was called "shock therapy" (Azimbayeva, 2017; Bain, 2010). Private property and private enterprises were allowed, the government opened the capital market, and mass privatisation began. Along with other public sectors, a series of higher education reforms has been launched.

As indicated in the Section 3.3 of this chapter, the Soviet system of higher education was not adapted to work in market conditions and graduates of Soviet universities were not ready to work in the new conditions on the labour market. The government sought to integrate the country into the global economy, including through higher education, so the reforms were designed to provide economic and cultural foundations for the development of such interaction.

Reforms in higher education in the 1990s included marketisation, deideologisation, the introduction of democratic principles of university management, decentralisation and increased autonomy of educational institutions. The state's functions in managing public services were declining, and responsibility for their own well-being was transferred to individual citizens (Huisman et al., 2018). The government hoped that the emergence of private property, the decline in state control and political pluralism would lead to the emergence of an educational market that would help overcome the accumulated problems since the former USSR. Free market mechanisms and the humanisation of education were supposed to contribute to positive social development.

The Russian authorities used several tools to implement these plans. The reforms were based on two federal laws: the Law on Education was adopted in 1992 (Russian Government, 1992), and after four years in 1996 – the Law on Higher and Postgraduate Education (Russian Government, 1996b). In addition, the activities of universities were regulated by Presidential Decrees (Yeltsin, 1991a, 1991b, 1994) and documents of the Ministry of Education. Firstly, laws determined the principles of state policy in the field of higher education. Students should have had the opportunity to choose their own universities and fulfil their learning needs. The official goals of HEIs have changed; now the main objective of the university is "meeting the needs of the individual" (Russian Government, 1996b, pp. Article 8, paragraph 2).

The government guaranteed access to higher education and promoted the integration of the Russian tertiary education system into the global context. For example, foreign authors were published in Russia, exchange programmes with international universities were implemented, Russian education was supported by the Soros Foundation, etc. Secondly, new ways of managing the university system were proposed, the relationship between universities and society was changed, and new ways of managing universities themselves were adopted. The government determined the terms of study, set national standards for the quality of higher education, and consolidated institutional autonomy. The process of creating a package of laws to determine the legal status of universities began with support of international organisations and allowed educational institutions to conduct financial activities and manage property.

The reform of higher education in Russia was influenced by the processes of globalisation and international organisations. The Russian Constitution, adopted in 1993, contained a provision on the priority of international law over Russian laws.

Russia was negotiating accession to the World Trade Organisation and pledged to open markets for foreign capital, including higher education. The World Bank had promoted the need for administrative and financial reforms in higher education based on neoliberal standards of efficiency and accountability (Boutillon, 2018, p. 28). For example, in 1997, the World Bank launched a programme to encourage new university management systems and improve the efficiency of universities, and also promoted the need to improve the quality of teaching social sciences (Gounko et al., 2006, p. 327). With the support of the World Bank, the Russian authorities launched programmes to increase efficiency, control the quality and measurability of results, market and increase the accessibility of higher education (Canning et al., 1999). University management was decentralised, and UNESCO international standards were used to account for and evaluate the quality of university work (Balzer, 1994; Karran, 2009; Zajda, 2007c, p. 31). OECD also offered specific recommendations and development directions to address the issues of quality of education, ensuring equal access and university management (OECD, 1999, 2005).

The government has consistently treasured its influence on public universities. Most public universities have received full independence in admission of new students. In order to overcome the financial crisis, universities were allowed double financing of educational programmes by charging tuition fees. The government could not maintain the level of funding for research and teaching and encouraged universities to search for new sources of income. Universities began to lease their property and conduct research for private companies, tuition fees allowed to increase the number of students, as well as the cost of higher education for ordinary citizens (Konstantinovskiy, 2017).

The Soviet higher education system was heavily ideologised, did not meet the needs of individual students and was heavily dependent on government decisions, some areas of research were banned or not developed. On the other hand, universities did not care about where to find funding, the Soviet government ensured the stable existence of state universities. Shishkin (2004); Ukhova (2014) note that a decrease in state control over the admission process after the collapse of the USSR, the emergence of tuition fees and new educational programmes have led to increased inequality, increased social tension and reduced access for

Russians to higher education. The OECD (1999) study indicated that reforms of the Russian government in the 1990s had several significant problems. Regional authorities increased their influence against the backdrop of a weakening federal centre and dictated their conditions for local universities. The Vice-Chancellors of individual powerful universities could in fact ignore the central authorities' recommendations (Froumin & Kouzminov, 2018). The federal government did not have sufficient finances to modulate the system as a whole and individual universities in particular.

Reforms of the 1990s contributed to the emergence of private universities, which had a significant impact on the higher education system in Russia. All universities in the Soviet Union belonged to the state, and private enterprises did not exist. The Russian government allowed not only the creation of private industrial companies, but also the creation of private universities (Repneva, 2011). This has led to a significant increase in the number of private educational institutions, as well as paid educational programmes in state universities. New educational institutions contributed to meeting the demand for humanitarian educational programmes and offered more flexible terms of payment for tuition than public universities. Private universities did not have a tradition of teaching and their own research base. They were created mainly as commercial companies, focused primarily on making a profit (Zajda, 2016). Private universities not only competed with public universities, but also offered jobs for employees of state educational institutions. In a period of low budget funding, many teachers combined work at two universities.

3.5.1.1. New Public Management and Higher Education

Many of the reforms in Russian public services, including HE, mirrored the new public management approach. Efforts were made to guarantee responsibility while decreasing the money spending on the administration side. The legislature increased focused funding, which ended up being a key change between existing foundations of higher education. The legislature allowed private universities to issue higher education diplomas. These changes indirectly affected public higher education institutions. The management of public higher education, viewed from the perspective of NPM, implies the cutting of spending plans, it made and expanded

challenge, enhanced the control and acquainted components with the higher education divisions.

As indicated by Shattock (2008, p. 32), the impact of NPM has primarily affected university governance, financial issues and positioning assessment. The NPM has helped in presenting the components of marketisation in the higher education segment. It has diminished the state spending plans and made them more aggressive. The government used the principles of NPM in its work and hoped that public universities would start working on the same basis. The new public management has been significant in conceding universities independence and supplementing it with verticalised administration structures. Pollitt et al. (2011, p. 54), express that it is difficult to assess the impacts of the NPM in marketisation of higher education.

As a result of the reforms of the 1990s, the sphere of higher education in Russia has undergone significant changes. The role of the state in managing public universities has changed. The government remained the main actor in the field of Russian higher education, but significantly reduced its influence. The decline in public funding, new management methods and new goals in training and research have changed the organisational structure of the higher education system. Public universities got the opportunity to operate in the open educational market, to take tuition fees and compete with private educational institutions. The main directions of the industry development were formed taking into account the recommendations of international organisations. The nationwide economic crisis and the lack of budget funding have created numerous problems for Russian higher education. The government reformed all sectors of the economy and was unable to maintain the previous level of budget financing. Universities found themselves struggling with working in market conditions and maintained a sufficiently large inertia. Researchers indicate that the negative results of the reform were related to the cultural influence of the Soviet past (Dent, 2012; OECD, 1999; Zajda, 2016). The transition from a planned economy to market-based management has proven to be a complex and poorly controlled economic policy.

3.5.2. Russian higher education reforms since 2000: back to the future

By the beginning of the 2000s, many unresolved problems relating to university management, the content of academic programmes, and outdated research and teaching technologies had accumulated in Russian higher education. A decade of meagre funding and a lack of market experience had led to a decrease in the popularity of the profession of a scientist and a high level of emigration. The average salary of teachers was below market (Maleshin, 2016; Shirin, 2015). The average age of academics has been increasing every year (Smolentseva, 2003, p. 403), the problem of attracting new personnel to universities has grown. During the 1990s, universities barely survived and were unable to invest in updating the material and technical base. Access to new information technology needed to be improved (Canning et al., 2004, p. 8). In turn, these factors affected the partial loss of the level of polytechnic research, which was traditionally strong in the USSR.

The massification of higher education has brought yet another challenge to university management. By 2000, the number of students studying in Russia doubled compared to 1990 (Platonova et al., 2018; Smolentseva, 2017). Smolentseva (2017) cites statistics according to which 2.76 million students studied in Russia in 1991, 4.74 million students in 2000, and by 2008 the number of students increased to 7.5 million people (later this indicator decreased due to demographic recession of the end of 1980-90). The number of places with full state scholarship from 1995 to 2005 increased by only 20%, while the number of students paying for their studies at state universities increased by 92%. The government continued to guarantee free tuition for the most gifted students, as well as for orphans and children from poor families (Froumin et al., 2014). It was necessary to rebuild the traditional university management structures in order to manage the increased number of students and maintain the accessibility and quality of teaching.

In 2012, the government amended the Federal Law on Education to enshrine the statement that education is a "public good" but is realised to meet the "educational needs and interests" of individuals (Russian Government, 2012). The ideas of higher education "as a personal good" enshrined in the 1996 Law on Higher

Education have been supplemented by the more conservative position that education is primarily a "public good".

In the early 2000s, the Russian authorities formulated the main priorities for the development of higher education by preserving "the best Soviet traditions" (Kuraev, 2014, p. 14) and using new approaches to teaching and research. The government invited public universities to update educational programmes and improve the quality of student training so that graduates met the requirements of the labour market. According to Mushketova et al. (2018, p. 47), the development of the market potential of universities is directly related to the internationalisation of the labour market and the growing need for skilled workers. Therefore higher education should maintain its high quality, become more accessible and consistent to current trends (Putin, 2014). To ensure access to education, it was necessary to open new dormitories for students and increase scholarships. Employment of graduates began to be used as an indicator of the relevance of training programmes, since in the late 1990s a lot of recent students could not find a job according to their educational profile (Fursova et al., 2014; Konstantinovskiy, 2017). The government invited universities to establish partnerships with business and thus receive additional funding (Sigman, 2008, p. 10). To preserve the quality of higher education, educational standards and unified application examinations have been introduced.

A unified state exam (USE) for school graduates has also been introduced in order to improve the quality of education and reduce corruption in university enrolment (Johnson, 2008; Shirin, 2015). The academic community perceived this reform ambiguously, as the examination mechanism was not perfectly worked out (Gounko et al., 2006). Universities lost control over applicants and could not conduct traditional entrance tests (oral or written exams). An essential part of the exam is a test in which you need to choose the right answers to questions. Despite the fact that additional "creative parts" were introduced in many subjects, critics of the reform pointed out that standardisation ultimately reduces the quality of teaching and does not show the real level of students "knowledge" (Canning et al., 2004; Gurova et al., 2015). The government regained some control of higher education by establishing the admission procedures, and not just by increasing budget funding.

The reforms of the 2000s resulted in the creation of a multi-level system of public universities. The government has authoritatively adjusted the university separation system that has existed since the Soviet Union (see Section 3.2). Two of the country's oldest universities - St. Petersburg State University (SPSU) and Moscow State University (MSU) received special funding and the opportunity to conduct independent admission exams (not the national USE that was mentioned above) (Gryaznova, 2018, p. 41). At the next level of the pyramid are the leading national research universities with a strong research profile (able to create new knowledge and effectively interact with the innovative industries). Federal universities were created (usually by combining several local universities) in each of the country's federal districts in order to improve the socio-economic development of individual territories (Holdsworth, 2008; Smolentseva, 2010). Finally, other public universities will offer undergraduate and graduate programmes. The government continued its policy of interfering in the higher education market, as a result of which the total number of universities was to be reduced. They planned to unite some of the regional universities, and economically inefficient universities, which were unable to implement the required educational programmes, and recommended that they should gradually be closed down. Nevertheless, in terms of the number of students, Russia occupied the fifth place in the world in 2009 (British Council, 2012, p. 45) and the popularity of higher education remained consistently high.

To manage a multi-level system, the government planned to use European educational standards, so in 2003 Russia joined the Bologna process. The European initiative to harmonise educational programmes in different universities had its supporters and opponents both in Europe and in Russia (Boutillon, 2018; Gänzle et al., 2009; Luchinskaya et al., 2011; Telegina et al., 2012). Mutual recognition of degrees and a universal system of educational loans made it possible to facilitate interaction between universities and issue diplomas of an international standard. The law on a two-tier system of higher education was adopted only in 2007, but even after the adoption of the law, a large number of students continued their studies according to the traditional "specialist" degree. By 2009, the system was launched Quality Assurance in the European Higher Education Area (ESG). As Boutillon (2018, pp. 77-78) notes, the Bologna declaration is a part of the

marketisation process and implies that European higher education has become part of the global knowledge economy.

The Russian authorities continued to implement the principles of NPM through performance management and subsidising the most successful public universities. The government launched the National Education Project in 2005, along with similar projects in other social areas such as "Healthcare" and "Affordable Housing" (Russian Government, 2019). The government has announced additional support for higher education institutions on a competitive basis (Platonova et al., 2018). The best universities should have received additional funding for intensive modernisation. It was assumed that universities would create innovative educational programmes, strengthen co-operation with business and introduce new managerial technologies. The winners will receive government grants for the modernisation of infrastructure and staff development (Zajda, 2016, pp. 156-157).

Russia increased its presence in the international higher education market and competed with other countries for international students. In 2012, a project was launched to increase the academic competitiveness of leading Russian universities 5-100 by analogy with similar programmes in other countries (Agasisti et al., 2018, p. 3). The authors of the programme planned that by 2020 at least five Russian universities will fall into the top 100 international university rankings. For this, various performance indicators have been introduced, such as the number of international students. If we take into account citizens of the CIS countries, in 2018 the number of foreigners studying in Russian universities exceeded 240,000 people (Leskina, 2019, p. 15). Strong universities with good starting positions in teaching and research were selected to participate in the program. The government has developed courses to provide additional financial assistance and promote universities in the international arena. The government also developed step-by-step recommendations for each of the universities of the project (Gryaznova, 2018, pp. 42-43). Based on such recommendations, each university has drawn up up its own development roadmap. Roadmaps include market-oriented management models, programmes for attracting students and teachers, as well as other key areas of university development. Depending on the results of the implementation of the roadmaps, the government annually provides additional funding on a competitive basis.

Over the past 30 years, higher education in Russia has been repeatedly reformed, and often such reforms resemble a roller-coaster. In the 1990s, the government launched a series of radical economic reforms and introduced private universities. Due to the lack of funding, public universities were also forced to use any opportunities to obtain additional sources of income. Despite the general economic and political crisis, the government tried to maintain control over public universities and guarantee free higher education by analogy with the period of the USSR. Thus, a fully-fledged market for higher education was not created, but the reforms allowed public universities to survive.

Over the first decade of reform, a large number of different problems have accumulated: a lack of funding, low salaries, corruption, outdated equipment and poor-quality education (Beliakov, 2006; Fursova et al., 2014; Osipian, 2012; Shirin, 2015). A significant increase in the number of private universities was barely controlled by the state and occurred on the principles of an almost free market. The new universities acted as fully-fledged entrepreneurial companies to maximise profits. Radical changes in the labour market led to high unemployment on the one hand, and high demand for specialists with higher education in the service sector (managers, marketers, financiers, etc.). All the factors described above led to the actual radical marketisation of higher education in Russia.

In the 2000s, the government decided to regain control over the field of higher education in order to solve the problems that had accumulated during the first ten years of reform (will be discussed in more details in the Section 3.6). Universities have become more accountable to the government, educational standards have been introduced, and state accreditation of universities has been strengthened. Public universities received more funding from the budget in order to attract new academics and upgrade equipment. Many public universities were disbanded or merged (especially outside of Moscow and St. Petersburg). These reforms indicate the demarketisation of higher education. On the other hand, Russia became part of the Bologna process and introduced a unified state exam for admissions.

The government continued to provide funding to public universities on a competitive basis and to monitor the work of higher education institutions based on quality assessment and KPI. Thus, the Russian government was not able to completely restructure the higher education system and acted, taking into account the legacy of Soviet public institutions. Subordinate to the economic interests of the state, higher education in the Soviet Union, despite the declared humanistic values, turned out to be subject to the new market requirements of the neoliberal economy (see. Marketisation Section 2.5). The government only strengthened control over higher education and formed a special institutional landscape.

3.6. Institutional Landscape of Russian Higher Education

The institutional landscape of Russia's modern higher education system has been shaped by several factors that need to be examined to determine the impact of marketisation processes on the operation of public universities. First, the Soviet legacy defined the basic characteristics of higher education (types of universities, funding principles, etc.). Second, the market reforms of the 1990s gave public universities more autonomy and created a more complex hierarchy of universities. Thirdly, changes in the labour market facilitated the emergence of new educational programmes and the massification of higher education. Fourthly, Russia joined the Bologna process (see Section 3.5.2), which led to standardisation of educational programmes and division of education into Bachelor and Master programmes. Fifthly, the admission procedure for public universities was standardised and a unified state examination (USE) was introduced. Sixth, universities are required to undergo state accreditation to receive federal funding. Finally, further reforms have led to a reduction in the number of universities and a more complex structure of the Russian higher education system. Key factors, which have influenced Russian public universities along with the processes of marketisation, will be discussed in more detail below.

The Soviet higher education system formed the basis of the Russian university system. Soviet Russia (RSFSR) was the largest republic within the Soviet Union and spent more on higher education than other regions. The RSFSR accounted for 39% of all spending on higher education in the country. Seventeen

per cent of expenditure on higher education amounted to all expenditure on education spent by the authorities of Soviet Russia (*High school in 1991: annual report on the development of higher and secondary specialized education*, 1992). The RSFSR was a federal republic and included dozens of regions that became separate regions and part of the Russian Federation. This feature has determined the need for the distribution of state universities across the country to ensure regional development. The two largest cities accounted for 24% of universities (82 higher education institutions in Moscow and 41 in St. Petersburg), in which more than 28% of the total number of students in the country studied (Platonova et al., 2018).

As noted in the previous Subsection 3.5, universities were subdivided into regional, specialised, and traditional academic. In each region, there were usually three to four universities of different types, depending on the size of the population and the needs of industry. Most universities were regional and subordinate to relevant ministries (Dent, 2012; Johnson, 2008). By the time of the collapse of the USSR, there were 514 universities in Soviet Russia, in which more than 2.8 million students were studying, of which 58% studied full-time, 32% went extramural and 10% went to evening courses (Huisman et al., 2018). The system created in the Soviet Union focused on practice-oriented education and inherited the principles of the Humboldt tradition, borrowed from German universities (According to Anderson (2010), Humboldt's central principle was the "union of teaching and research", where students and teachers are engaged in an unselfish search for truth). Universities were ideologised, completely subordinate to the state and worked in the interests of a planned economy.

The current state of the institutional landscape of higher education in Russia was formed as a result of a series of reforms that were studied in detail in the previous Section 3.5 of this study. In the 1990s, the basic laws on education were adopted, and public universities were granted greater financial and structural autonomy. Government funding and control declined significantly. Since the early 2000s, the government has begun to regain control of public universities. The government created the first support programmes for national research universities and federal universities; the hierarchy of public universities has become more

complex. In 2012, a new law on education was adopted, which marked the beginning of new reforms of the institutional structure of higher education. The government has actively used the principles of new public management to assess quality and determine the most effective universities. Monitoring the activities of educational institutions based on KPIs has become the basis for reducing the number of universities through mergers and reorganisations (Smolentseva et al., 2018). A project for increasing academic competitiveness 5-100 was launched, aimed at improving the positions of leading Russian universities in international rankings.

Economic reforms in Russia led to the emergence of private universities. The elimination of the state monopoly on education, the decrease in the importance of STEM disciplines and the increasing popularity of social disciplines, the diversification of funding sources, the massification and support of international organisations led to the rapid growth of non-state universities. At the same time, the quality of education decreased, and weak private universities appeared that did not provide real knowledge to students (Maleshin, 2016; Zajda, 2003). As a result, the government tightened state control over the private higher education market and getting a state license and accreditation has become more difficult. The number of private universities has decreased to 29% of the total number of universities, and the number of students at these universities does not exceed 10% of the total number of students enrolled in higher education programmes in the country (Ministry of Science and Higher Education of the Russian Federation, 2020b). Public universities used the experience of private educational organisations to create new educational programmes that are in demand on the market.

Along with marketisation, the landscape of higher education in Russia was influenced by changes in demand for selected educational programmes. As noted in the previous Subsection 3.5.1 of this chapter, Russia experienced major changes in the economy in the 1990s. The service sector, financial sector, management and public administration have grown significantly. At the same time, many former Soviet enterprises in the "real sector of the economy" were reorganised or went bankrupt. In 1991, the value added of services amounted to 36.7% of GDP, and in 2017 the same indicator grew to 56.3%. A similar indicator of the industry decreased from

45.9% in 1991 to 30.5% in 2017 (World Bank Open Data, 2019). Most employers required a university degree. As a result of such processes, the demand among students for STEM programmes decreased, and the popularity of social sciences increased (Gimpelson et al., 2007).

Massification of higher education has significantly changed the nature and structure of higher education institutions in Russia. As noted in the previous Subsection 3.5.1, in the 1990s the government headed for the humanisation of higher education. The rapid growth of the service sector required qualified specialists. The number of students grew annually until 2008 and still remains one of the highest in OECD countries. In 2017, The Russian Federation has one of the highest tertiary attainment rates across OECD countries, at 63% of 25-34 year-olds compared with the OECD average of 44% (OECD, 2019). In terms of Tertiary enrolment rates from age 19 to 20, Russia ranked second among OECD countries. Massive demand has doubled the number of universities from 1991 to 2012. Public universities have opened campuses and branches in other cities to meet the demand for higher education. Given the low social mobility of the population and the low level of income, this decision of universities was in demand in the educational market. Mass demand has led to increased part-time educational programmes and evening education, which were not funded by the government.

The Bologna process (referred in more detail in the Section 3.5.2) has become another factor that has changed the landscape of higher education in Russia. The government has reformed the university system in accordance with the neoliberal ideology of creating a knowledge economy (see the previous Section 3.5 on higher education reforms). The main goal of the process was wider internationalisation and participation in the global system of higher education (Huisman et al., 2018). The transition to a two-level system of education (undergraduate and graduate programmes) was launched in 2003 and within a few years most educational programmes should have been reformed (Esyutina et al., 2013). Universities began to use the European system of educational loans and quality control of education (ECTS).

The standardisation of university admission procedures was implemented using the unified state exam (USE), which was discussed in more detail earlier. The

exam was introduced to improve accessibility and equal access to higher education. USE also increased student mobility and opened up opportunities for universities to attract talented applicants from all over the country (Froumin et al., 2014). The government has received a new tool for assessing the success of certain universities. The exam is held for all graduates of schools and its results are used to make decisions about admission to universities: "90 per cent of all secondary school graduates will be admitted to post-secondary institutions based on the results of the USE" (Gounko et al., 2006, p. 333). Public universities can charge tuition fees, so students with low scores choose paid educational programmes or educational institutions with low competition. A higher passing score correlates with the number of talented applicants and the quality of teaching. The government uses this indicator to create a university hierarchy based on prestige and student demand.

The USE has gradually become the main instrument for measuring the quality of education and the prestige of universities, although it was conceived as a way to ensure the accessibility of higher education and transparent assessment of the achievements of students (Gurova et al., 2015). The Unified State Examination has become part of the process of centralisation and increasing the efficiency of educational institutions. A comprehensive system for assessing and monitoring the quality of education was created as part of the State Programme for the Development of Education for 2013-2020 (Russian Government, 2013). The state authorities tightened the regulation of universities, introduced criteria for assessing achievements in the field of education, as well as independent quality assessment procedures based on expert opinions and the work of universities in the international market for higher education.

The government monitors the quality of education and accreditation of universities annually publishing more than 140 indicators for each university, some of which are performance indicators (research, teaching, international activities, financial stability and teachers' salaries. Monitoring of public and private universities is provided by the Federal Service For Supervision In Education And Science (Rosobrnadzor, 2019). Based on these data, a large-scale reorganisation of public universities and their branches took place: more than 50 universities and more than 500 branches have been reorganised (Platonova et al., 2018). Thus, many public

universities have been reformed and merged with each other, and many private universities have ceased to operate. As a result of the reforms, 710 universities (497 public and 213 private) are operating in Russia by 2020 (Ministry of Science and Higher Education of the Russian Federation, 2020b). The changes have been based on the recommendations of international organisations on the basis of results-based management, marketisation and NPM.

Officially, all higher educational institutions in Russia are divided into three types: institutes, academies, universities (Rosobrnadzor, 2019). In order to receive more stable public funding and increase student attractiveness, many institutes upgraded their status to universities in the 1990s (Bain, 2003). Despite market reforms in the 1990s and decentralisation policies, the Russian government has retained sufficient influence over universities and continues to strengthen it. Only a small number of public universities are subordinate to regional authorities and more than 95% of state funding comes from the federal level (Froumin et al., 2015; Huisman et al., 2018). The new edition of the Federal Law on Education introduced additional categories of universities: federal and national research universities (Russian Government, 1996a). Also, the two oldest universities (Moscow State University and St. Petersburg State University) received special status and funding. As outlined earlier, in Russia the system of subordination of individual universities to line ministries has been preserved. In addition to the Ministry of Education, another 21 different government bodies oversee the work of public universities. Most universities report directly to the Ministry of Education.

The government has created a system of vertical hierarchy of public universities, emphasising the special status of leading universities. Unlike the Soviet Union, the authorities of the new Russia stimulate the development of research at universities through several special federal programmes and funds. The first such programmes appeared in 2006, when the government launched the process of creating federal universities (like "macro-universities", combining several local educational institutions). In 2008, the government began to create national research universities (NRU), which received more funding for the creation of new academic programmes and international promotion. Authorities annually assessed the effectiveness of the NRU based on the KPI. As outlined in this study earlier,

universities participating in the 5-100 programme received special status. Universities 5-100 recruit students with the highest USE results and are significantly different from other universities (Yudkevich, 2017). Additional support of the federal authorities led to the strengthening of the positions of these universities in international rankings, a significant increase in publication activity and increased popularity among students.

Platonova et al. (2018) proposed the university structure in modern Russia based on several factors: the number of students, the number of paid students, part-time training, research areas, the number of undergraduates, USE indicators and state support. Six groups of universities were identified. Research universities accept students with high USE scores, have a large number of master's programmes, are additionally supported by the state and offer mainly full-time education. Large federal universities are located in the regions and focus mainly on teaching a wide range of disciplines. Specialised universities offer a small set of academic disciplines and a high competition for admission (mostly medical universities). The largest group of mass universities has been designed to satisfy demand and equal access to higher education. Private universities are divided into three groups: elite highly specialised educational institutions, universities of a wide profile with a low introductory score and open universities focused on distance learning.

The institutional landscape of higher education in Russia was formed on the basis of the Soviet university system. Market reforms and a radical decrease in budget funding led to the emergence of private universities and the introduction of paid education in public universities. The neoliberal policy of the authorities, combined with the massive demand for higher education, forced universities to learn to operate in market conditions, while maintaining the traditions of Soviet higher education. The Bologna process, the Unified State Exam and the strengthening of centralisation in the 2000s led to increased state control over the sphere of higher education using NPM mechanisms. The government created new federal universities to meet the regional needs of the economy, and also offered additional support for leading universities to improve the position of Russian higher education in the international market. Quality control of education was ensured through the

reorganisation of branches of public universities and more stringent licensing of private universities. These and other factors of marketisation of higher education in Russia will be discussed in the Section 3.7.

3.7. The impact on Marketisation at Russian Universities

In Russia, as in many other countries over the past 30 years, higher education has come to be seen as part of the new knowledge economy. This Section will describe in more detail the key reforms and marketisation mechanisms of Russian public universities. As was described above public universities were forced to start competition with private educational institutions (Dent, 2012; Vakhitov et al., 2013), as well as work in the international educational market and compete for budget funding (Agasisti et al., 2018). Paid educational programmes have changed the perception of students as an additional source of funding (Maximova-Mentzoni, 2009, 2012; Nixon et al., 2018). Market competition has affected the work of university employees — managers and professors (Huisman et al., 2018; Smolentseva, 2017). Research and teaching have changed under the influence of market reforms (Boutillon, 2018; Smolentseva et al., 2018), which have affected higher education as one of the public service sectors.

The marketisation of Russian universities has become part of the process of commodification and privatisation of public services (Geroimenko et al., 2012). Firstly, partial privatisation of material assets of universities was carried out (some premises, buildings and equipment were privately owned). Secondly, some of the services not related to research and teaching were outsourced to private companies (catering, cleaning, medical services, Internet access, etc.). Thirdly, the government focused on increasing nonstate funding for public universities, which reached more than 41% in 2018 (Bondarenko et al., 2018, p. 98). Fourthly, universities are expanding areas of activity that are profitable, and subordinate enterprises are being created to promote the commercialisation of education. Finally, the direct management of universities has declined, the state uses neoliberal indirect NPM methods to control the activities of universities in market conditions.

As the Russian government moved to a neoliberal ideology, universities were forced into a new era of marketisation as part of globalisation processes. To save

the university system from destruction in the beginning of 1990s, the Russian government allowed public universities to charge tuition fees (Canning et al., 2004; Gleizer, 2002). As a result of top-down marketisation reforms (Bain, 2015; Kuraev, 2016), the relationship between government and universities has been completely changed. The Soviet centralised system of higher education management was replaced by decentralisation and greater university autonomy (Dent, 2012; Zajda, 2007a). As in other areas of public life, the government has introduced performance based management, key performance indicators, and quality control of teaching for public universities (Platonova et al., 2018).

In parallel with the development of the new higher education market, the crisis of public universities worsened in 1990s. The government could not cope with the provision of social obligations and in 1998 declared a default. At that time, the funding allocated by the state per student of a public university has decreased by 70% compared with the late 1980s (Platonova et al., 2018). Public universities did not receive sufficient funding from the state, as it was during the previous 70 years in the Soviet Union (Azimbayeva, 2017; Beissinger, 2002). Total spending on higher education fell from 17% in 1988 to less than 10% in 1999. Universities were forced to actively seek additional sources of income. Most public universities were not even able to pay utility bills. To overcome the crisis, universities were forced to lease premises to private companies and launch paid educational programmes (Bray et al., 2001; Chowdhury, 2003; Karpov, 2013). However, direct privatisation of educational institutions was not carried out.

After improving the economic situation in the country in the 2000s, the government regained more control over the field of higher education (Bain, 2015; Zajda, 2007c). The government was concerned about the declining quality of higher education and the over-reliance of many universities on additional profits from teaching and research (Gryaznova, 2018; Konstantinovskiy, 2017). Therefore, many private universities were closed or did not pass state accreditation. The government borrowed management methods from the Soviet era, combined them with new NPM approach and organised multilevel control over public universities using market mechanisms. As a result of marketisation reforms, a free market for higher education was never created, as the government remained the central player

for all kind of universities in Russia (Huisman et al., 2018). The level of students influence on universities has also increased.

3.7.1. Students as a source of additional income

Since the end of 1990s public universities began to consider students as a source of additional income. During the economic crisis, university leaders tried to receive and maximise funding from the state, as well as adjust revenues from extrabudgetary sources. Universities expected to invest tuition fees in material resources (procurement of materials, equipment of laboratories, repair of campuses). For example, at Moscow State University it was planned to receive additional income from a business school at the Faculty of Economics, language courses at the philological faculty and the training of international students (Kulakov, 1993). The number of students paying for their studies began to grow (Jones, 1994). By 1995, only 13.7% of students paid for their studies in public universities, and after 2000, more than 40% of students in state universities paid for their studies on their own (Platonova et al., 2018). Considering paying students at Russian universities (state and private), more than 60% of students study in Russia at their own expense. Russia still does not have a system of educational credits for university studies. Private foundations do not offer education loans. The government subsidises universities, which provide places for education at the expense of the federal budget. A student cannot receive money from the government directly and spend it on a university of their choice. For example, applicants could choose universities which have 'budget places'. Thus, there were and are no specialised private funds or direct state-backed educational loans in Russia.

Students got the opportunity to pay for their studies at public universities. Competitive selection on admission was stimulated by a limited number of places with budget funding. Students perceived higher education as a personal good and an opportunity to improve their financial situation in the future. Universities began to perceive students paying for their studies as clients and created popular educational programmes. Also the high demand for educational programmes for new sectors of the economy has forced many universities to create new areas of teaching. Most public universities in modern Russia, including traditionally technical universities,

have management and marketing degree that are in high demand among applicants (Peter the Great St.Petersburg Polytechnic University, 2019). Humanities education programmes, which generate little profit, are left out of research and receive a minimal share of the total university budget. A significant proportion of public universities population are self-paying students (Pachuashvili, 2008).

The massification of higher education has contributed to the increasing importance of paid education revenue for universities. 2.64 million people studied at Russian universities in 1995, and in 2005 this indicator grew to 5.42 million (Ministry of Science and Higher Education of the Russian Federation, 2018). The government increased quotas for student education at the expense of the federal budget from 1995 to 2005 by 20% (Smolentseva, 2017, p. 8). At the same time, the number of self-paying students increased by 92% (Azimbayeva, 2017). Demand for higher education programmes grew annually until 2014, and thanks to the opportunity to receive a "budget place" and not pay tuition fees on their own, most students tried to enter state universities. The consolidation of universities, the reduction in the number of private universities, demographic and economic factors have led to a reduction in the number of students in Russian universities to 4.04 million in 2020 (Ministry of Science and Higher Education of the Russian Federation, 2020a).

Decrease of budget funding, changing the perception of students as clients and creating market-oriented educational programmes can have serious consequences for the Russian higher education system. The high level of competition and autonomy of universities leads to a stronger stratification both among educational institutions themselves and in society (Zajda, 2003, 2006). As noted in the Section 2.5 of this study, increased social stratification may be one of the consequences of marketisation along with increased contradictions between private and public universities.

3.7.2. Public universities under pressure from private institutions

Marketisation has also influenced the perception of higher education institutions in society (Marginson, 2017). In the Soviet Union, higher education was free, and the employment of graduates was guaranteed by the state (Kuraev, 2016). The market economy implied competition for working places, an opportunity to

receive paid higher education. Market reforms have created new sectors of the economy (especially in the service sector) that did not exist before (Konstantinovskiy, 2017). The traditional perception of public universities as places for the training of highly qualified specialists and the new demands of the economy have led to an increase in the demand for training. Higher education has become a kind of "social norm" (Smolentseva et al., 2018, p. 15) and universities had to adapt to the new requirements of mass education.

Russian society perceived public and private universities in different ways, as well as training in technical and humanitarian specialties. State universities had a rich history and were famous for the high quality of training of students in applied science (STEM) (Flander, 2019, p. 10). Public universities also possessed the necessary facilities and resources from the Soviet period (Canning et al., 2004; Kaufman, 1994). On the other hand, private universities quickly adapted to market requirements and offered modern educational programmes in the professions that are in demand in society. Education in private universities was considered less prestigious, because these higher education institutions did not have a strong brand and resources (Altbach, 2017, p. 18). The quality of private higher education was poor due to the desire to maximise profits in the first place and the lack of serious academic research. Gradually, public universities also began to offer paid, and state funded educational programmes in the humanities.

The development of private universities has had an ambivalent effect on higher education. On the one hand, private universities could independently determine the cost of training and satisfy the massification of higher education. On the other hand, the population expected from private universities the same high quality of education as in public universities that inherited strong engineering developments from the time of the USSR. In reality, many private universities offered weak educational programmes and did not have sufficient resources to teach technical disciplines (Yudkevich, 2017, p. 113). The number of private universities grew rapidly throughout the 1990s and reached more than 700 universities by 2003 (Zajda, 2016, p. 155). The majority of students enrolled into private universities studied mainly humanities. As outlined earlier, many professors at public universities combined teaching at private universities with their main job.

As a result, private higher education institutions became dependent on external employees. Private universities were often created primarily for profit and did not care about the quality of education or academic reputation (Suspitsin et al., 2007, p. 72). On the other hand, private universities contributed to the growth of public universities marketisation: state universities received additional arguments to justify the introduction of paid services and courses by analogy with private education organisations.

Public universities for a long-time lost competition with private ones for solvent students. Business perceived higher education mainly for income generation, since a strong material and technical base was not required for teaching popular programmes (Repneva, 2011; Suspitsin et al., 2007). Private universities did not have an established academic reputation, and humanitarian education in the Soviet Union was so politicised that the legacy of the past was almost impossible to use in a market economy. Therefore, the quality of teaching and research at most of the new private universities in Russia turned out to be quite low. Historically, the Russian state has guarantee the quality of higher education, but the introduction of educational standards gives an advantage to large public universities and does not allow solving the problem of "diploma mills" (Suspitsin et al., 2007, p. 78).

The above reasons have shaped public opinion, according to which state universities offer better education. Admission market competitive mechanisms for the right to receive state scholarships that fully cover the cost of education have created a high level of competition between applicants. Private universities offered more flexible study programmes for those who could not enter the budget places (Marginson, 2016, 2017). Universities provided a way to achieve personal good in public opinion. Massification of higher education has taken place; the number of students has steadily increased annually from 1995 to 2008 (Smolentseva, 2017). The number of people graduating in a cohort of 20-24 years exceeded 30% (OECD, 2016, p. 30). And more than 90% of enrolment in higher education in Russia among 20-year-olds (OECD, 2018, p. 155). Marketisation process has changed the perception of higher education in society significantly: university studies have become widespread and necessary for obtaining highly paid positions in business.

3.7.3. Private Industry influence

Public universities have also been influenced by marketisation and have had to develop relationships with companies on market terms, conduct research for business and adapt their educational programmes to labour market demands (where the employers are also mostly private companies). In the USSR, many universities were subordinated not only to the Ministry of Education, but also to the related ministries (Savelyev, 1990). This made it possible to train qualified work force for many sectors of economy and for the needs of large corporations (railways, nuclear industry, oil industry, etc.). Market reforms destroyed the old ties of the planned economy, but enterprises still needed employees (Qi, 2016; Senashenko et al., 2012). Therefore, universities were forced to re-build relations with industry on a market basis. Private and state-owned companies began to use universities as a base for R&D (Lisitskaya et al., 2018; Smolentseva, 2010). The government is pushing universities to increase revenues from extrabudgetary sources, including through the execution of orders for industrial enterprises.

Marketisation had a strong influence on the relationship between business and universities. Firstly, public universities have increased interaction with public and private companies. Thirdly, business uses universities as a source of personnel for its activities and has looked for future employees among promising graduates. Neoliberalisation brought about explicit structural transformations to the Russian economy which led to a major expansion of the higher education sector (Sachs et al., 1994, p. 101). In the 1990s, businesses "experienced a dramatic loss in the number of employees amounting to 36%. Industry sectors that that experienced higher loss of employees were agriculture (20%), construction (23%), and transport (16%)" (Gimpelson et al., 2007, p. 4). These changes had a direct impact on university education was then provided according to market demands. It generated a market sentiment which led to a perception that there was an emerging decline in demand for "hard sciences". Universities have changed the direction of research due to the lack of interest in the development of private enterprises (Huisman et al., 2018, p. 339; Oxenstierna, 2016, p. 60).

3.7.4. Increased competition

Universities compete with each other not only for contracts with business, but also for positions in rankings, for budget funding, for attracting employees and students in the educational market. The government has implemented market reforms that have encouraged the use of market economy principles in universities (Berman et al., 2016; Van Dooren et al., 2015). Thanks to the economic crisis of the 1990s, universities were forced to compete with each other for budget funding and look for ways extrabudgetary funding (Sigman, 2008, p. 16). Universities created paid educational programmes and advertised them to attract a larger number of applicants. At the same time according to Yudkevich (2017, p. 118) "no matter how much extra funding these universities receive or what special status they get, they are still constrained by university-state relations and existing mechanisms in the sphere of academic recruitment, teaching workload and other requirements imposed by the state".

Double funding has affected competition between students and between universities. By law, a student could apply for state funding on a competitive basis. The popularity of such programmes was higher, since the student not only paid nothing on their own, but also received a state scholarship. If the results of entrance exams were not high, then the student could independently pay for tuition at a public or private university. Public universities use a single ranking system in which students with the highest scores enter a limited number of budget places, and all others are offered paid tuition on the same educational programmes. Thus, a system was formed in which the most motivated and successful students go to state universities.

With increased centralisation and increased control after the 2000s (Gryaznova, 2018, p. 40), public universities began to compete more with each other for budget funding. The government used market performance indicators and rankings to subsidise public universities. The open borders and the influence of international educational organisations have allowed Russian public universities to establish co-operation at the international level and compete with universities from other countries for international students (Altbach et al., 2015; Stukalova et al.,

2015). In 2013, the Russian government launched the Russian Academic Excellence Project 5-100 (RAEP 5-100) to improve the position of several public universities in international rankings (The Ministry of Science and Higher Education of the Russian Federation, 2017). Additional funding and reporting were allocated in order to promote Russian universities in the international higher education market (Froumin & Lisyutkin, 2018).

The government uses roadmaps as instruments of control, in which universities develop detailed plans for their positioning and promotion in international and local markets. The structure of university roadmaps depends on the requirements of the government and the educational institutions' own ideas. Usually, each document is created and implemented to achieve common goals in specific government support programmes. The development areas described in the roadmaps become fundamental for the university for several years to come. Over the last 20 years, the government has announced several public university support programmes, for each of which the universities have prepared unique reporting documents. Chapter 4 will be devoted to an analysis of the 5-100 roadmaps for universities.

3.7.5. The consequences of marketisation for academics

Market reforms of the 1990s led to several negative consequences for the academic environment (Canning et al., 1999; Fursova et al., 2014; Senashenko et al., 2012). Low salaries and lack of state funding have led to a massive outflow of personnel from public universities to private universities or other sectors of the economy. Many academics emigrated abroad to be able to do their research or were forced to look for ways to earn extra funding (Shirin, 2015). Private educational institutions offered employees of public universities part-time jobs and additional teaching opportunities. As a result, many teachers provided private tutoring services for applicants and were thus directly involved in a market economy (Fursova et al., 2014). The level of corruption in admission and study at universities has increased (Fursova et al., 2014; Osipian, 2012; Shirin, 2015). The economic crisis affected the prestige of the academic profession, this led to a significant increase in the average age of existing professors and teachers. Many educational programmes and

research projects were reformed or closed, as they turned out to be economically unprofitable (Maleshin, 2016, p. 297), and university staff working on them had to quit or retrain.

The areas of marketisation described above have influenced the academic's traditional functions, such as teaching and research (Smolentseva et al., 2018). Professors were forced to adjust their educational programmes in accordance with market requirements. Research areas have also often been driven by government requirements and the international agenda (Bassett et al., 2009; Knight et al., 2018). The government encouraged university staff to take more publication and attract more extrabudgetary funding to achieve higher positions in international rankings. Collaboration with foreign partners also modulated research activities, depriving local academics of some independence. Public universities have also introduced performance indicators for teachers (usually in the form of the required number of publications and participation in international research projects).

The impact of marketisation processes on the academic community seems to be the least studied of all the topics presented above. Market services for students, a high level of accountability, limitation of academic freedom and unstable salaries can have a serious impact on researchers and academics, as noted in the Chapter 2.

3.7.6. The consequences of marketisation for university managers

The university management staff turned out to be a conductor and an object of marketisation at the same time. On the one hand, managers operated on market terms and pushed academics to work in one direction or another. On the other hand, managers themselves were forced to work on a market basis. Economic efficiency has become an important indicator of the work of university managers (Gryaznova, 2018; Morgan et al., 2012). Vice-Chancellors tried to preserve their educational institutions and attracted additional funding in order to provide the opportunity to pay salaries to employees. The rental of university premises to private companies was not directly permitted by law, but it was widely practiced by public universities as one of the easiest ways to receive additional income. The introduction of paid educational programmes has affected university management (Babintsev et al.,

2016; Drantusova et al., 2014). Management allocated additional funding to promote profitable programmes and closed research areas and faculties that did not generate revenue.

Marketisation has influenced university management (OECD, 2014; Sigman, 2008; Van Dooren et al., 2015). The working methods of private companies were borrowed by the government and universities as part of the new public administration. Managers switched to effective contracts; university management introduced a KPI management. Management became a marketisation agent and promoted the university brand among various audiences: government, business, students and other universities (Chapleo, 2015b; Mushketova et al., 2018).

To meet the requirements of the government, public universities significantly expanded the bureaucratic staff. The managers of public HEIs focus more on satisfying government demands than on achieving high economic efficiency in their organisations (Babintsev et al., 2016). The formalisation of the educational process is being strengthened to ensure compliance with all requirements of the authorities. The standardisation and regulatory procedures created under the NPM lead to an increase in the workload for managers. A high level of centralisation of university management leads to a decrease in the way how managers could perform any tasks (Froumin et al., 2015). Existing studies do not fully reflect the impact of marketisation on the work of managing personnel of Russian universities. Managers are forced to act under pressure from external performance indicators and cope with the growing volume of bureaucratic tasks. To study the degree of influence of market mechanisms on the work of employees is planned in this study.

As a result, higher education in the USSR was subordinated to reforms of the economic planned economy, economic factors and top-down changes in funding and management coming from the state.

Marketisation has primarily affected the funding of public universities. Most universities in Russia still remain public (were not privatised), and the number of private universities, which increased by the beginning of 2000, began to decline (Sigman, 2008). More than half of the students pay for their studies at state universities (Zajda, 2016). Tuition, on the other hand, is not the main source of

funding for state universities. In the vast majority of universities, the share of extrabudgetary funding is less than 40% and only in some cases achieves 50% (Gryaznova, 2018). Thus, the government continues to control most of the revenues of public universities. State authorities are simultaneously trying to control revenues and stimulate universities to earn money on their own. As a result, the transformation of the higher education system in the country occurred primarily due to the marketisation of state universities, and not the emergence of private universities.

Marketisation has had a significant positive and negative impact on all areas of public higher education in Russia. Thanks to market reforms, the perception of university education in society has changed. Public universities received greater autonomy from the government due to the ability to take extrabudgetary funding. Universities have become more independent and competitive. Russian government has introduced market mechanisms for university management also provided additional financial support to selected universities in the international market. The business was involved in the creation of private universities and stimulated public universities to create popular educational programmes and research areas. Marketisation has influenced the attitude of students to higher education, has changed the content of the work of managers and academics. Teaching and research have also changed under the influence of the top-down marketisation. On the negative side, marketisation has strengthened the separation between universities, most of which do not occupy high positions in the rankings. The desire of the government for formal results and quality assessment led to the standardisation of the educational process and the growth of bureaucratic costs. The new academic culture has been closely linked to market requirements that impede academic autonomy and free research.

3.8. Conclusion

Global trends in public policy have had a significant impact on the marketisation of higher education. As shown in Chapter 2, globalisation has accelerated the interaction between universities and governments around the world. The neoliberal turn has prompted governments around the world to take greater control over universities to make them more publicly accountable and ensure equal access to higher education. To deal with the consequences of the crises, the UK and US authorities used a new public management approach, which thanks to globalisation, was soon implemented by many other countries, including Russia. The NPM borrowed private business management practices to work with public institutions. All this led to the marketisation of the public sphere and higher education. Universities were forced to start operating in a market environment in order to diversify their sources of funding and to integrate into the global knowledge economy.

Russian public universities have undergone significant changes over the last 30 years. As has been shown in this literature review, the Russian government undertook a series of public service reforms to overcome the economic crisis of the 1990s. The Russian authorities have acted within the neoliberal agenda: the government has had to reform the regulation of higher education, change the accountability of public universities and adapt to the requirements of international organisations Marketisation processes were one of the ways in which public universities emerged from the crisis. The centralised, tuition-free and ideologised system of Soviet higher education was replaced by privatisation, private universities, and tuition fees at public universities. The emerging private universities promoted market changes and competed with the state universities. Under the influence of international organisations and government pressure, higher education institutions started adapting market-based management methods, introducing in-demand educational programmes, and competing more strongly with each other. After 2000, the Russian government overcame the economic crisis and allocated additional funds to promote Russian education in foreign markets. New methods of distributing the federal budget based on performance indicators and competitive mechanisms were introduced.

Marketisation of Russian universities had its own peculiarities, as it took place under pressure from the government. Universities retained their dependence on the state but gained more autonomy in the academic sphere. State universities were able to attract private funding, as well as to charge tuition fees for some educational programmes. The perception of higher education has changed: instead of being a "public good" it has now become a "private good". The concept of educational services was enshrined in the legal framework, and students began to be perceived as "an additional source of income". Rankings began to play a more significant role in the work of universities: the government launched incentive programmes to promote universities in international market and abroad and began to allocate funding based on positions in league tables. Marketisation has also affected the internal organisation of public universities and the work of managers and academics.

Research on the impact of marketisation on Russian higher education, firstly, is very sparse, and secondly, it does not reveal many important details of the unfolding of this process. After the collapse of the planned economy, Russian universities were forced to adapt quickly to market conditions. There are no specialised publications on marketisation in the academic literature. Some general reviews have separate chapters mentioning the impact of the market, the emergence of tuition fees in public higher education institutions and the increased competition with private universities. General studies on the structure of Russian higher education also contain some relevant information, but do not provide a complete picture of the impact of marketisation on public higher education institutions.

Therefore, the question remains open as to which key forms of marketisation are applicable to Russian HEIs and which are less relevant? The impact of marketisation on research directions, ways of financing and strategic development of universities is also lacking in separate publications. After all, it is the state that has initiated many marketisation processes in higher education. What influences the work of universities more: market mechanisms or state requirements? In order to close the gaps in the previous studies, the first research question "What are the key forms of marketisation that have been introduced into Russian universities, and how

have they interacted with other policies, eg funding, and influenced the direction of provision, strategic development and growth?"

The question of how Russian universities respond to marketisation processes was even less represented. While some works by individual authors contain references and theories about the role of the market in the development of higher education in Russia, there are almost no studies that examine the direct response of universities to such processes. Therefore, the second research question was formulated How have Russian Universities responded to marketisation processes? The following chapters will examine the official documents of universities through which they communicate with the government. We will also analyse the websites of universities to find out to what extent educational institutions demonstrate their involvement in educational markets to a wider audience.

Finally, the most unexplored area is the perception of market reforms and marketisation in general on the part of university staff. To this end, the question How have marketisation processes affected the views, work and outlook of senior academics and managers within universities? It is important to find out to what extent the actions of the state, university management and private educational providers do or do not affect the work of individual university employees.

Public universities were chosen for this study for several reasons. First, historically, only public universities have existed in Russia and it is these that have gone through all stages of market reforms. Second, the number of public universities in Russia is much greater than the number of private ones. The majority of Russian students study at public universities. Thirdly, it is public universities that have been marketised by the Russian government, which has made efforts to promote Russian education on the international educational market. Finally, it was the public universities that published roadmaps that could be compared with each other in a single study.

4. Exploring Public University responses to government demands: Roadmaps

4.1. Methodology

This purpose of this Chapter 4 is to investigate how universities respond to government directives and position themselves as public institutions that are intrinsically linked to, and ultimately dependent upon government. It therefore addresses questions about the key forms of marketisation and establishes understanding of how Russian public universities responded to marketisation processes. In addition, the public universities of the RAEP 5-100 project are forced to follow the stated plans and report on the approved KPIs. It is planned to investigate the impact of marketisation both on the activities of universities and on the language that universities use to achieve their goals.

Before moving on to the empirical analysis, the following two sections in this Chapter will describe in detail the methods. Having described the methods used in the research, the empirical sections will undertake a quantitative textual analysis of key policy documents. It is planned to find out what kind of message universities transmit in official documents for the Russian government, determine how universities position themselves on the world market, and indicate the degree of penetration of the market language into roadmaps. AS was mentioned in Section 3.7, roadmaps are documents that public universities have used to plan their work for several years ahead and to obtain additional funding from the government. The final section reflects how the market language and new directions of work have influenced the activities and positions of universities in the rankings. Chapter 5 and Part 6 will use their own research methods.

4.2. The Method of Analysis

As outlined in previous chapters, Russian higher education has undergone radical neoliberal reforms since the 1990s. Prior to this, public (state) universities had not had any market-based experience and did not pay much attention to customers, turnover, profitability, and market-led activities. In recent years, state universities have been forced to imitate business activities: conducting assessments

of the quality of teaching; auditing research and expenses; responding to key performance indicators, etc. The government has pushed university staff to strengthen personal responsibility and increase the profitability of work.

The purpose of this research is to study the impact of marketisation processes on public universities in Russia. To achieve this, the roadmaps produced by universities to attract extrabudgetary funding and achieve better positions in international rankings were analysed (see section 3.7 above). Universities are required to produce these roadmap documents for the government in return for additional funding as one of the areas of work of the RAEP 5-100 project. The Russian Academic Excellence Project is a Russian government initiative to adapt public universities to global standards and integrate them into the international educational environment. The five-year project was launched in 2012 and was extended until 2020. The main goal of the project was to bring at least five universities into the top 100 according to three international rankings: Quacquarelli Symonds (QS), Times Higher Education (THE), and Academic Ranking of World Universities (ARWU).

This chapter reveals what are the key forms of marketisation that have been introduced into Russian universities and how have Russian Universities responded to marketisation processes? By examining these Roadmaps, it also reveals how universities have specifically responded to the moves towards marketisation required since the 1990s. This allows the researcher to later examine the wider implications for university managers and staff. The roadmaps will be examined for uniqueness or discursive standardisation and uniformity.

4.3. A Brief Literature Review of Methodological Approaches

Linguistic analysis is a valuable but under-utilised tool in policy discourse and analysis. Yet it is a useful method to measure the impact of marketisation on higher education institutions. Fairclough (1993) pointed to a change in discursive practices after comparing bachelor's degree programmes in the 1960s and 1990s. Previously, applicants received information about the content of educational programmes "as is" and universities did not care whether or not someone applies. In modern brochures, universities already promote their educational programmes and invite

applicants to enrol (the promotional function of the document has become the main one). A similar study was carried out by Rutter et al. (2017): the scientists analysed the prospectus of ten leading universities in the UK. Researchers argue that brand identity helps university positioning in conditions where higher education is perceived by students as a deal with financial income.

University mission statements were examined in terms of vocabulary and structure (I. Connell et al., 1998; Cortés-Sánchez, 2017; Morrish et al., 2010) and showed that universities actively use market vocabulary in these documents. Kheovichai (2014) analyses university job advertisements by interpreting evaluative adjectives and text structure. Kheovichai concludes that there are strong differences between announcements in the 1970s and 2000s: earlier universities have only indicated the working conditions, and now each such announcement has advertised in nature, and universities generally use business-oriented discourse. Zhang (2017) explores the websites of Chinese universities and concludes that even public universities are influenced by marketisation and use the appropriate language to communicate with external audiences.

This method of content analysis has several advantages. First, the method allows a more objective assessment of the information in the documents compared to a qualitative analysis. The probability of error due to inattention of the researcher is reduced using specialised software. Secondly, the method allows the analysis of large amounts of information that would be difficult (or almost impossible) to analyse manually. Third, the methodology makes it possible to identify correlations between individual words, phrases and attributes in different documents. On the other hand, this approach is not sufficient for the in-depth analysis of the situation in public universities that is available in interviews with university staff. Also, the data obtained require additional analysis and processing in order to make a correct interpretation, as the frequency of use of a certain word does not always provide an understanding of the context.

Thus, scientists use linguistic analysis to study various university documents (from job advertisements to mission statements and website pages) to assess the impact of marketisation on higher education.

4.4. Data and Analysis Methods

For the analysis of roadmap data in this study, a corpus of roadmaps from 21 universities of the RAEP 5-100 project was assembled. These are leading public Russian universities supported by the government through additional funding and assistance in resolving organisational issues. The universities are evenly distributed across the country. These universities have a unique set of characteristics and differ in several parameters from each other in various ways. The average age of the universities studied is 103 years, half of the universities are over 99 years old, half are younger. The oldest Sechenov university (261 years), and one of the youngest is the Higher School of Economics (27 years). Each university has an average of 3 campuses in other cities. At the same time, the median value is 1 branch, 4 universities have no branches at all and MEPHI has 11 branches. Basic information about universities with details of the characteristics is summarised in the Table 4-1 below. The "Red — Yellow — Green" colour scale has been applied to each of the columns in the table individually. The colour indicates where the value of each cell in that range falls. Red is the highest value, yellow the average, and green the lowest.

Table 4-1. Key characteristics of RAEP 5-100 universities (Source: author)

				Number of Branches	er of students	Number of International Students	Number of Faculty Members	Number of International Faculty Members	Main educational programmes for prospective international students	Additional educational programmes for prospective international students	term courses	Percentage of international faculty (including Russians holding a Ph.D. from foreign universities), 2018	Percentage of international students studying in main educational programs (including CIS countries), % (2016)	of revenues from non- tary sources in the sity's revenue ure, % (2016)	Number of Words in the Roadmap
				dumb	Number	dumb	dmub	Number Faculty N	Main e progra ntern	Additional programm internation	Short	Percentage faculty (incl holding a Pl universities	Percentage students students students students students studentiona (including C (2016)	Share of revended budgetary suniversity's structure, %	Number c Roadmap
University	Established	Age	City of Main Campus				3027	36	555	32					
SIBFU	2006	13	Krasnoyarsk	3	30239	938					13	1.28	2	23	22500
IKBFU	1947	72 77	Kaliningrad	1	7509	647	756	9	122	14	5	0.4	5.6	30.5	11976
Samara	1942		Samara	1	14878	535	1193	4	297	1	0	2.8	5.3	30.7	26794
TSU	1878	141	Tomsk	<u>1</u> 0	15257	2601	1095	114	216	73	5	3.5	13.5 15.95	32	31071
LETI	1886	133	Saint Petersburg	_	8996	1691	1214	11	147	42	13	3.5		32.8	16501
FEFU	1899	120	Vladivostok	8	23000	3500	1935	159	322 91	21	3	3.9	17.3	34.8	21859
TPU	1896	123	Tomsk	1	15000	3813	1700	117		41	5	7.1	27.6	35	17288
Sechenov	1758	261	Moscow	1	15000	2200	1500	56	102	2	0	1.12	14	36	25160
MISIS	1918	101	Moscow	6	15000	3386	4000	23	227	24	0	3.5	23.7	36	11727
MIPT	1951	68	Moscow region	0	7364	800	1906	21	12	1	0	5.3	12.7	39.2	15899
HSE	1992	27	Moscow	3	40300	3500	3700	120	303	7	0	10.8	8	39.5	27377
SPBPU	1899	120	Saint Petersburg	1	32121	7000	1552	210	399	39	36	8	13.02	40.53	16373
KFU	1804	215	Kazan	2	43333	5573	2547	43	678	144	3	4.5	10.9	43.3	40968
URFU	1920	99	Yekaterinburg	9	34794	3114	2993	35	413	30	17	6.1	6.7	44.7	23742
Lobachevsky	1916	103	Nizhny Novgorod	7	26125	1064	1330	4	372	17	3	1.24	3.22	44.8	13942
SUSU	1943	76	Chelyabinsk	4	27000	2000	1150	0	156	12	2	3	12	45	13300
NSU	1959	60	Novosibirsk	0	7000	1400	2500	52	248	57	54	5.12	17.4	45.25	24265
MEPHI	1942	77	Moscow region	11	7064	1249	1503	223	177	13	11	16	18.57	45.5	39168
ITMO	1900	119	Saint Petersburg	0	14300	1307	1200	26	267	14	12	6.9	12.7	58.9	16135
UTMN	1930	89	Tumen	3	19571	1960	1033	15	89	23	6	2	5.3	68	27457
RUDN	1960	59	Moscow	1	30000	7500	2810	27	523	900	50	1.14	25.24	71.63	22007
Average	1916	103		3	20660	2656	1935	62	272.2	71.8	11.3	4.6	12.9	41.8	22167
Median	1920	99		1	15257	2000	1552	35	248	23	5	3.5	12.7	39.5	22007

To facilitate this part of the analysis, the sample text (the roadmaps) formed a corpus of general words. A corpus could be defined as "a collection of machine-readable authentic texts (including transcripts of spoken data) that is sampled to be representative of a particular natural language or language variety" (Sinclair, 1991). Corpus linguistics allows the use of a set of procedures and methods which reveal more about the use of particular words through computer-based analysis (McEnery, 2012). Words are treated like any other data. This approach makes it possible to work with texts (corps) of large volumes and draw conclusions about the relationships of words.

The methodology of this component of the research has three key features. First, it applies new methods of quantitative analysis to the text of official university documents, which has not been used before in the same set of data. Secondly, understanding of the marketing-related methodology context was established. Thirdly, such analysis contains a broader "sampling frame" and the identification of features of all 21 roadmaps of all HEIs, allowing for a more comprehensive study of the entire document body.

The quantitative analysis methods of the NVivo and Wordstat software have two main advantages. First, the programmes are capable of automatically coding and analysing a large amount of information and detecting relationships between individual words and phrases in texts (Farnsworth et al., 2018). Topics stemming and clustering techniques reveal common associations between individual concepts and phrases. Correspondence analysis establishes links between the number of phrases or words in a text and other variables (e.g., number of students, year of university foundation, location (regional or capital), etc.). All 21 documents with a total of 0.5 million words were studied. All the roadmaps were downloaded from the official websites of the universities, converted, and analysed (see Table 4-2). Secondly, this methodology avoids bias in the choice of certain concepts to analyse the impact of marketisation on Russian public universities. The typical criticism of the qualitative analysis of documents refers into question the validity of interpellation statements due to the fact that themes and quotations can be selective. The current analysis of the whole roadmaps word corpus used by universities to communicate

with the government has been undertaken to identify the main patterns more objectively and draw valid conclusions based on them.

The content analysis methods used in the research help to identify key word combinations and words in the documents and do not preclude further analysis and examination of key concepts. The application of quantitative analysis to the HEI roadmaps made it possible to extract key ideas and concepts in order to compare them with those suggested in the research literature and to establish a solid basis for further analysis of HEI websites and interviews with staff members. The sample quotes used in the study serve to better illustrate the more abstract quantitative analysis presented next.

This is carried out in two stages. First, the analysis of word frequencies will be carried out in all 21 roadmaps included in this corpus. Prepositions, particles and conjunctions were excluded from the analysis, and the most relevant words for marketing processes were identified (to be explored in more detail later). This helps to reveal more about the language used in the documents, but also the key topics in the corpus. For each of the roadmaps, a list of common words was collected. A comparison between universities reveals a great deal of similarity, but also key differences in responses and priorities at different universities. The compiled lists of the most frequently used words were cleared of grammatical words to leave only meaningful concepts (for example, definite and indefinite articles were excluded). The collected word lists were further divided into three groups: nouns, adjectives, and verbs. This is important to evaluate analysis as described below.

The second stage of the analysis of the corpus was to study the most common combinations of words (collocations) in each of the documents and in the corpus. Researchers define collocations differently. For example, "the occurrence of two or more words within a short space of each other in a text" (Sinclair, 1991), or "co-occurrence of two or more lexical items as realisations of structural elements within a given syntactic pattern" (Cowie, 1978). In this work, the collocation refers to "a sequence of two or more consecutive words, that has characteristics of a syntactic and semantic unit, and whose exact and unambiguous meaning cannot be derived directly from the meaning or connotation of its components" (Choueka, 1988). Collocation reveals more about the meaning of words and identifies key

discourse trends in the corpus. The application of these two techniques will reveal the main similarities and differences in the discourse of the 21 universities under study.

4.5. An Identification of Key Topics

Each of the documents were individually uploaded to NVivo and Wordstat. Through the "frequency of words" function, 1000 of the most common "topic" words were identified from the corpus of text. Then, using the "stemmed words" function, words were grouped by topic. For example, the following words and word forms fell into the "students" group: students', students, students. For each university, a separate compliance table was created for the top 20 most popular topics. Every roadmap differs from each other in text size (from 20 to 40 thousand words). Therefore, to correctly compare the results of the analysis of individual documents with each other, relative indicators of the frequency of word use were examined. The purpose of this is to highlight which words are frequently used by the institutions. This provides an overview for the research to receive a sense of the type of documents and the general sentiments employed.

It is important to note that all the studied universities are part of one state project to improve the competitiveness of Russian HEIs, which aimed to bring 5 universities into the top 100 world rankings. Thus, the very subject of the roadmaps contributed to the appearance of more words related to this topic. On the other hand, there are two reasons to trust quantitative analysis and consider it a sufficiently objective research tool. Firstly, the government has defined only some formal requirements for the content of these documents. Universities determined the content and scope of roadmaps on their own, so the appearance of marketing-related terms among the top 40 most popular words for all universities demonstrates the importance of this topic. Secondly, in the following Section 4.11.1 (Old and new development programmes), a comparison has been undertaken between the roadmap of one of the universities created in 2010 before the RAEP 5-100 project and the modern roadmap of the same university from 2010. It turned out that the university used to use marketing-related terminology much less frequently.

The analysis of the entire roadmaps of the RAEP 5-100 corpus consisted of several stages. After compiling a list of the 1000 most common topic words further analysis was carried out through Excel. The topic, its frequency (expressed as percentage of the overall wordcount within each document) and the name of the university were tabularised and analysed through the Pivot Tables function in Excel. A table containing the 40 highest ranking topics across all the universities (each stemmed word represents more than 5% of the total number of words in all roadmaps). All auxiliary words (prepositions, conjunctions, particles) were excluded and after automatic sorting using software, the final list was manually checked again to exclude possible errors.

As already stated, the total number of words within the documents under investigation is 465,509. After employing the exclusion dictionary, there were 14,217 distinct words that were identified. The most frequent 1000 words are identified in Appendix A. Not surprisingly, the most frequent words were irrelevant to this study, but this list also captures some key terms that are of interest because they relate directly to marketisation. For example, among the top 40 most common words in all the roadmaps were the words: "competitiveness", "highly", "leading", "number", "indicators", which can serve as markers of marketisation and are not directly related to the research or teaching functions of the university (see the Figure 4-1). Also, among the most popular words are: "international", "foreign", "management", "position", "world". The first part of the literature review established a correlation between the processes of marketisation and internationalisation, the markers of which can be the words "foreign, international, world". Universities pay great attention to their competitiveness, including in the global higher education market. Institutions are interested in high performance and leading positions. The authors of the roadmaps use quantitative "number" indicators to track the performance of HEIs. In addition, market influences in roadmaps texts can be seen through "positions and management". To determine the context of the use of these concepts, the most popular word combinations including these words were investigated.

Table 4-2. Number of words in university roadmaps (Source: author)

University (Short Name)	University (Full Name)	Number of Words in the Roadmap
KFU	Kazan (Volga Federal University) federal university	40968
MEPHI	National Research Nuclear University MEPhI	39168
TSU	National Research Tomsk State University	31071
UTMN	The University of Tyumen	27457
HSE	National Research University Higher School of Economics	27377
Samara	Samara National Research University	26794
Sechenov	I.M. Sechenov First Moscow State Medical University	25160
NSU	Novosibirsk National Research State University	24265
URFU	Ural Federal University Named After the First President of Russia B.N. Yeltsin	23742
SIBFU	Siberian Federal University	22500
RUDN	Peoples' Friendship University of Russia (RUDN University)	22007
FEFU	Far Eastern Federal University	21859
TPU	National Research Tomsk Polytechnic University	17288
LETI	Saint Petersburg Electrotechnical University "LETI"	16501
SPBPU	Peter the Great St. Petersburg Polytechnic University	16373
ITMO	Saint Petersburg National Research University of Information Technologies, Mechanics and Optics	16135
MIPT	Moscow Institute of Physics and Technology	15899
Lobachevsky	National Research Lobachevsky State University of Nizhny Novgorod	13942
SUSU	South Ural State University	13300
IKBFU	Immanuel Kant Baltic Federal University	11976
MISIS	National University of Science and Technology «MISIS»	11727
Average		22167
Median		22007
Sum		465509

The analysis shows that all universities homogeneously use the most popular words. As shown in the literature review, the unification of concepts and terms is part of the marketisation processes of higher education. All HEIs adjust to the same requirements and use similar language. Table 4-3 analyses the use of the most popular 40 words for each of the universities studied. The hypothesis that the most popular words on average among all HEIs are popular for each individual roadmap was confirmed. The words "number" and "international" were among the top 7 most frequently used words among all documents. Universities focus on the international market and use measurable indicators ("number of programmes", "number of students", "number of grants"; all relevant phrases will be explored in the next

Section 4.6). Examples of the use of marketisation-related word combinations will be discussed in more detail below.

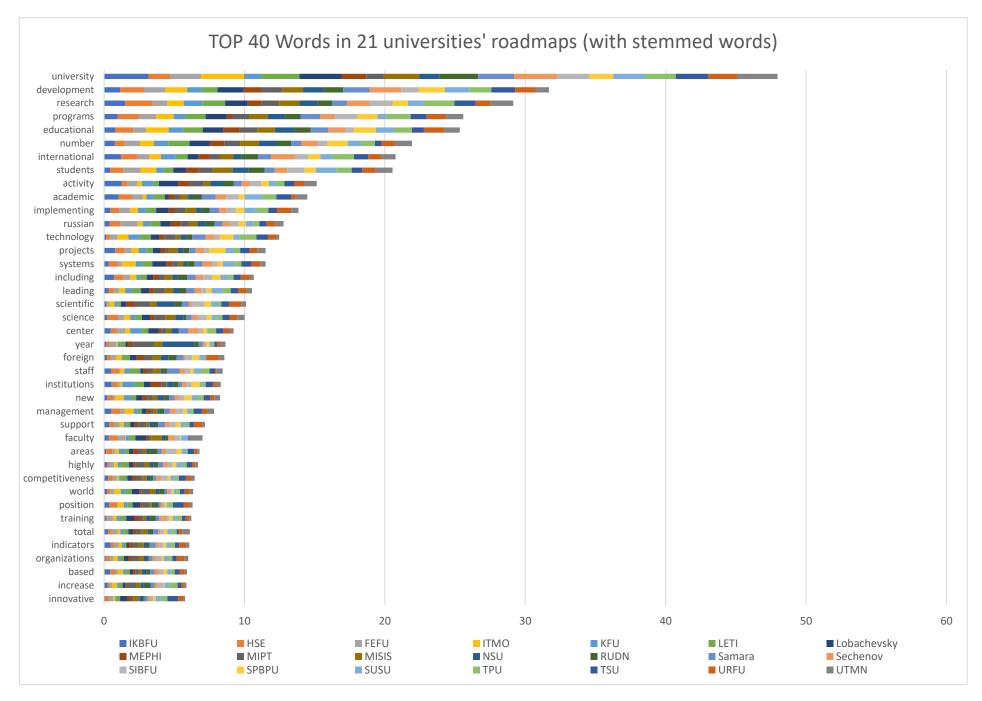


Figure 4-1. TOP 40 stemmed words in 21 RAEP 5-100 universities' roadmaps (percentage in each roadmap)

Table 4-3. TOP 40 stemmed words in 21 RAEP 5-100 universities' roadmaps (with percentage of frequency)

Stemmed words	IKBFU	HSE	FEFU	ТМО	KFU	E31	Lobachevsky	MEPHI	MIPT	MISIS	NSU	RUDN	Samara	Sechenov	SIBFU	SPBPU	nsns	TPU	LSU	URFU	NMTO	Sum	Average
university	3.16	1.59	2.16	3.07	1.24	2.7	2.99	1.76	1.26	2.51	1.42	2.79	2.55	3.07	2.29	1.72	2.24	2.19	2.33	2.09	2.84	47.97	2.28
development	1.15	1.69	1.54	1.54	1.04	1.12	1.88	1.22	1.54	1.45	1.43	1.42	1.89	2.26	1.23	1.87	1.77	1.55	1.69	1.45	0.95	31.68	1.51
research	1.49	1.97	1.04	1.17	1.32	1.63	1.61	1	1.25	1.44	1.26	1.08	1.04	1.62	1.65	1.07	1.11	2.21	1.51	1.04	1.63	29.14	1.39
programs	0.96	1.54	1.21	1.25	0.84	1.43	1.52	0.36	1.26	1.3	1.23	1.11	1.37	1.09	1.55	1.46	0.64	1.71	1.14	1.39	1.23	25.59	1.22
educational	0.78	1.28	0.93	1.61	1	1.43	1.46	1.18	1.24	1.26	1.4	1.15	1.26	1.21	0.58	1.6	1.24	1.32	0.85	1.44	1.12	25.34	1.21
number	0.77	0.69	1.11	0.98	1.02	1.52	1.45	1.02	1.13	1.35	1.24	1.05	0.73	1.14	0.71	1.44	0.92	1.02	0.48	0.95	1.21	21.93	1.04
international	1.2	1.17	0.85	0.83	1.06	0.84	0.79	0.77	0.71	0.99	0.55	1.22	0.91	1.71	0.95	0.86	0.88	1.51	1.01	0.96	0.99	20.76	0.99
students	0.42	0.95	1.23	1.12	0.54	0.67	0.91	0.9	0.98	1.44	1.15	1.13	0.72	0.89	1.21	0.81	1.51	1.06	0.74	0.95	1.22	20.55	0.98
activity	1.25	0.38	0.73	0.34	0.85	0.36	1.36	0.74	1.1	0.46	0.94	0.73	0.54	0.58	0.84	0.55	0.48	0.62	0.71	0.68	0.9	15.14	0.72
academic	1.03	0.96	0.77	0.26	0.53	0.78	0.29	0.4	0.39	0.6	0.28	0.68	0.98	0.75	0.9	0.42	1.17	1.08	1.07	0.32	0.81	14.47	0.69
implementing	0.45	0.64	0.78	0.55	0.56	0.73	0.9	0.44	0.72	0.79	0.38	0.57	0.69	0.54	0.65	0.61	0.81	0.9	0.61	1.01	0.51	13.84	0.66
russian	0.4	0.74	1.25	0.37	0.52	0.74	0.74	0.66	0.62	0.61	0.6	0.63	0.56	0.5	0.63	0.52	0.54	0.44	0.49	0.61	0.61	12.78	0.61
technology	0.14	0.3	0.51	0.79	0.81	0.78	0.58	0.38	0.78	0.38	0.43	0.39	0.96	0.64	0.35	1	0.42	1.22	0.83	0.56	0.22	12.47	0.59
projects	0.79	0.68	0.49	0.51	0.53	0.47	0.54	0.34	0.23	0.67	0.39	0.42	0.46	0.62	0.35	1.17	0.59	0.44	0.66	0.55	0.61	11.51	0.55
systems	0.33	0.64	0.29	0.99	0.46	0.74	0.96	0.45	0.43	0.37	0.26	0.51	0.59	0.69	0.37	0.38	0.88	0.44	0.75	0.6	0.37	11.5	0.55
including	0.72	0.67	0.47	0.45	0.24	0.49	0.46	0.41	0.4	0.57	0.37	0.66	0.63	0.52	0.63	0.6	0.56	0.38	0.51	0.61	0.31	10.66	0.51
leading	0.31	0.38	0.37	0.45	0.46	0.67	0.57	0.34	0.76	0.61	0.45	0.49	0.6	0.46	0.36	0.38	0.77	0.59	0.53	0.6	0.39	10.54	0.50
scientific	0.14	0.08	0.16	0.36	0.23	0.23	0.41	0.59	1.08	0.46	1.27	0.53	0.47	0.22	0.89	0.51	0.41	0.31	0.55	0.91	0.31	10.12	0.48
science	0.23	0.76	0.42	0.46	0.38	0.44	0.58	0.34	0.75	0.72	0.56	0.22	0.39	0.41	0.65	0.37	0.35	0.4	0.51	0.54	0.53	10.12	0.48
center	0.23	0.75	0.42	0.40	0.38	0.44	0.75	0.34	0.73	0.72	0.50	0.22	0.65	0.41	0.03	0.37	0.03	0.63	0.51	0.48	0.26	9.23	0.48
year	0.48	0.43	0.33	0.34	0.80	0.43	0.73	0.21	1.52	0.56	2.32	0.04	0.03	0.73	0.32	0.27	0.03	0.03	0.31	0.48	0.33	8.64	0.44
foreign	0.13	0.24	0.47	0.11	0.18	0.54	0.14	0.54	0.61	0.56	0.53	0.28	0.27	0.13	0.13	0.52	0.22	0.13	0.18	0.27	0.33	8.56	0.41
staff	0.52	0.55	0.57	0.33	0.36	0.78	0.48	0.34	0.36	0.55	0.33	0.27	0.89	0.12	0.48	0.32	0.41	0.65	0.38	0.08	0.47	8.45	0.41
institutions	0.54	0.39	0.19	0.28	0.89	0.65	0.49	0.74	0.36	0.06	0.17	0.27	0.26	0.32	0.37	0.57	0.45	0.03	0.53	0.03	0.47	8.31	0.40
new	0.23	0.33	0.15	0.61	0.52	0.36	0.45	0.74	0.36	0.37	0.48	0.32	0.20	0.36	0.31	0.56	0.13	0.28	0.46	0.33	0.38	8.26	0.40
management	0.52	0.41	0.13	0.64	0.32	0.30	0.43	0.32	0.30	0.31	0.12	0.35	0.38	0.30	0.51	0.29	0.44	0.26	0.40	0.36	0.5	7.83	0.37
support	0.35	0.41	0.36	0.28	0.22	0.24	0.31	0.32	0.54	0.24	0.12	0.33	0.52	0.44	0.32	0.25	0.15	0.28	0.31	0.58	0.21	7.19	0.34
faculty	0.33	0.65	0.52	0.28	0.22	0.45	0.82	0.23	0.54	0.75	0.41	0.18	0.03	0.32	0.43	0.07	0.51	0.28	0.08	0.07	0.85	7.01	0.34
areas	0.33	0.43	0.32	0.26	0.23	0.49	0.28	0.36	0.32	0.73	0.20	0.59	0.32	0.40	0.76	0.37	0.31	0.1	0.47	0.22	0.03	6.8	0.32
highly	0.22	0.43	0.36	0.25	0.19	0.61	0.3	0.19	0.62	0.36	0.31	0.3	0.36	0.23	0.35	0.28	0.4	0.33	0.38	0.23	0.2	6.69	0.32
	0.27	0.34	0.3	0.16	0.14	0.44	0.39	0.13	0.37	0.34	0.25	0.2	0.22	0.33	0.47	0.21	0.32	0.28	0.5	0.36	0.27	6.46	0.31
competitiveness world	0.27	0.34	0.29	0.16	0.14	0.44	0.53	0.3	0.65	0.34	0.25	0.2	0.22	0.33	0.47	0.21	0.32	0.28	0.34	0.35	0.27	6.35	0.31
position	0.36	0.57	0.05	0.42	0.25	0.38	0.54	0.13	0.5	0.2	0.11	0.37	0.16	0.16	0.14	0.13	0.09	0.34	0.76	0.42	0.23	6.31	0.30
training	0.13	0.09	0.43	0.24	0.22	0.47	0.59	0.39	0.23	0.21	0.28	0.38	0.28	0.51	0.19	0.26	0.21	0.44	0.27	0.25	0.15	6.22	0.30
total	0.28	0.25	0.43	0.2	0.23	0.34	0.34	0.24	0.34	0.45	0.16	0.23	0.38	0.13	0.26	0.25	0.32	0.34	0.16	0.24	0.54	6.11	0.29
indicators	0.47	0.24	0.32	0.24	0.14	0.19	0.18	0.31	0.39	0.35	0.26	0.16	0.42	0.17	0.37	0.23	0.26	0.35	0.3	0.5	0.22	6.07	0.29
organizations	0.12	0.33	0.21	0.31	0.16	0.29	0.31	0.26	0.46	0.39	0.31	0.04	0.26	0.25	0.42	0.15	0.21	0.38	0.32	0.53	0.29	6	0.29
based	0.44	0.37	0.23	0.32	0.22	0.26	0.23	0.18	0.23	0.21	0.3	0.3	0.3	0.32	0.31	0.28	0.24	0.29	0.36	0.35	0.17	5.91	0.28
increase	0.24	0.14	0.18	0.38	0.19	0.19	0.18	0.1	0.72	0.29	0.22	0.48	0.28	0.21	0.43	0.09	0.32	0.6	0.27	0.18	0.17	5.86	0.28
innovative	0.12	0.26	0.27	0.14	0.12	0.23	0.49	0.32	0.16	0.4	0.29	0.09	0.22	0.2	0.19	0.18	0.35	0.48	0.77	0.4	0.09	5.77	0.27
Total	22.09	24.5	22.66	23.36	19.84	26.04	28.35	19.6	25.98	25.57	23.88	22.85	24.63	25.31	24.13	22.96	23.28	26.26	24.96	24.63	23.15		24.00

4.6. Determining the Frequency of Verbs, Nouns and Adjectives

Features of language constructs usage were analysed with NVivo 12 software, as well as with the online tool "Free CLAWS WWW tagger". This software allows text to be automatically sorted into parts of speech. The full text of each document was uploaded to NVivo 12. Using the Word Frequency Query function, the researcher selected the 1000 most frequently used words in the text with the exact matches parameter. The exact match was chosen because in a stemming operation, different parts of speech were combined, and the accuracy of the analysis is reduced. The exact match was chosen because when stemming, different parts of speech are combined and the accuracy of the analysis is reduced. For example, stemming operation may combine the words "education and educational", or "organisation and organise". For understanding different parts of speech, such a combination is not desirable. The compiled list of words was uploaded to the CLAWS4 University of Lancaster's free tag web service, which offers access to British National Corpus (BNC1994), the BNC2014, and all the English corpora in Mark Davies BYU corpus server. For each of the loaded words, a form of speech was determined. Next, the top 20 most commonly used nouns, adjectives and verbs were highlighted in separate tables.

Marketisation manifests itself through the language that public universities use to communicate with government. The division into parts of speech reveals which topics are most important to universities (nouns), how universities evaluate themselves and external audiences (adjectives) and exactly how the institutions plan to achieve their roadmaps (verbs). This method was used to find out the most popular topics in universities roadmaps, as well as vocabulary through which universities communicate with the government. Similarities and differences between the universities were revealed, which led to conclusions about homogeneity of university roadmaps. The impact of marketisation on the university roadmaps content has been manifested in topics that are popular in roadmaps, as well as in specific concepts, such as adjectives and verbs used by universities.

The algorithm for determining the parts of speech and ranking them by frequency in each roadmap, as well as in the entire corpus of words in will be presented below:

- The full text of each roadmap was copied and pasted into CLAWS WWW
 tagger data with the default "c5 horizontal" parameters located on the page:
 ucrel-api.lancaster.ac.uk/claws/free.html
- 2. Free CLAWS assigns tags to all words in the corpus, identifying nouns, verbs and adjectives.
- 3. The copied text was downloaded into MS Word and processed to obtain a list of words with the collocated parts of speech split into four columns (after initial processing, all values are displayed as "word+number of occurrences". The top 1000 words are shown as a simple list with no row or cell separation). Spaces were replaced by paragraph marks; double paragraphs were deleted. Word was used at this stage of data processing, as it allows for operations on text that are more difficult to perform in Excel (e.g., splitting a single text into paragraphs).
- 4. The text formatted in this way is loaded into MS Excel to receive a table with the following columns:
 - a. Word
 - b. The name of the part of speech
 - c. Number of words in a document
 - d. Percentage of times the most common words appear
- 5. The resulting list is sorted by parts of speech. Separate lists are created for nouns, adjectives and verbs, sorted by the number of repetitions of words.
- TOP-40 of the most popular values in each category is checked manually to exclude possible errors and repetitions.
- 7. As a result of the above actions, four TOP-20 words lists are created for each roadmap:
 - a. TOP-20 of all words in the document
 - b. TOP 20 nouns
 - c. TOP 20 adjectives
 - d. TOP-20 verbs

8. A similar operation was carried out for the entire word corpus of 21 RAEP 5-100 roadmaps. This allowed the researcher to identify marketing-related themes (nouns), evaluation of events (adjectives) and ways of achieving the goals (verbs) in the roadmaps.

To compare the most popular parts of speech in different universities, the following methodology was used:

- 1. For each university, all adjectives, nouns, and verbs from the list of the top 1000 most frequently occurring words in each roadmap were selected.
- 2. The lists were combined so that each word was assigned the frequency of use and the name of the university.
- 3. Using the "pivot tables" function, a new table has been created that summarises the frequency of use of each word in the corpus.
- 4. The results were sorted in ascending order from the most frequently used words in the entire corpus to the least frequently used.
- 5. This operation was carried out separately for nouns, adjectives, and verbs.

The automatic selection of TOP-1000 words in all documents of the corpus was abandoned using the NVivo 12 specific function, to avoid the misleading results in the process of analysing roadmap documents. Each document contained a different number of words (some roadmaps are twice bigger than others), which could affect the final values. Primary summation of all words in a single corpus, and their frequency calculation can significantly affect the overall result. Therefore, it was decided to first determine the number of different parts of speech in each document separately, and then summarise the values obtained in the final table.

4.7. Marketisation Related Dictionary

The marketing-related vocabulary of words and phrases was compiled based on a literature review and an analysis of the key words of the roadmaps of 21 Russian public universities. The content analysis allowed identifying the most popular words that are markers of marketisation. The software was used to find typical word combinations that reveal the context of the use of certain concepts. Strongest correlations are institution-specific and generic in most cases. Reveals that the concepts used words by institutions are not especially unique. This provides

some indication that the marketisation words used by institutions are general, not unique to any particular institution. It may be that ALL universities use similar marketisation-related words. This exercise is also important in another way. It helps to reveal some of the words that are of use to the analysis here because they relate to marketisation in some way.

In this study several groups of concepts related to marketisation were identified. Not all words were equally relevant of course. In order to distinguish between the most important to this study, a categorisation dictionary was built. Categorisation dictionaries take the analysis from single word focus to multiples of words that have particular meaning. The categorisation dictionary was built in the following way: First, these are phrases containing specific adjectives. World-class universities and research centres demonstrate the orientation of public higher education institutions towards the international educational market. The same group of words includes "Top and Leading". Universities want to occupy "leading positions", to top the rankings, to be leaders in their industries. Universities also use superlative adjectives "the best, the newest, the greatest". This refers to the use of "cutting-edge technology", attracting the "best students" and working with partners.

Second, phrases with relevant nouns. Tuition fees "is one of the important markers of the marketisation processes taking place in Russian public universities, as historically the federal government has guaranteed a completely free higher education". Rankings and league tables are also often mentioned in the roadmaps of universities. Related to the attempt to unify all universities is the frequent use of the word "positions". Universities often refer to markets as such and write about "educational market", "labour markets" and "international higher education market". In order to operate in the market, HEIs try to build their "brand" and "advertise their services". The commercialisation of higher education is also addressed in the roadmaps. HEIs are starting to provide services for private businesses and "educational services" for students. Attracting students from Russia and abroad is an important part of universities' work. Universities work on KPIs, assessing quality and excellence. Thirdly, the roadmaps contain a block of words and phrases from the field of internationalisation, which can be linked to marketisation processes. HEIs attract international students and invest in English language learning (teaching

to students and academics, articles in English to improve ranking positions, etc.). Universities create dual degree programmes and outline opportunities for the international market by creating massive online courses and providing scholarships for international students.

In order to create a vocabulary of marketing-related words, the following concepts were chosen: world-class, gifted, talent, talent, activity, talented, talents, best, better, bigger, biggest, excellent, greater, greatest, larger, largest, premium, top, effective, effectiveness, effectively, effectivity, effectivity, efficiently, efficient, high, highest, new, latest, newest, leading, great, tuition fees, fees, leader*, leadership*, leaders, brand*, branding*, promoting, promotion, promotions, promotional, advertis*, advertisement, advertising*, commerce, commercial*, commercialisation*, commercialise*, commercialization*, commercialise*, excel, excellence, excellent, business, enterprise, company, modernisation, modernization, modern*, quality, quality, service*, attraction*, attracting, attractive, market, market*, marketing, marketisation, marketization, merchandising, selling, shop, supermarket, store, position*, indicator*, kpi, key performance indicator*, kpis, compete, competitions, competitive, competitiveness, competition, league table*, position, gs, gsrank, gsthe, rank, ranking, ranking*, rankings, rating*, the times, times higher eduation, internationalisation*, internationalization*, scholarship*, mooc, massive online course*, moocs, foreign graduate, foreign graduates, international graduate, international student*, foreign student*, english, foreign language*, double, dual, international academic program*, international educational program*, international program*, joint program*, joint project*, global, globalisation, globalization, globally, globally, globe, world, world, worldwide, international.

Marketisation categories were established initially out of the literature review on NPM in particular (see Chapter 2 above). Words relating to the following thus emerged as important:

1. Market

- a. Tuition Fees, Service
- b. Rankings, Position, League tables
- c. Brand, Business
- d. Promotion, Excellence

- e. Commercialisation
- f. Leadership, TOP
- g. KPI, Effective
- h. Best, greatest, largest, biggest, talented

2. International market

- a. Internationalisation
- b. MOOC
- c. International students
- d. Joint programmes
- e. Global, World
- f. English as foreign language

To assess the place of the marketing theme in the roadmaps, traditional university themes such as: students, managers, teachers, educational programmes, research, knowledge, and skills were also highlighted. The dictionary was further refined in the following ways. First, words identified in the frequency list with similar or identical meaning were placed in the categorisation dictionary (See Table 4-4 below). For example, the following words were included under competitiveness: compete, competition, competitiveness, competitions, competitive. Both variant spellings of words in American and British English were considered in all cases (this clarification was important to make as universities used different English in the roadmaps).

Table 4-4. Main roadmaps' topic categorisation (Source: author)

	Frequency	% shown	% processed	% total	No. Cases
Academics	6050	15.89%	2.35%	1.42%	21
Students	4164	10.94%	1.61%	0.98%	21
Research	4021	10.56%	1.56%	0.94%	21
World	3464	9.10%	1.34%	0.81%	21
Managers	2599	6.83%	1.01%	0.61%	21
Rankings	2119	5.57%	0.82%	0.50%	21
Leading	1585	4.16%	0.61%	0.37%	21
Education programs	1356	3.56%	0.53%	0.32%	21
Kpi	1005	2.64%	0.39%	0.24%	21
Competitiveness	1002	2.63%	0.39%	0.23%	21
Global	883	2.32%	0.34%	0.21%	21
High	865	2.27%	0.34%	0.20%	21
Market	759	1.99%	0.29%	0.18%	21
Teaching	669	1.76%	0.26%	0.16%	21
Service	533	1.40%	0.21%	0.12%	21
Brand	520	1.37%	0.20%	0.12%	21
English	506	1.33%	0.20%	0.12%	21
Effective	497	1.31%	0.19%	0.12%	21
Quality	474	1.25%	0.18%	0.11%	21
Business	460	1.21%	0.18%	0.11%	21
Modernisation	443	1.16%	0.17%	0.10%	21
Talented	443	1.16%	0.17%	0.10%	21
International and foreign students	414	1.09%	0.16%	0.10%	21
Position	400	1.05%	0.16%	0.09%	21
Attraction	386	1.01%	0.15%	0.09%	21
Тор	365	0.96%	0.14%	0.09%	21
Knowledge	348	0.91%	0.13%	0.08%	21
Excellence	315	0.83%	0.12%	0.07%	21
Leadership	255	0.67%	0.10%	0.06%	21
Joint programs and project	227	0.60%	0.09%	0.05%	21
Skills	223	0.59%	0.09%	0.05%	21
Commercialisation	212	0.56%	0.08%	0.05%	21
World-class	177	0.46%	0.07%	0.04%	20
Best	111	0.29%	0.04%	0.03%	19
Mooc	97	0.25%	0.04%	0.02%	17
Internationalisation	65	0.17%	0.03%	0.02%	19
Scholarships	57	0.15%	0.02%	0.01%	15

Although individual words give some sense of meaning from the documents, it is also useful to look at combinations of words (collocations) that increases the level of meaning. An example of this is "numbers" — which is one of the most frequent words and indicates the importance of quantification within the documents.

If we look at phrases rather than words, however, this reveals that the universities discussed numbers in at least two keyways, relating to publications (therefore pointing to ranking and research excellence) but also to student numbers, relating to income primarily. A peculiarity of Russian public universities is that they see students as a source of income, but not through tuition fees, but through scholarships from the federal budget. Thus, the more students a university attracts, the more the state pays it. This peculiarity of marketisation processes will be discussed in the Section 4.8.1.

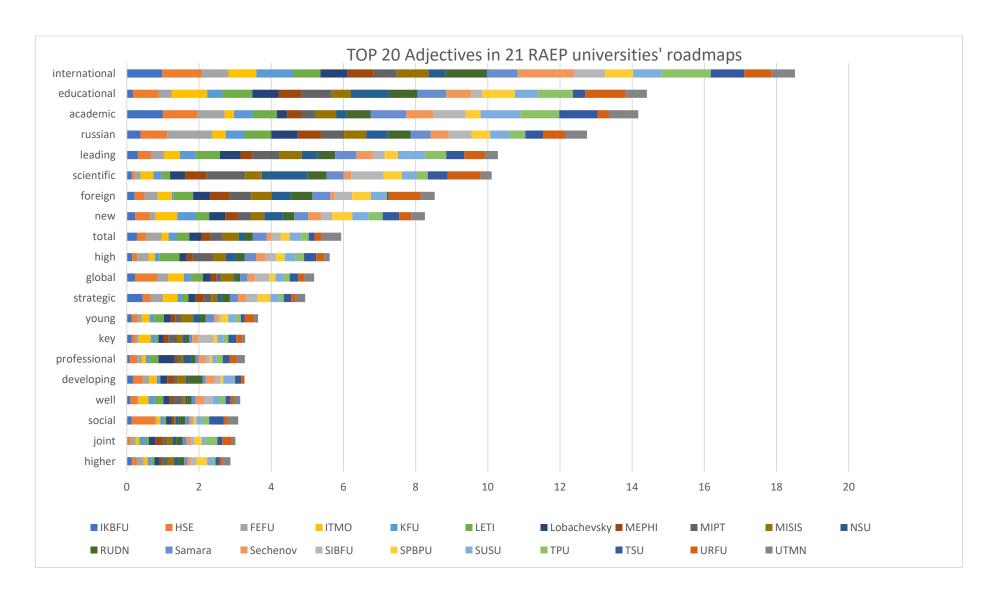


Figure 4-2. TOP 20 Adjectives in 21 RAEP universities' roadmaps

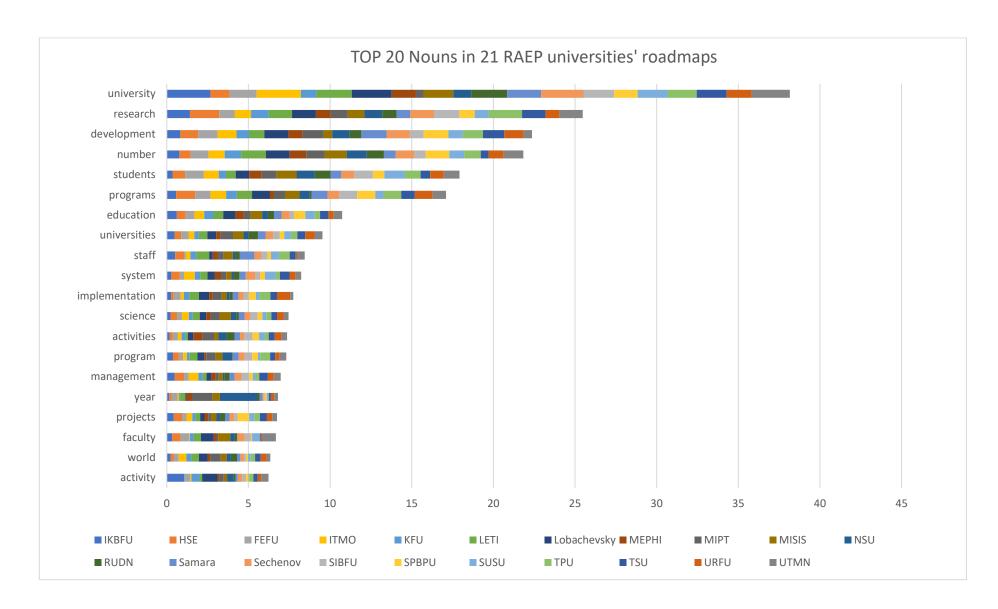


Figure 4-3. TOP 20 Nouns in 21 RAEP universities' roadmaps

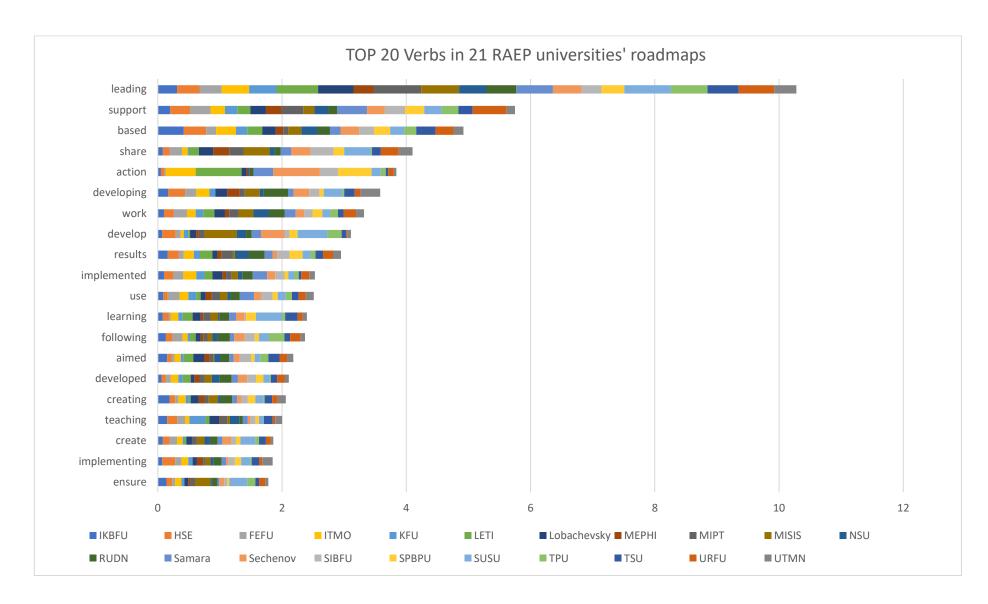


Figure 4-4. TOP 20 Verbs in 21 RAEP universities' roadmaps

4.8. What Do Universities Sell to the Government Via Roadmaps?

The roadmaps of the universities of the RAEP 5-100 project were created in order "to sell" their future achievements to the government, and not only to determine the main directions of development of each of the universities. The frequency of certain keywords indicates how important RAEP 5-100 universities consider some topics and how they position themselves for the authorities. Roadmaps contain the ways universities achieve "the higher education goals" which were formulated and articulated in the federal law on education. Universities should consider the needs of the state, society and students: "Higher education aims to ensure the training of highly qualified personnel in all major areas of socially useful activity in accordance with the needs of society and the state, to meet the needs of the individual in intellectual, cultural and moral development, deepening and expanding education, scientific and pedagogical qualifications" (Russian Government, 2012, p. 105).

Marketisation as part of the neoliberal discourse encourages universities to use a common language and terms in roadmaps. Each group of words from the top 40 keywords is used comparatively often in all roadmaps (See Figure 4-1). These top 40 topics are present in all documents, however, the frequency of mentioning each individual concept varies several times in different universities. For example, 1.71% of the words in the Sechenov University roadmap are in the "international" group, while at the same time, Novosibirsk State University (NSU) devoted only 0.55% of the words in this document (three times often one university uses the same topic than another).

The top 40 stemmed words make 24% of the entire RAEP 5-100 university roadmaps corpus (See Figure 7-1). Marketisation contributes to the unification of language, so instead of describing goals and ways of achieving them in their own way, Russian universities use a homogeneous set of words. The results of the roadmaps cluster analysis were another similar language usage evidence. Using NVivo 12 software documents were displayed together if they have similar characteristics. The Pearson correlation coefficient was used as a similarity metric. Most universities are tightly grouped together (See Figure 4-5). Only HSE, NSU and

TPU universities are somewhat distinguished from the general list, however, they still do not have significant differences.

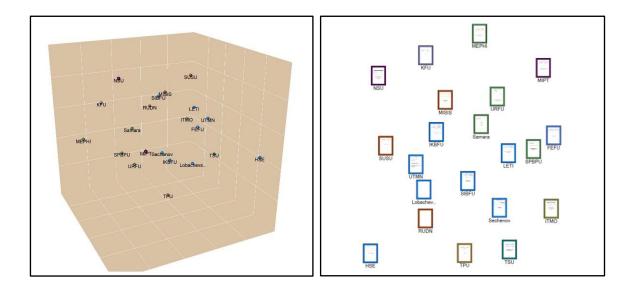


Figure 4-5. Roadmaps clustered by words similarity

Using Excel Correlation Data Analysis (See Table 7-1), several significant positive and negative correlations between the certain words frequencies in roadmaps were identified. A few examples are described below. With a probability of -0.73, if the term "institutions" is often outlined in the roadmap, the university will pay less attention to "students". Russian public universities have experienced a series of associations and enlargements over the past 20 years. The government has invited universities to give more independence to their structural units. Many universities have consolidated their faculties into institutes (for example, "mega faculties" in ITMO), or vice versa, were created from several separate institutes (for example, FEFU was created by combining several regional institutes). Possibly, increased attention to structural changes shifts the focus of universities from research and teaching to formal aspects of work organisation.

The analysis of the roadmaps shows some evidence of the positive correlation of +0.70 between the group of words "high" and "leading" which could be the sign of marketisation processes. Universities that often used the words "high, highly" also often used the word "leading". Both groups of words are associated with the universities positioning themselves towards a higher education international market (the common collocation around these words will be shown later). An attempt

to study in more detail the most popular collocations associated with these words will be made in the corresponding Section below.

All RAEP 5-100 universities are focused primarily on research and development, and not on students and teaching. Most often, the word "university" is outlined in roadmaps, with "research and development" topics in second and third places. The frequency of mentioning the topic "development" is an average of 1.51% in the entire corpus of words, while most often the topic "development" is outlined by Sechenov University (2.26%), and least of all — Tyumen University (0.95%). Most often, "research" is found at Tomsk Polytechnic University (TPU) (2.21%), while at the same time, MEPHI University uses this topic less often (1%). The average research topic is 1.39% of the total word corpus. Since all universities of the RAEP 5-100 group are state-owned, they primarily receive funding for research and development from the state. All RAEP 5-100 universities hold leading positions in local and regional rankings, and historically these educational institutions have focused on research rather than teaching.

Universities "sell" educational programmes to the government using market terminology. Educational programmes are becoming the second most popular topic on roadmaps. Throughout the corpus of words, the themes "educational" and "programmes" occupy third and fourth places, respectively. On average, 1.22% of the words in each roadmap are "programmes" and 1.21% are "educational". TPU focuses most on the "programmes" (1.71%), while ITMO University most often uses the "educational" topic (1.61%). Universities are opening new educational programmes, reforming and changing old courses and promoting the need for such work in front of the government. Educational programmes are one of the universities' KPI's for government funding support. Also, a variety of educational programmes help universities to the achieve the official goals of higher education specified in the Federal Law on Education (Russian Government, 2012).

Universities now try to measure everything, and every part of university life has an indicator and a number: "number of students, number of lecturers, number of articles, number of contracts", etc. The lexical unit "number" (#6th in popularity among the entire corpus of words an average of 1.04%) can serve as evidence of the deep the market language penetration into the texts of roadmaps. 1.52% of the

total number of words in the LETI University roadmap is about "number", the least mention is made at Tomsk State University (TSU) — 0.48%. Marketisation in documents is manifested using a specialised language total measurement of university development. Higher education institutions use "number" to describe the quantity of students, educational programmes, research areas and any other indicators. Accountability is one of the marketisation indicators. It is possible to compare universities among themselves and determine the most consistent of them with the standards. Authorities are pushing universities to use measurable indicators as formal grounds for assessing the quality of educational institutions, as well as for allocating funding. An attempt to quantify rather than measure could be another market vocabulary usage indicator.

Thus, the RAEP 5-100 universities focus on research and development. "Educational" and "programmes" themes remain popular and occupy third and fourth places. Universities describe these and other topics in market terms using quantitative indicators (topic "number" ranked TOP-5 in popularity in the entire corpus of words).

4.8.1. Students as a product but not a resource

"Students" lexical item is a popular topic and occupies 0.99% of the total number of words in the roadmap corpus. According to the literature review, marketisation is often associated with a change in the student's role in the educational process: universities begin to sell their services to students and position themselves in front of students more as tourist destinations than educational institutions. Roadmaps are intended for internal use by the university and for communication with government officials, however, relationships with students are reflected in these documents as one of the important topics. The number of "students" mentioned between different universities is three times higher: from 1.51% at SUSU university to 0.42% at IKBFU.

An increased attention to foreign and international students can be evidence of marketisation processes. There are several reasons for this. Firstly, Russian public universities have the right to independently establish higher tuition fees for foreigners. This makes attracting international students more profitable. Secondly,

the Russian government pays for the tuition of some international students from the federal budget. Universities are beginning to consider such students as an additional source of funding. At the same time, universities hardly mention tuition fees on roadmaps (the reasons for this situation are discussed below). Thirdly, the RAEP 5-100 project obliges universities to use international students' attraction as one of the KPIs. The analysis of the number of mentions of international and foreign students in roadmaps shows that, on average, such collocations occupy 0.23% of the total word volume in roadmaps (See Figure 4-6). Siberian Federal University (SibFU) and the Russian University of Friendship of Peoples (RUDN) are focused most of all on the international students. TOP-3 universities from the RAEP 5-100 project are four times more likely to mention foreign and international students than the last three on the university list.

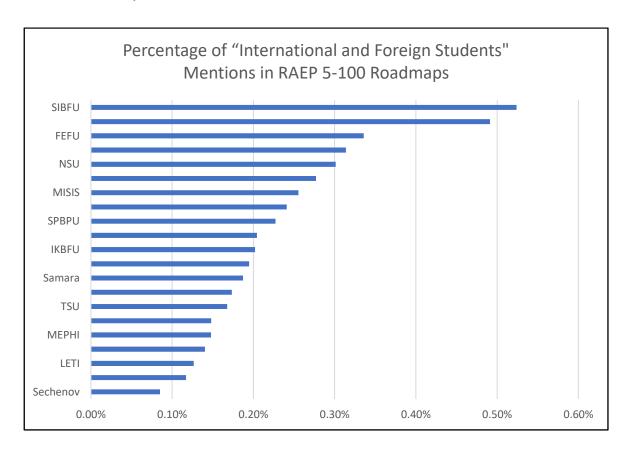


Figure 4-6. Percentage of "International and Foreign Students" Mentions in RAEP 5-100 Roadmaps

Marketisation has forced universities not only to pay attention to foreign applicants, but also to spend efforts on attracting international students (See Figure 4-7). Many roadmaps contain separate subsections on how to attract students from

both Russia and other countries. Universities are attracting applicants as a separate area of work, which contributes to increased competition for students between universities. Attracting students on average takes 0.2% of the total number of words in each of the roadmaps. RUDN (0.32%) is four times more likely to mention "attracting foreign students" than KFU and Sechenov University (0.8% each).

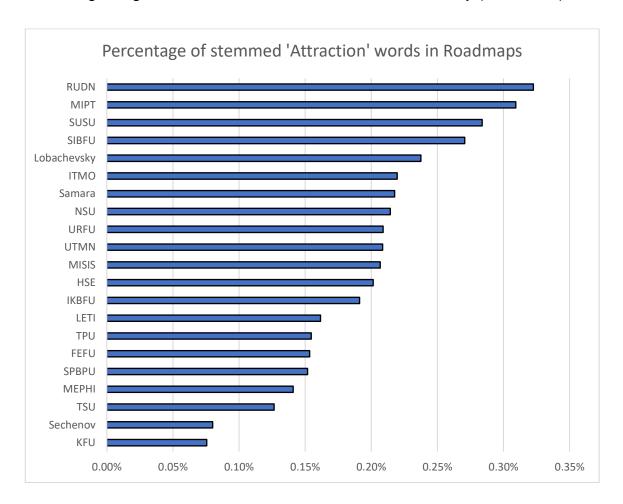


Figure 4-7. Percentage of stemmed "Attraction" words in RAEP 5-100 Roadmaps

Universities use adjectives in superlative roadmaps to describe interactions with students. They want to not just attract students, but to choose the very best and most talented ones. Along with promises to conduct "best research" and apply "best managerial practices", universities create another high-quality product from their students. For example, the HSE's strategy aims "to attract best students from the national market", the university looks for "best tuition-paying candidates". Other universities of the RAEP 5-100 project are also looking for "best applicants" and

"best talents" (See Figure 4-8). The use of such collocations indicates a high degree of penetration of the market language into the universities' work practices.

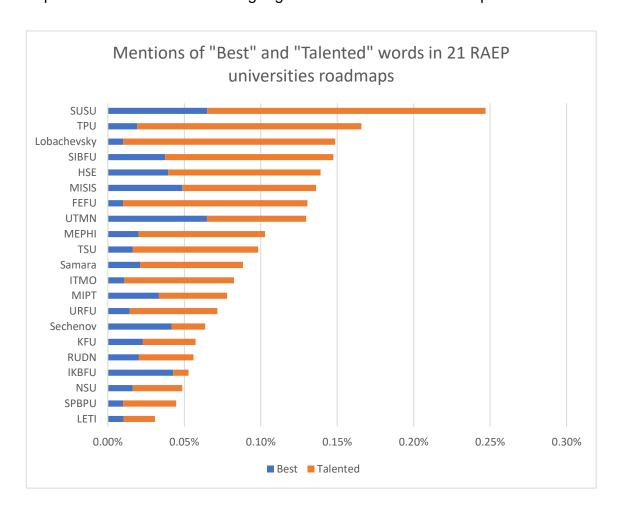


Figure 4-8. Mentions of "Best" and "Talented" words in 21 RAEP universities roadmaps

Surprisingly universities of the RAEP 5-100 project almost do not consider students as a source of additional funding. Typically, marketisation of higher education implies that public universities are interested in attracting international students in order to be able to charge higher tuition fees (See the Literature Review). Russian universities rarely use the words "tuition, paying and payment" (See Figure 4-9) in documents. On average, tuition fees are outlined 4.7 times (0.02%) on each roadmap. Most often, HSE (13 times) and Ural Federal University (10 times) write about tuition fees. Nine universities mention this topic three or fewer times in documents each of them contains more than 20 thousand words. Russian public universities use the market language, but do not describe students as an additional source of funding. About half of Russian students independently pay for their

education, but universities in communication with government prefer not to raise this topic. Perhaps universities want to receive additional state funding: they may avoid demonstration of financial independence to raise their chances of transferring extra federal money.

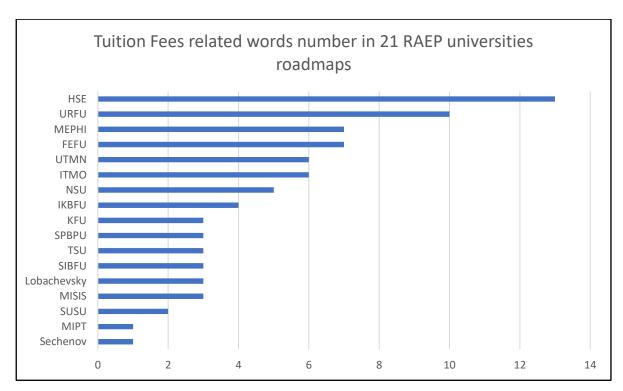


Figure 4-9. Tuition Fees related words number in 21 RAEP universities roadmaps

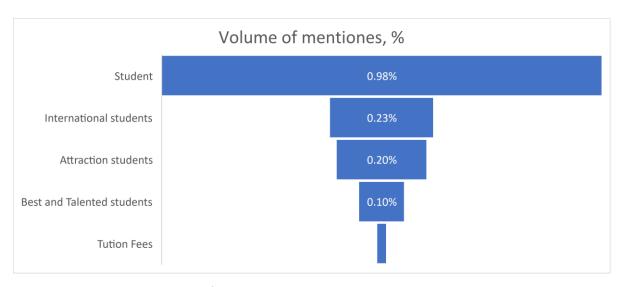


Figure 4-10. Volume of mentions on student related topics

Thus, universities describe students as a "product", but do not consider tuition fees as an important source of additional income. The topic of interaction with

students remains one of the most popular in roadmaps: 0.23% and 0.2% of all words are related to international students and ways to attract them. Russian universities aim to find self-paying students from other countries. Budgets are allocated to attract the best and most talented applicants. At the same time, the need to attract "talented foreigners" is not related to the economic benefits of this process. The number of international students is one of the KPIs established by the Russian government. This indicator also affects the position of universities in league tables. Therefore, universities which are ready to spend additional money for that do not hope for the self-sufficiency of teaching international students' expenses.

4.8.2. Skills and Knowledge as products

An analysis of roadmaps shows that knowledge is not related to students: the collocation "knowledge production" is much more common. Universities mention "knowledge-intensive companies" (FEFU) and "knowledge-intensive services" (HSE), several universities are focused on "generate new knowledge" (ITMO) and "new knowledge produced" (SPBPU). Universities do not plan to attract students to the creation and development of new knowledge; instead, knowledge becomes a product owned by the university. Universities promote and "sell" knowledge in the higher education market and use roadmaps to formalise these plans. Tomsk Polytechnic University (TPU) believes that "concentration of technologies <...> allow the University to commercialise knowledge and improve its competitiveness". Knowledge as commodity is emphasised using high-quality adjectives (modern, new, advanced). Universities describe what can be done with knowledge using the verbs "develop, generate, promote, transfer". Universities commercialise not only knowledge, but also skills and research.

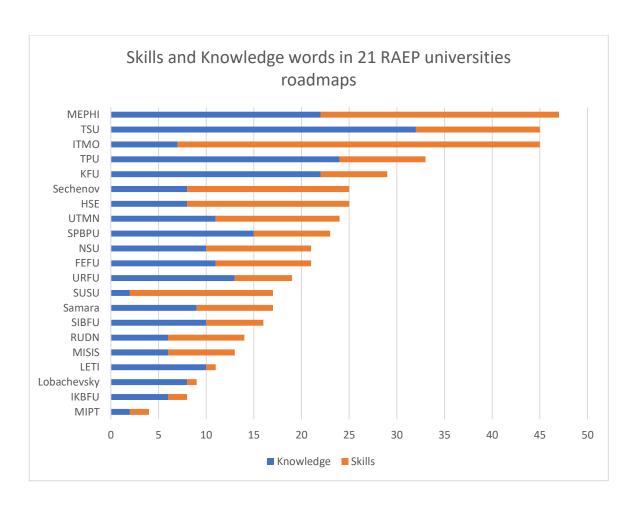


Figure 4-11. Skills and Knowledge words in 21 RAEP universities roadmaps

Skills are described by universities using market terminology. Universities plan to develop skills not so much among students as managers and teachers. For example, the HSE plans to develop "teaching entrepreneurial skills with commercialisation of research output", and KFU monitors the "number of employees participated in Skills Enhancement Program". NSU, RUDN and other universities are planning to develop managerial skills with their employees. Even those universities that link skill development with student learning use characteristic adjectives to describe this process (high, competitive etc.). Communicative skills are often associated with the study of English, as a prerequisite for achieving better positions in a global competition.

4.9. Russian Public Universities in the International Higher Education Market

Marketisation has forced Russian public universities to become active participants in the international higher education market. Members of the RAEP 5-100 project included relevant development directions into their roadmaps. To ensure competitiveness in the world market, universities are strengthening the study of English and other foreign languages, as well as creating double degree programmes. HEIs provide additional funding to attract foreign students, including scholarships. Massive open online courses (MOOCs) are becoming one of the ways to promote Russian higher education in the world market. Universities often mention internationalisation on roadmaps, and also use the adjectives "global" and "world". These areas of development of RAEP 5-100 universities will be considered below.

4.9.1. English as a competitive advantage

English as a prerequisite for successful competition in the higher education market is often outlined in the roadmaps of universities of the RAEP 5-100 project. The Russian government plans to use the market potential of higher education for additional profit, therefore, the authorities are pushing universities to work more actively to promote themselves in international rankings and attract foreign self-paying students (Sub-section 4.8.1). English is primarily needed for academics and university managers in order to eradicate communication problems with foreign colleagues, publish articles in English and participate in international activities. Universities are making efforts to improve the teaching of foreign languages for students.

There are large differences between the universities of RAEP 5-100 in the number of references to English and other foreign languages (See Figure 4-12). The Higher School of Economics (HSE) referred to this almost ten times more often (58 references) than the Lobachevsky University and the Polytechnic University in St. Petersburg (SPBPU) (6 times each of the universities). Each of these universities has a different number of international students, however, SPBPU is not an outsider in the number of international students it attracts. According to the official Russian

government portal StudyinRussia, in 2020 more than 32 thousand students study at the SPBPU university, 7500 of which were citizens of other countries. This situation can be explained by the fact that many universities teach international students in Russian. Not all universities of the RAEP 5-100 project could create English-language educational programmes and they do not have certain KPIs.

"Share of faculty who speak English" has become one of the KPIs at FEFU. The Higher School of Economics (HSE) has created new training programmes in English in order to form an "elite segment of international prospective students". ITMO has made efforts to create a "system for promoting an English-speaking environment at the University". Universities described English with market-related adjectives: "new, advanced, comfortable". The use of the word "comfortable" creates the feeling that universities are more a tourist destination, a place for a pleasant pastime, and not an educational institution. Universities use English-language educational programmes as an advantage over their competitors who do not have such programmes. For example, MEPHI directly writes about "promotion of the University's education programmes or their modules, including bi-lingual programmes/modules (English) on foreign markets". Therefore, the use of English in the teaching, management and work of academics is an important part of internationalisation, as another process related to marketisation.

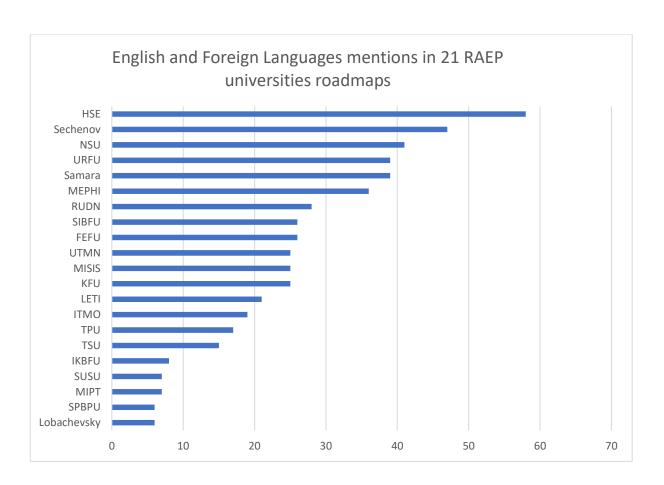


Figure 4-12. English and Foreign Languages mentions in 21 RAEP universities roadmaps

4.9.2. Internationalisation as a marketing-related topic

The "international" group of words (internationalisations, international, internationally) is a sign of internationalisation as part of the marketisation process. Knight (2015) describes internationalisation as "the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education" (p. 2). As noted in the literature review, higher education has become an important lucrative sector of the economy. Universities are making marketing efforts to capitalise on and advertise themselves as desirable places of study (Stack, 2013; Stein, 2018). One of the important goals of universities is to maintain national competitiveness in a global environment. Since May 2017, the Russian Government has been implementing the project "Export of Russian education". The key goal of the project is "to increase the attractiveness and competitiveness of Russian education in the international market for educational services and thus increase the non-resource export of the Russian Federation"

(Russian Government, 2017). The topic "international" occupies 0.99% of the total number of words in the studied words corpus. Most often, Sechenov University raises this topic (1.71%), versus the least often Novosibirsk State University uses the same concept (0.55%).

In this section, only those types of internationalisation of higher education which are related to marketisation are considered. As noted in the literature review, there is a link between internationalisation and marketisation. Depending on the context, the same concepts can be associated with both concepts. For instance, "global" can be seen as a sign of international cooperation or as an indicator of a university's entry into international global markets. The reference to "international students" may be a consequence of globalisation processes, or it may be seen as well as a source of additional income. The systemic approach allows us to analyse the context of the use of this group of notions through the prism of the market technologies impact on public higher education institutions.

Internationalisation-related topics are among the TOP-40 most popular themes on roadmaps. The topic "foreign" is found in 0.41% of the corpus of words and "world" is 0.3%. This proves that universities are focused on the international market of higher education. Universities compete among themselves for international students and teachers and compare themselves not only with other universities within the country, but also with leading international educational institutions. In roadmaps, universities are looking for partnership opportunities with foreign companies and foreign universities to take a leading position in their industry. Tomsk State University (TSU) describes internationalisation using a specialised marketing language (indicators, goals, rankings, leadership):

The indicators, by which the University intends to measure its progress towards the Program's goal, are presented in the logic of the world's leading ranking services, i.e. are based on an intrinsic, professional assessment of scientific achievements and openness, as well as the constant assimilation of the best world practices through internationalisation and co-operation, through partner networks.

The roadmaps of the universities of the RAEP 5-100 project present various aspects of internationalisation. Knight et al. (2018) include in internationalisation not only scholarships for international students and international projects, but also "branding, international programmes and provider mobility, global citizenship, internationalisation at home, MOOCs, global rankings, knowledge diplomacy, world class universities, cultural homogenisation, franchising, and joint and double degree programmes" (p. 2). Many of these concepts are directly related to marketisation and will be considered separately. In this section of the research, "double degree" and "joint programmes", as well as "MOOCs" and "international university programmes", will be studied. Learning English can also be attributed to the impact of internationalisation. Universities are interested in learning foreign languages for three reasons. Firstly, most research in international journals are published in English, secondly, the demand for English-language educational programmes is quite high among international students. Finally, English taught programmes become an advantage to creating double degree programmes and finding motivated local students.

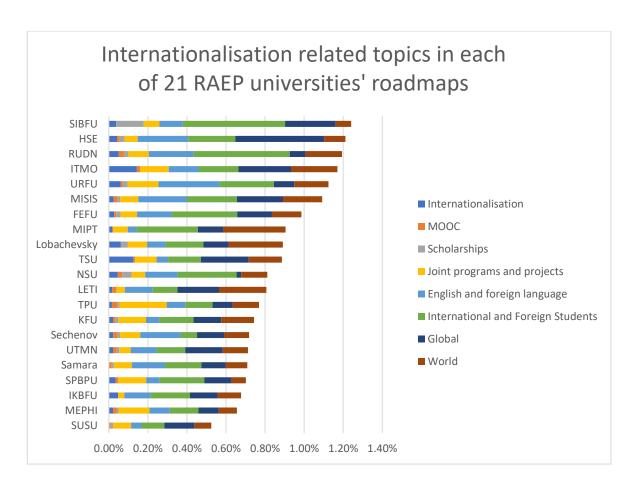


Figure 4-13. Internationalisation related topics in each of 21 RAEP universities' roadmaps



Figure 4-14. Common topics within the internationalisation sphere related to the marketisation processes

Double degree programmes are further evidence of the impact of internationalisation on the higher education market in Russia. Double and joint programmes are outlined in all roadmaps 621 times or on average 30 times in each of the analysed documents. This topic takes 5th place among the words related to internationalisation. Most often, MEPHI declares about double degree programmes (83 references), least often — IKBFU (6 times). Half of the universities of the RAEP 5-100 project outlined the need to create and develop double degree programmes more than 25 times. Creating joint programmes allows universities to solve several problems. Firstly, universities strengthen co-operation with foreign universities. As partners, educational institutions are trying to choose strong universities that are in the top 400 world rankings. Joint teaching contributes to the growth of joint research and publications, and this affects the position of universities in the rankings. Secondly, universities attract international students to one-year and semester programmes. One of the KPIs established by the Russian government for RAEP 5-100 universities is the number of foreigners studying in basic educational programmes. Thirdly, universities use double degree programmes as a competitive advantage. Russian students are interested in a diploma from a foreign university (obtaining such a degree is cheaper, does not require a fully-fledged move abroad, and it is an advantage for employers). Thus, Russian universities use double degree programmes to achieve market goals: to attract international students, to fulfil the KPI government and as a competitive advantage.

Universities of the RAEP 5-100 project use massive open online courses (MOOCs) and scholarships as additional market advantages. MOOCs and scholarships are least often outlined on university roadmaps compared to other internationalisation and marketisation-related topics. The need to create and promote massive open online courses is outlined 100 times in the corpus of words on roadmaps, while scholarships are referred to 57 times. Almost half of the scholarships mentioned were made at SIBFU (20 times), the leaders with the numbers of mentions of MOOCs were MEPHI and Sechenov (12 and 11 times in each roadmap). Some universities do not have outlined scholarships or MOOCs in the roadmap even once. According to the literature review, both directions can be used to attract international students and take the best positions in world education markets. Online courses allow HEIs to promote themselves among a wide

international audience. Scholarships used to be a way to find the most talented applicants, even if they cannot pay for their studies. For Russian universities of the RAEP 5-100 project, these areas of work are not so popular for several reasons. First, the creation of fully-fledged MOOCs requires additional personnel. Video shooting and editing, online course promotion etc require additional costs. Secondly, only teachers with good English knowledge can conduct the course. Not many Russian academics have fluent foreign language knowledge. Tuition fees at Russian universities are relatively low compared to leading foreign universities, so scholarships are not always a decisive factor for applicants. On the other hand, the Russian government subsidises some international students, paying for their tuition from the federal budget. Therefore, universities are not interested in providing their own scholarships. However, universities use MOOCs and scholarships as additional sources to improve their position in the global higher education market.

4.9.3. League tables and competitiveness

League tables are an important indicator of marketisation. As described in a review of literature, marketisation pushes public universities to create uniform standards of instruction and the need to compare educational organisations among themselves. Universities fall into the league tables trap (Altbach, 2006; Hazelkorn, 2007) for several reasons. Firstly, many students no longer perceive higher education as a public good. Now, applicants use university education as an investment in their future, so they want to choose the "best university". Secondly, the government takes a neoliberal approach to managing the public sphere and allocates funding based on KPI. To create a system of better accountability, to measure the quality of teaching and management, uniform standards are needed. Thirdly, the standardised management system for public universities in modern Russia was inherited from the USSR, when the state guaranteed a uniform standard of education throughout the country. Finally, there is a change in the perception of universities among employees and managers (which will be shown in the next Section 4.10 of the research). Heads of higher educational institutions are developing the prestige and reputation of universities to increase their positions on the global education market. Thus, the universities of the RAEP 5-100 project were forced to consider rankings and competitiveness as important topics in their roadmaps.

Competitiveness is an important component of marketisation, which is often found in the roadmaps of the RAEP 5-100 universities. Using the NVivo 12 software, this concept was combined on the basis of synonyms: competition, competitions, competitive, competitiveness. On average, competitiveness takes 0.31% of the total words number in the studied corpus. Most often, Tomsk State University operates with these terms (0.5%), least often, Kazan Federal University (0.14%). Universities stimulate the competitive environment both within the faculties (attracting university funds to finance faculties and competition between employees) and when interacting with other universities (competition for federal government resources, competition for students and new teachers. For example, HSE "has established the first in Russia and globally competitive academic centre of excellence in education and human development with a special focus on interdisciplinary research". SIBFU has looked for the "best practices to enhance competitiveness include the mechanisms practised by leading universities in Russia and abroad". TSU has made the "developing system pursuant to constantly growing demands of the international research environment and increasing competition in the market of innovation products and education service". Universities position themselves in the competitive market of higher education.

Various rankings are a popular topic on all roadmaps of universities of the RAEP 5-100 project. Ratings, rankings, and league tables in the roadmaps corpus of words are outlined 1063 times. Each university uses this term 51 times on average. There is a strong correlation between the use of the words "leading", "positions" and "rankings". Universities not only mention league tables in their development plans, but also strive to take first, leading positions in the competitive higher education market. The TSU most often refers to different rankings (121 times or 0.44% of the total number of words in its roadmap), while the FEFU is least focused on rankings (21 times or 0.11% of the number of words in its development plan). The collocation "position in the ranking" is the third most popular among all market-related nouns after KPI and competitiveness. For, example IKBFU decides that "reaching top positions in the international rankings is one of the key success

indicators of the strategy pursued". All RAEP 5-100 universities track their positions in major international rankings (THE Times, QS, ARWU). Higher education institutions seek to compete and compare with each other in a single market using comparable indicators. At the same time, each of the universities has tried to find its competitive advantage.

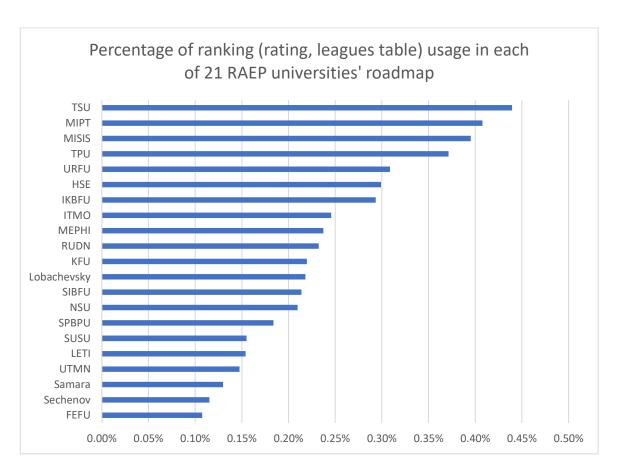


Figure 4-15. Percentage of ranking (rating, leagues table) usage in each of 21 RAEP universities' roadmap

An analysis of Russian public universities roadmaps shows that all universities in the RAEP 5-100 project are active in the international higher education market. Internationalisation as part of the marketisation process has become an important activity for HEI managers. Universities open double degree programmes, attract international students and invest additional funds in English learning in order to successfully compete with foreign universities. The project 5-100 members work in an atmosphere of competition and compare themselves with leading foreign educational institutions. League tables have become an important criterion for the success of universities. Comparison of common criteria is pushed

by the Russian government and market mechanisms. The government receives uniform criteria for allocating funding and managing public universities. And universities use rankings as a competitive advantage to attract talented students to build their own brand.

4.10. Marketisation

Topics related to marketisation play an important role in the corpus of words used in university roadmaps from universities of the RAEP 5-100 project. In this section of the research, the main concepts relate to marketisation in the documents being studied. Russian public universities plan not only to compete for the best positions in the league tables and attract international students, but also to develop their own market brands, focus on services and commercialisation of the educational process. In addition to the tuition fees, which were discussed in this chapter earlier, universities directly declare the need for doing business, improving the quality and excellence of their work as well as set certain key performance indicators (KPIs) to measure every part of their activities. Specific adjectives (top, effective, highest, biggest, largest, talented, leading etc.) can also be considered as evidence of market language penetration into the daily life of universities. Finally, the frequent use of the "market" itself is important evidence of the ongoing marketisation processes in Russian higher education.

4.10.1. Market and Brand

The universities of the RAEP 5-100 project describe development plans as work in the higher education market and focus more on working methods than on developing their brand. The noun "market" is found in all roadmaps 746 times (35 times on average for each university, the median value is the same). Between universities, there are significant differences in the number of uses of the word. The Higher School of Economics (HSE) is eight times more likely to write about markets (76 mentions) than IKBFU and MISIS (nine mentions each). An analysis of phrases that include the word "market" shows that universities mention both local and global markets. Most universities of the RAEP 5-100 project are oriented to international markets. Only some of the universities speak of domestic or regional markets. For

example, FEFU has looked for "technology businesses integrated into the markets of the BRICS and Asia-Pacific countries" (FEFU Roadmap).

Most often, universities focus on three types of markets: the labour market, the student market, and the research market. Some universities describe their plans as actions in the recruiting market and the employer market. Universities create attractive conditions for highly qualified professionals and develop ways to work in the "academic market". Many higher education institutions consider working with applicants as a market activity. MEPHI has created a separate section in the "Enrolment Market Strategy" roadmap. Most universities focus on the research market. HSE operates on "the global market of educational services and research & development". ITMO focuses on "international R&D and engineering markets". Market conditions forced HEIs to transform their educational programmes as services. For example, RUDN positions on "the educational services market". Samara State University plans to completely transform its work into a market economy: "The University needs to move from providing services to traditional customers to the introduction of new technologies (engineering and social), the development of new markets for products and services". All universities of the RAEP 5-100 project make efforts to work in the market of higher education, but only some of them clearly formulate the need to develop a university brand.

Marketisation has forced Russian public universities to purposefully develop their brands and adopt the concepts and practices of branding (Chapleo, 2015a, 2015b; Endo et al., 2019). As Chapleo (2015b) states "good brands are key resources for generating competitive advantage and brand management is a central organisational competence that organisations need to understand and develop" (p. 2). However, Russian public universities are much less likely to use the concept of "brand" than other market-related words. In all roadmaps of universities of the RAEP 5-100 project, the "brand" occurs 143 times (6.8 references in each document on average). SPBPU and TPU never write directly about their brand. At the same time, RUDN and Tyumen State University mention the concept of "brand and branding" 18 and 21 times.

There are three main features of branding in university roadmaps: audience engagement, promotion channels and brand content. Firstly, some universities use

the brand to attract the target audience: students, academics, stakeholders. FEFU talks about the brand as a tool to attract talented students. MEPHI creates "brand which is well recognised offers many opportunities, including new markets of talented students and employers". HSE and Lobachevsky University focuses on brand promotion not only among students, but also among the academic community. At the same time, the university organises "promoting the University's brand and boosting its visibility as a global research centre". MEPHI and HSE plan to find brand ambassadors among graduates. ITMO chooses "reinforcement of the University's brand and the involvement of stakeholders in the University's development process" as one of the KPIs.

Secondly, universities detail the content of the "brand" concept. IKBFU understands the brand most narrowly: "branding materials brought in line with the unified standards". UTMN manufactures and implements "UTMN-branded products". LETI reduces the brand to the frequency of university references in international media. To do that, the university plans to rebrand: update the logo and modernise the website. MIPT in the roadmap claims to be "one of the most recognisable brands among the Russian universities, associated with high-quality education, strong corporate spirit, cohesion of graduates, as well as high moral values of both students and faculty of the university". Thirdly, universities declare the need to promote their brand. SIBFU uses forums and exhibitions, other universities focus on media publications or the development of Internet communication. Universities generally promote themselves as a single brand, although there are exceptions. For example, the University of Tyumen chose the "brand house" as the optimal marketing model, according to which the general umbrella brand of the University of Tyumen contains semi-autonomous brands and other units that are developing faster than the university as a whole.

Thus, the universities of the RAEP 5-100 project position themselves in roadmaps as organisations working in the international market of higher education. As a result of marketisation processes, universities compete among themselves for best students and teachers, change the content of educational programmes to make them more attractive in the educational market. Universities are beginning to perceive their work as providing services to target groups of customers. To

strengthen their market positions, universities use the self-promoting function of branding. However, working with the brand is not popular among Russian public universities. Compared to other market topics, branding is about five times less likely to be outlined than the "market". Universities define branding in different ways, which may indicate a difference between them in understanding market mechanisms. Many universities commonly perceive the concept of brand as something too abstract and do not incorporate specific KPIs in their branding strategies. On the other hand, some universities either do not mention the brand in roadmaps at all or understand the brand very narrowly — as the design of printed promotional materials in a single style.

4.10.2. Commercialisation, Services and Business

The marketisation of Russian public universities is manifested in the gradual commercialisation of their activities. As noted earlier, universities are beginning to perceive educational and scientific activities as services. Commercial services include paid degree programmes, short-term courses and summer schools. Russian public universities often mention the need for doing business. Commercial units and business incubators are created at universities to facilitate the commercialisation of research and development (R&D). Educational institutions focus on profitable programmes and look for additional, extrabudgetary sources of funding.

The universities of the RAEP 5-100 project are considering the possibility of commercialisation of their work in accordance with the logic of higher education marketisation. In the corpus of roadmap's words, commercialisation, and stemmed words (commercialise OR commercial) occur 178 times. Four universities (KFU, TSU, Sechenov University and SIBFU) on average mention commercialisation 23 times each, while other universities of the project write about this topic 4.6 times less (on average five times each). Universities are mainly focused on commercialising the development of existing scientists and academic groups, but some of them mention the need to develop business incubators for students: "organisation of the project and commercial activities of students" (TSU). Some universities plan to commercialise their research with acceleration programmes (FEFU, HSE). ITMO looking for "development and implementation of mechanisms

for commercialisation of products of scientific research". MIPT has worked for "increasing the share of R&D from applied 'commercial' science". LETI has gone to earn differently and provide commercial educational services. As noted in this study earlier, universities perceive knowledge as a commodity, for example, MEPHI has developed a "system for the commercialisation of accumulated scientific knowledge and technologies". Moreover, "commercialisation of knowledge is one of the three priority activity areas induced by TPU along with education and research". KFU plans to focus on expanding commercial contracts with industrial partners. UTMN economic model is based on "co-operation with business and the commercialisation of intellectual products".

The mention of services and the transformation of the work of educational institutions into "companies" operating on commercial principles can be seen in the roadmaps of universities of the RAEP 5-100 project. The word "services" is used 534 times in the body of roadmaps (an average of 25 times in each of the documents). Most often, Sechenov University writes about services (78 times), and least often SUSU and MIPT (5 times each). Despite the difference of 15 times between universities in this indicator, Sechenov University does not use other terms related to marketisation more often than other universities of the project 5-100. Higher education institutions use services as an additional source of funding. For example, FEFU has looked for ways for "expansion and diversification of sources of income are primarily related to the improvement of sales policies, the enhancement of the quality and output of products and services offered by the university at the regional and the global markets". MEPHI invests in the "promotion of the University's educational services on foreign markets". HSE takes a similar position and plans for "boosting co-operation with corporate and regional clients, developing R&D packages, consulting services and continuing professional education services". The HSE differ from other universities: it provides research and educational services, and also marketing and administrative services for a wide audience.

Educational services for their students and staff make up the second largest group of university services. Many universities plan to launch the educational services export for students from other universities. For international students, KFU organises linguistic support services in the first years of study, social and cultural

services for better integration into the educational environment. The university also plans to provide services for its teachers to support publication activity and the learning of English. Educational services for international students are launched by Lobachevsky University. MISIS provides "students and faculty with high-quality services". RUDN University also draws attention to the high quality of the services provided. Thus, universities describe their own activities as services for various target audiences. Universities monitor the quality of services for their students and teachers, and try to commercialise their research, educational programmes, including through close co-operation with business.

Business has become one of the popular topics on the roadmaps of Russian public universities along with services and the market. Business-related phrases are outlined 387 times in the corpus of words on all roadmaps (18 times on average in each roadmap, median is 16 times). Most often, MEPHI writes about business (54 times), MIPT and Sechenov University least often use the word "business" (4 times each). There are three main aspects related to business: interaction with private business outside the university, creation of business incubators and implementation of business projects by the university itself. Business incubators and business accelerators are created at universities to help students learn how to sell their products and to create commercially successful products and services. SUSU plans "training students and staff in entrepreneurial skills and developing business ideas". MISIS will give "students and employees an opportunity to start their own businesses in immediate proximity to their colleagues and the university infrastructure".

The high frequency of using the word "business" in the MEPHI roadmap is associated with the launch of "business educational programmes" for students at the university. Other universities barely do not discuss specific courses for students on roadmaps and are more focused on business incubators. For example, HSE Business Incubator has worked "on smart city technologies". HSE is also one of the few universities in the RAEP 5-100 project that mentions private companies as clients for whom the university can make analytical reports and provide other services. Many universities are more focused on partnerships with private businesses. It can be agreements on graduates employment, the creation of joint

educational programmes or R&D with the business community (ITMO, IKBFU). For example, the NSU has established as one of the KPIs "number of educational courses implemented together with business companies".

Thus, the Russian public universities of the RAEP 5-100 project create new market areas of work. Universities are commercialising their research to earn extra funding. Paid educational services and products are created both for own students and for other participants of the higher education market. Universities have changed their attitude towards their students and teachers, providing for them paid and free (included in the cost of education) services related to socialisation, learning Russian and foreign languages, etc. In addition to research and teaching, universities begin to engage in business development, create business incubators for students, and establish partnerships with private businesses. Thus, universities become fully-fledged subjects of the market environment, which monitor key performance indicators, high quality standards and strive for excellence.

4.10.3. Excellence, Quality and KPI

The pursuit of excellence, the creation of high-quality standards and the constant monitoring of key performance indicators (KPI) are the logical consequence of the marketisation of higher education in Russia. Like private companies operating in market conditions, universities compare themselves with each other and create "centres of excellence". HEIs are trying to meet the requirements of the government and the needs of future students by improving the quality of teaching and other educational services. All this requires the creation and regular measurement of the KPI work of various departments of universities. These topics will be discussed in more detail next.

4.10.3.1. Excellence as a way to work in the education market

Excellence has become one of the tools to achieve the market goals of universities. As noted in a review of the literature, the Russian government seeks to directly use the potential economic benefits of scientific discoveries to create a knowledge economy. The innovative and scientific discourse in higher education has become increasingly economic in nature, which is why many universities strive

for excellence. The universities of the RAEP 5-100 project use the concept of "superiority" very heterogeneously. The entire corpus of roadmap words contains 316 references to this concept. On average, each document contains 15 references, but the median value is nine. The fact is that KFU's "excellence" plan is 82 times higher, and two more universities more than 30 times. At the same time, six universities talk about this concept less than five times. Such a significant difference in the use of this concept can be associated with various formulations in the texts of roadmaps.

Most often, universities use the stable phrase "centre of excellence". This is the name of universities or their units, which conduct research and development in breakthrough areas of knowledge and have unique material, technical, intellectual and human resources. Centre of excellence "activities are of the highest quality and effectiveness". As a rule, they are national (some world leaders) in one or several areas of science and technology and at the same time serve as a link in the transfer of knowledge from the forefront of research to national companies and laboratories. The emphasis on "excellence" indicates that these centres serve as standards for other institutions of a similar profile. Many universities of the RAEP 5-100 project use this very formulation. As noted earlier, many universities are interested in achieving leadership, taking top places in rankings, etc. For example, LETI creates "Centres of Excellence, state-of-the-art labs and world-class centres in priority interdisciplinary areas". Some universities use excellence for "motivation of employees to invest into self-development, and improvement of the scientific performance stimulated by the academic excellence initiatives". Sechenov University "set a goal to achieve an international level of excellence in R&D". As a result, all universities are somehow interested in leading positions in the international education market, for the achievement of which quality monitoring is also used.

4.10.3.2. Comprehensive quality: from products and services to the quality of people

The concept of quality in higher education is directly related to the processes of marketisation. As was shown in the literature review, quality control affects all areas of university activity: from research to teaching, from managing global goals

to the work of specific managers and academics. Targeted management and the achievement of measurable goals have become the basis for a comparative analysis of universities and the most suitable universities to identify additional budgetary funding. From an institutional point of view, the concept of "quality of education" was enshrined in law in the Soviet Union, therefore, the Russian higher education system inherited similar mechanisms. State standards of teaching quality, as well as state certification of public universities only enhances the penetration of "quality assessment" in the official documents of educational institutions. Marketisation helps reinforce this process.

In each roadmap, universities on average mention quality more than 22 times (in the whole corpus of words, the concept of "quality" occurs 478 times). TSU more often than others declares quality (79 times), IKBFU writes about it nine times less often (9 references). The universities of the RAEP 5-100 project are trying to control and improve the quality of their work. Several characteristic topics related to quality assessment in roadmaps were identified. Firstly, universities focus on the quality of the internal processes of the university: research, teaching, management. For example, LETI seeks to provide "world-class education quality" and "functioning of the system for educational quality management based on the principles of total quality management". Similar measures are described by MEPHI and other universities. HSE and TPU propose the creation of a research quality control system. LETI interprets high quality education as:

High-quality of education is provided by means of a convergent education paradigm "from idea to business" in the scope of a system to develop and transfer competences to industry via relevant human resources being bearers of knowledge and technologies.

Secondly, universities describe specific techniques and activities whose quality needs to be improved. Almost all educational institutions want to achieve "high-quality academic publications" (HSE, TPU, KFU etc). SUSU more specifically writes about "high quality, first-quartile publications". The number of publications in leading journals is one of the criteria for evaluating the work of universities for international league tables. Universities are developing publishing activity to improve their rankings. The quality of MOOCs allows not only to improve the position

in the rankings, but also to promote the university among a wide audience. Therefore, LETI creates "high-quality online courses". Other universities bring the "scientific and educational activities to a new level of quality" (RUDN), organise "high-quality events" and "high-quality multimedia broadcasting" (MIPT), and create the "high quality website" (MEPHI). To ensure the quality of education, SUSU controls "quality of educational materials", and TSU improve the "quality of language training". The university improves education quality "through international and professional accreditation of academic programmes and intellectual products". Lobachevsky University uses "high quality equipment" in the learning process and "evaluating the quality of the programme content and training of graduates". NSU improve "the quality of training qualified graduates through introducing new educational approaches and the system of motivation" and "surveying teaching quality at Physics department through questioning of students".

Thirdly, universities control the quality and standards of their services. As noted earlier, marketing has affected universities' perceptions of their work. In roadmaps, Russian public universities not only describe their activities as the production and distribution of goods and services based on high quality standards. For example, LETI seeks not only to "increase the quality of education but also to improve marketing, e.g. to promote actively itself on the markets of educational services, scientific and technical products as well as on the labour market". RUDN "always try to meet the highest education quality standards". Among universities, it is believed that international educational standards are synonymous with high quality, therefore, for example, Sechenov University takes "international quality standards" as its basis. MIPT provides "students and faculty with high-quality services". The most notable market position is held by MEPHI, which created "a list of services and criteria of their quality and time of their delivery".

Fourth, the universities of the RAEP 5-100 project are ready to evaluate and improve the quality of applicants, students and teachers. As noted earlier, marketing promotes the perception of university employees and students as a "product" whose quality can be improved. To achieve the desired performance, KFU creates a "high-quality personnel pool", while the NSU claims to be looking only for "high-quality researchers". The Higher School of Economics is ready to track "higher quality of

the student". MEPHI "enhanced quality of prospective students". RUDN and URFU are taking steps to improve "quality of recruitment of international students". MIPT strives to provide "high quality of admission" and details what they mean by the quality of applicants:

"Quality of enrolment in bachelor's programmes. These measures included proactive work with schools, a year-round information campaign, a scholarship programme for talented students and introducing modern technologies to make it easier for applicants to submit documents. The rise in student performance proves that the university has chosen the right option: every additional ten points in the Unified State Exam (USE) increases the average expected marks in the university's exams by 0.4 points" (MIPT).

4.10.3.3. KPI: how to measure everything

Key performance indicators (KPIs) occupy a significant place in roadmaps. The words KPI or "performance indicator" are found 1002 times in the entire body of roadmaps. As was shown in the literature review, performance indicators are borrowed from the experience of private companies and are clear evidence of the marketing of higher education. In each roadmap, the university is obliged to use some indicators provided by the government (for example, universities monitor their position in league tables and strive to increase the number of international students studying "according to the main educational programmes"). Most of all indicators are outlined by MEPHI (96 times), and least of all about specific KPIs by Lobachevsky University (17 times).

Universities track various indicators related to the work of individual departments, the quality of teaching, academic workload and the number of R&D studies per teacher and even describe the desired "share of revenues from non-government sources in the university's revenue structure" (HSE). Most of the previously described areas of work of universities also have their own performance indicators. For example, ITMO establishes a specific number of joint programmes with leading world universities, the number of students studying using MOOCs, and also measures the level of English proficiency by counting "students participating in advanced English language programmes". Universities develop academic mobility

and offer a grant support system to increase the number of students participating in academic mobility programmes (KFU).

Financial and market indicators are often outlined in university roadmaps. Educational institutions plan the costs of R&D activities, allocate funds for participation in international educational exhibitions and media publications, indicate the desired revenue structure and measure the flow of funding from private companies. Universities devote a substantial part of the content of roadmaps to the achievement of target indicators. Each document contains tables listing KPI for each area of work, indicating the planned values for several years in advance. For example, Lobachevsky University conducts "performing analysis and monitoring of indicators of international competitiveness of the Institutes and University based on indicators of international rankings of universities and project indicators 5-100". Ranking positions, the number of international students and teachers, income from non-state sources, publications in leading scientific journals and the number of graduate students recruited from other universities are the main KPIs for all universities of the RAEP 5-100 project. The degree to which other targets are worked out and the details of how to achieve these goals depend on specific universities. Nevertheless, in the roadmaps, universities describe in detail with which performance indicators they plan to implement the roadmaps.

Marketisation has had a significant impact on how Russian public universities create their roadmaps. Educational institutions behave as fully-fledged subjects of the educational market. HEIs strive for excellence and competition. Universities develop their competitive advantages, invest in branding, allocate budgets for promotion at the international level. Universities are making efforts to commercialise their scientific and research developments. In addition to federal funding, educational institutions learn to make money from R&D and through collaboration with private companies. Universities open their own business accelerators to generate additional income. Universities plan to find the best students and set the highest requirements for applicants. Universities are also interested in attracting top scientists and researchers to secure high positions in league tables. Focus on international rankings promotes the implementation of international quality standards. Universities evaluate not only the quality of teaching, research and

equipment, but also the quality of students, managers and academics. All spheres of university life are viewed through the prism of measurable KPIs created on uniform quality standards (federal and international).

4.11. Do the 'road maps language' matter?

The use of a market language in roadmaps of Russian public universities of the RAEP 5-100 project does not have significant correlations with real university performance in international rankings. The need to participate in league tables is one of the important signs of marketing. The Russian government created the RAEP 5-100 project in order to help at least five public universities get into the top 100 world rankings by 2020. For this, since 2013, universities have been creating roadmaps in which they set specific goals and describe ways to achieve them. The largest international rankings QS, THE Times, ARWU conduct annual monitoring of universities and publish data on the positions of 1000+ leading world universities. As a result of the implementation of the programme of activities of the RAEP 5-100 project, participating universities had to improve their positions in one or more rankings.

4.11.1. Old and new development programmes

Market language was uncharacteristic of official documents of Russian public universities until 2010. This study does not set itself the goal of comparing the roadmaps of public universities over the past 30 years, but the author finds it useful to cite as an example a similar document ten years ago by one of the future universities participating in the RAEP 5-100 project. This will demonstrate the difference in the language used by universities in the 2000s and at the present stage. Kazan Federal University in 2010 published a development plan: "The development programme of the Federal State Autonomous Educational Institution of Higher Professional Education 'Kazan (Volga) Federal University' for 2010 — 2019". This document performs similar functions as the roadmaps of the RAEP 5-100 project analysed in this study. For a correct comparison, the KFU Development Programme was translated into English. The average volume of one university roadmap for the RAEP 5-100 project is 22,167 words. Documents of Kazan Federal University differ in volume. The university development programme in 2010

amounted to only 5594 words (4 times fewer words than in the average roadmap of RAEP 5-100 universities), at the same time, after inclusion in the project RAEP 5-100, KFU created one of the most voluminous roadmaps — 40,986 words (this is two times more than the average in universities and seven times more than in its similar document a decade ago).

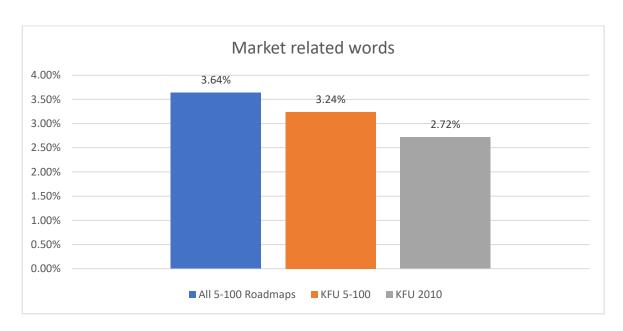


Figure 4-16. Market-related words in universities official documents

In order to compare documents of different volumes, relevant words and topics in each of them were expressed as a percentage in relation to the total number of words in the document. As a result of the analysis, it can be noted that the number of words related to market activity increased by 1/3 compared with the average for all roadmaps and by 1/5 in the documents of KFU. A significant increase in the number of words in roadmaps compared to a similar document in 2010 may indicate that universities have begun to describe their development directions in more detail. In the documents of the RAEP 5-100 project, much attention was paid to international rankings (0.23%), while the KFU development programme in 2010 contained only 0.04% of relevant words. "Internationalisation and Scholarhips", "International and Foreign Students", "MOOC" and "Foreign Languages" were not outlined at all in the old documents. Also, in the document there were no such market concepts as Leadership, Brand, Commercialisation and Excellence. In 2010, KFU has never used the adjective "TOP", while on average, each roadmap of the project 5-100 contained 17 references to this word, and it appeared 41 times in the

KFU map. All this allows us to conclude that marketisation has a significant impact on Russian public universities, which is reflected in the content of roadmaps. The marketisation features of each university are reflected in the next Section 4.11.2 of the study.

4.11.2. Features of the RAEP 5-100 universities market language

Based on the frequency of mentions related to the marketing of tokens, charts of the most and least marketed university roadmaps were compiled. Most often, market-related nouns are used by Tomsk State University (3.59% of all words in the university's roadmap are related to market terms). Least of all "market" nouns use SPBPU (1.74%). The three most popular nouns on roadmaps are: competitiveness (0.41%), KPI (0.3%) and ranking + position (0.24% each). Most often, universities mention in the market context MOOC (0.01%), tuition fees (0.02%) and scholarships (0.02%). The leader in the use of "market" adjectives is South Ural State University (SUSU). The share of such words in the university roadmap is 1.52%. Least of all uses the relevant adjectives IKBFU (0.8%). Most often, universities use the words "leading" (0.35%) and "global" (0.17%). Most often, universities write about TOP (0.03%) and superlative adjectives "best, biggest, largest" (0.05%).

The "market" adjectives and nouns were combined into a single array, on the basis of which a rating of the most and least marketed roadmaps of universities of the RAEP 5-100 project was compiled. Despite the difference in the popularity of individual "market" words between universities by more than ten times, the total number of references to relevant nouns and adjectives is not so significant. Most often, Tomsk State University uses market language: 5.07% of such words in the TSU roadmap. Tyumen State University and SPBPU (3.17% and 3.18%) write the least about market manifestations. On average, 4% of all words in the roadmaps of universities of the RAEP 5-100 project are related to marketisation.

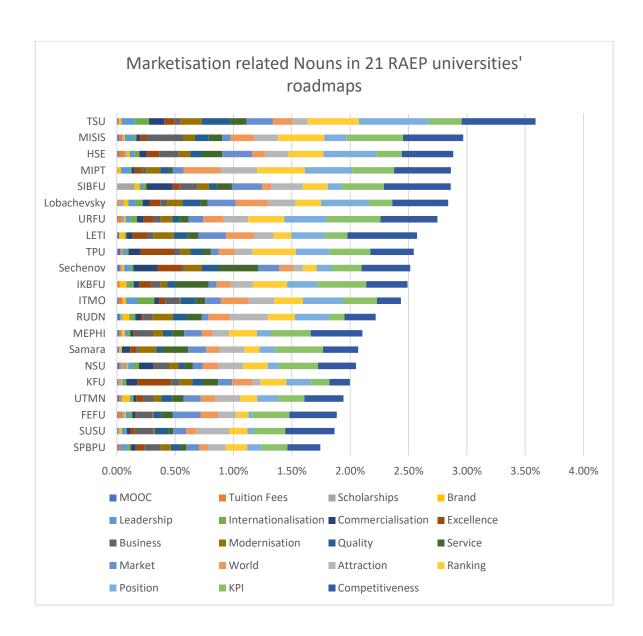


Figure 4-17. Marketisation related Nouns in 21 RAEP universities' roadmaps

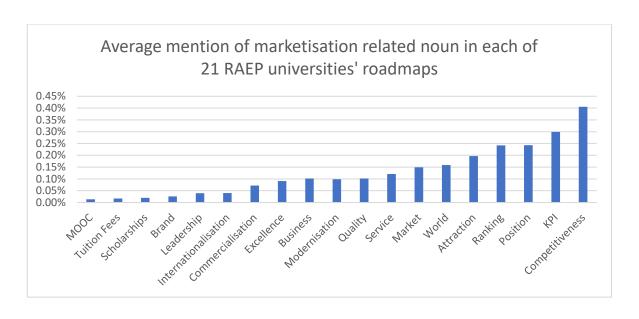


Figure 4-18. Average mention of marketisation related noun in each of 21 RAEP universities' roadmaps

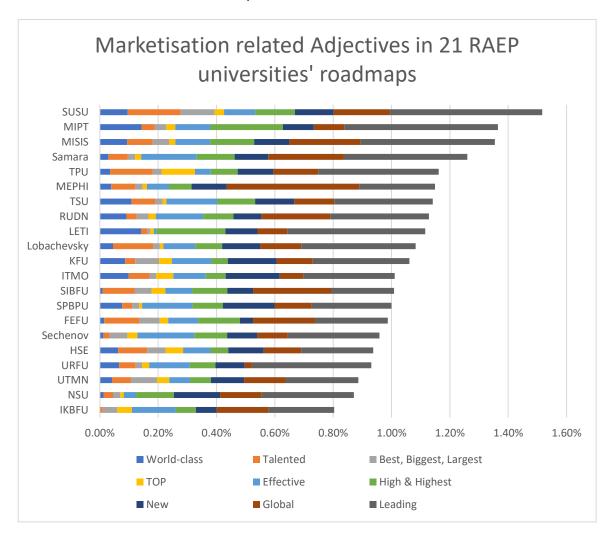


Figure 4-19. Marketisation related Adjectives in 21 RAEP universities' roadmaps

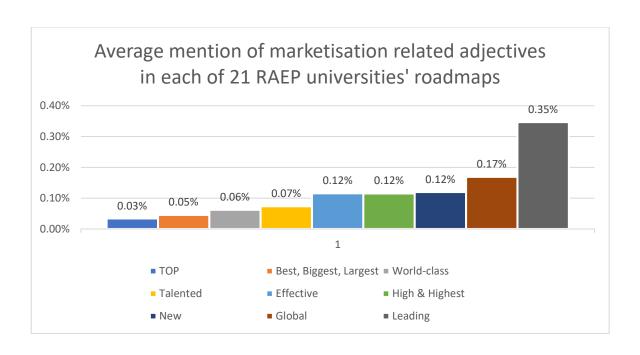


Figure 4-20. Average mention of marketisation related adjectives in each of 21 RAEP universities' roadmaps

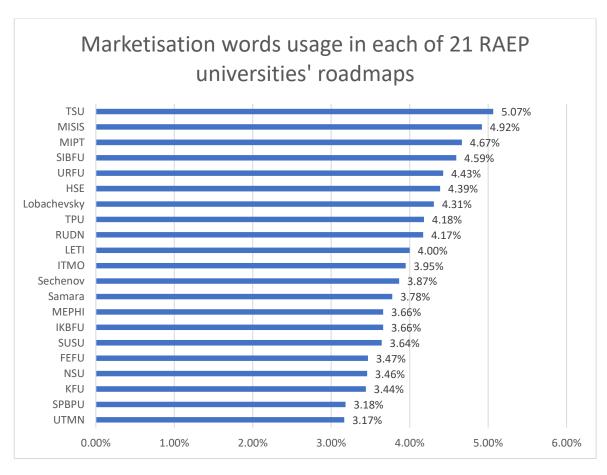


Figure 4-21. Marketisation words usage in each of 21 RAEP universities roadmaps

The usage of a market language is indirect evidence of marketing. In order to evaluate the real changes in the work of universities, the positions of universities in international rankings were examined: QS, THE Times, ARWU and Webometrics. NSU leads the QS ranking (231st), five universities are not on the list. In the THE Times ranking in the first place is MIPT (position 201-250), two universities have not participated in the ranking. The ranking of universities ARWU was headed by SPbPU (position 301-400), 11 universities were not included in the list. In the ranking of Webometrics, the first place among the universities under study is occupied by the Higher School of Economics (553 place), in the last place is Sechenov University (2993 place).

Table 4-5. Positions of RAEP 5-100 universities in the international league tables (2020)

University	QS 2020	THE 2020	ARWU 2019	Webometrics
IKBFU	-	-	-	2611
HSE	322	251-300	901-1000	553
FEFU	531-540	1001+	-	1567
KFU	392	601-800	801-900	831
MIPT	302	201-250	401-500	764
MISIS	451	601-800	801-900	1456
MePhl	329	401-500	601-700	752
Lobachevsky	601-650	1001+	-	1363
NSU	231	501-600	401-500	575
Sechenov	-	1001+	-	2993
RUDN	392	801-1000	-	1141
Samara	651-700	1001+	-	1564
LETI	-	1001+	-	2607
SPbPU	439	501-600	301-400	742
SIBFU	-	1001+	-	1519
TSU	268	501-600	801-900	711
TPU	387	601-800	-	882
UTMN	-	-	-	2411
ITMO	436	401-500	801-900	723
URFU	364	1001+	701-800	1046
SUSU	801-1000	1001+	-	1756

In order to evaluate the general positions of universities in all rankings, the data were brought to uniform indicators. If the university ranked in a certain range (for example, 401-500), the average value of the parameter (450) was indicated in the Table 4-5. QS, THE Times and ARWU consider the positions of universities in

the range from one to 1001, Webometrics contains positions of universities from one to 30 thousand. The maximum ranking value was taken as a unit. The difference between the current position of the university and the first place was divided by the difference between the first and last place in each of the rankings. As a result, a value in the range from zero to one was obtained for each university (the smaller the number, the higher the position in the ranking). In order to avoid incorrect comparisons between universities that did not fall into the rankings for this calculation, they were assigned positions two times higher than the worst position in the league table. For example, if the last position in the ARWU ranking is 1000, so the universities that were not included in the ranking were assigned the place 2000. Thus, each university took a position between 0 and 1. SPBPU leads in the ARWU ranking and takes the position 301-400, and after recounting it the position becomes 0.35. If the university is not included in the ARWU list, after recounting its position it will be 2. This approach allows bringing data from different rankings to the same denominator.

Table 4-6. RAEP 5-100 Roadmaps league tables positions distribution within the 0 to one scale

University	Webometrics	THE 2020	QS 2020	ARWU 2019
FEFU	0.05	1.00	0.53	2.00
HSE	0.02	0.27	0.32	0.95
IKBFU	0.09	2.00	2.00	2.00
ITMO	0.02	0.45	0.43	0.85
KFU	0.03	0.70	0.39	0.85
LETI	0.09	1.00	2.00	2.00
Lobachevsky	0.05	1.00	0.62	2.00
MePhl	0.03	0.45	0.33	0.65
MIPT	0.03	0.22	0.30	0.45
MISIS	0.05	0.70	0.45	0.85
NSU	0.02	0.55	0.23	0.45
RUDN	0.04	0.90	0.39	2.00
Samara	0.05	1.00	0.67	2.00
Sechenov	0.10	1.00	2.00	2.00
SIBFU	0.05	1.00	2.00	2.00
SPbPU	0.02	0.55	0.44	0.35
SUSU	0.06	1.00	0.90	2.00
TPU	0.03	0.70	0.39	2.00
TSU	0.02	0.55	0.27	0.85
URFU	0.03	1.00	0.36	0.75
UTMN	0.08	2.00	2.00	2.00

A correlation between the number of market related words and the position of universities in international rankings has not been identified during this research (Figure 4-22). MIPT and NSU took the best position in the four rankings, while TSU and MISIS were the most marketed roadmaps. The study also did not reveal correlations between the level of marketisation and other objective characteristics of universities, such as: the number of students and teachers, the number of international students, the date of the foundation of the university, the location of the university in the capital or regions, etc.



Figure 4-22. Correlation between the number of market related words and the position of universities in international rankings

Thus, the presence of a market language in the university roadmaps turned out to be not connected with the positions of universities in international rankings. The relationship between the frequency of use of market terms and other characteristics of universities has not been identified. This may be since universities draw up roadmaps only to satisfy government requirements and receive additional

funding. It is planned to evaluate the real impact of marketisation on the work of universities using further analysis of university sites, as well as interviews with employees of educational institutions.

4.12. Chapter Summary

Marketisation is manifested in various aspects of the work of modern Russian public universities of the RAEP 5-100 project. The analysis of the roadmaps revealed the main forms of marketisation implemented in Russian public universities. The use of market language has become an important evidence of market influence on higher education. The research methods made it possible to analyse the roadmaps of leading Russian universities and determine the degree of penetration of the market language into official documents. The leadership of universities actively uses market terms in describing the development plans of educational institutions. The Russian Academic Excellence Programme 5-100 has set targets for participating universities. The government allocated additional funding depending on the universities' success in implementing the roadmaps. HEIs were required to set key performance indicators in various areas of their work. Thus, on the one hand, it was the government that acted as the marketisation agent, and on the other hand, the universities themselves used relevant language to meet the government's requirements and receive additional funding.

Market mechanisms have had a significant impact on the goals and areas of work of the public universities participating in the RAEP 5-100 programme. Firstly, universities began to strive to improve their positions in international rankings. Analysis of the documents showed that universities began to actively attract international students and professors, take into account the number of publications in scientific journals, as well as to stimulate English language learning for students and staff. Secondly, universities have begun to compete more actively with one another for additional funding. Depending on the interim results, universities could receive different amounts of funding over several years of the project's existence. Third, many areas of work began to be quantified. Key performance indicators were introduced to track the results of universities as a whole, but also of departments and even managers and academics.

Universities began to describe their students and research areas in a new way. Universities perceive students as a product, invest additional funds in attracting foreigners. Students ceased to be just participants in the educational process, now universities monitor the "quality of students" and are only interested in obtaining the "best" and most talented applicants. Universities describe skills and knowledge as services and products that they sell in the international market. Educational programmes and research are becoming a way of obtaining additional funding. Universities focus on the global market and set ambitious goals to become world leaders in their fields of knowledge, compare themselves with leading foreign universities. To achieve high positions in the rankings, universities are intensifying publication activity and developing the study of English and other foreign languages. Internationalisation processes occupy an important part of roadmaps. Work with international students, foreign scientists, collaboration with world research centres and the sale of their services in international markets are the priorities of the work of universities of the RAEP 5-100 project.

Public universities responded to the introduction of market mechanisms by creating new policies and areas of work. Marketisation topics are an essential part of the content of roadmaps. Universities are considering ways to improve their position in international rankings and increase competitiveness. By analogy with private companies, public universities think about branding and internationally promoting their products and services. Commercialisation of scientific developments and co-operation with private business are designed to provide additional non-state sources of income. To achieve their goals, universities create centres of excellence, evaluate the quality of their work, as well as the quality of students and staff. Key performance indicators are used for all areas of university activity.

The level of marketisation in university roadmaps does not correlate with other indicators of university performance: the age of the institution, the number of international students and teachers, the size and location of the university do not depend on the words used in the roadmaps. Even though the goal of the RAEP 5-100 project is to have at least five leading public universities in the TOP-100 international league tables by 2020, the planned indicators have not been achieved. None of the 21 universities made it to the TOP 100 rankings of QS, THE Times, ARWU or Webometrics. Moreover, the current position of universities is also not

related to the level of marketisation of roadmaps. This may be because universities participate in the RAEP 5-100 project to receive additional funding from the federal government and use market terms only in official documents. The real impact of marketisation on university activities is planned to be established through the future analysis of university websites and through interviews with university staff.

5. Positioning Russian Public Universities for Society: Websites

To answer the second research question, how universities have responded to marketisation processes, an attempt was made to analyse university websites. This is the second step in assessing the impact of marketisation on university performance. Along with roadmaps designed mainly for interaction with the Russian government, university websites are a platform for positioning universities to external, wider audiences (including applicants and students, their parents, as well as university staff, government, business, and others). As shown earlier, Russian public universities actively use market-based instruments and terminology when interacting with the government in roadmaps. Two main directions of marketisation were identified: the use of a specific language and substantive changes in the work of universities.

Based on the data obtained, an attempt has been undertaken to analyse university websites and find out how market terminology has penetrated this area of university activities. In contrast to other approaches, website content reveals objective features of universities' self-presentation based on open data, as well as identifying differences in what institutions emphasise in their interactions with the general public and the government. The data and hypotheses generated by this approach were used as the basis for the interview questions for the HEI staff (see next Chapter 6).

5.1. Methodology

The analysis included identifying and downloading all English versions of each university's websites. There were several reasons for this. First, all the universities surveyed have their own English-language versions of the websites. Second, the universities prepared roadmaps in English as well, so that allows a more correct comparison and avoids inaccuracies in translations. Third, the Russian-language versions of the websites are too voluminous and store too much information for analysis, while the English-language versions of the websites usually contain the most important information about universities. In this case a full-text analysis method was used in the same way as in the case of roadmaps (see

previous Chapter 4). Fourth, the English version of the websites is aimed at foreign audiences, whose attraction has become a prestigious task during the implementation of the RAEP 5-100 project, so universities describe the most significant facts and attempt a lot of effort to present themselves here.

The analysis was conducted throughout the summer of 2020. To avoid any mistakes, every web address of the English-version pages was manually located featuring home pages separately. The initial list only contained one home English-language page. At the later stage a list of parameters for web addresses was created to collect only the links to all English-language pages (without saving webpage text itself). Additionally, the researcher developed a set of rules to identify the English-language page (for example, the URL contains "/en/"). If such a rule was absent, then the collected data were not saved to the final dataset. During the next stage a list of tags was collected that contained the main content of every page. Using a special script (p. 295), the data from every website page were saved as .txt files. The final analysis data from each website page from all the analysed websites were combined into 21 relevant documents containing all the English-language content of each of the Russian public universities in the RAEP 5-100.

This method of English-language full-text selection has two main disadvantages. First, the significance and importance of each of the terms decreases when the entire document is analysed. The English-language versions of university websites contain a large amount of information only indirectly related to the marketing of the work of higher education institutions. The share of market terms in general texts will be lower than in the sample, which includes only pages "for applicants". However, a full-text analysis will make it possible to understand how often universities use the market language to describe their work in general, and not only on specialised pages. Secondly, this research focuses on the study of universities in general, and not just the departments working in English. Traditionally, pages in English are almost always translated by universities themselves. This means that universities do not create unique content in English, but only translate the most important Russian-language pages. Thus, it can be argued that the full-text analysis of English-language pages is even more suitable

for achieving the goals of this study, since universities publish the most important and essential information there.

The new software Wordstat 8.0 was chosen for this research, since the data set after the analysis of university websites significantly exceeds the data of road maps in volume. Wordstat is flexible text analysis software that enables intelligent analysis of large amounts of information, extraction of topics and trends, and accurate measurement with quantitative content analysis tools. With the help of Wordstat, an analysis of the text of the roadmaps as well as university websites and its correlated content with structured information about the universities themselves was undertaken (numerical values and categories).

The software was configured based on the data obtained at the first stage of the study. Text files containing English-language texts from all pages of the websites of each of the universities were uploaded to Wordstat 8.0. A preliminary analysis and verification of materials was carried out. Based on previous research, a categorisation model was created containing the main concepts and topics under study. First, the model includes a block of marketisation data: relevant nouns, adjectives, and phrases (e.g. "marketing", "branding", "rankings", etc.). Secondly, the model includes topics traditionally found in the work of universities, such as "knowledge", "skills", "teaching", "research", etc. After the preliminary analysis of the data, using the frequencies function and the frequencies of mentioning each of the topics were collected (See Figure 5-1). Further, each word and phrase already used before was checked again using the "Suggestions" function. This function shows synonyms and related words. Suitable terms have been added to the dictionary. Thus, the research vocabulary was expanded and supplemented in order to increase the representativeness of the selected categories.

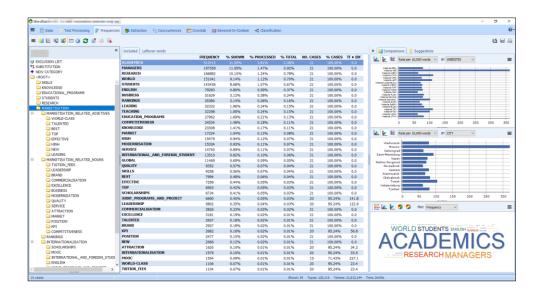


Figure 5-1. WordStat Software Frequencies function

To test related hypotheses, new variables have been added to cluster the list of universities on different grounds. Universities of the RAEP 5-100 project have several significant differences. Firstly, universities are located throughout the country from Kaliningrad (a city on the shores of the Baltic Sea) to Vladivostok (a city on the shores of the Pacific Ocean). Six universities are in Moscow and the Moscow region, three universities in St. Petersburg, two in Tomsk, and one each in other cities. Secondly, universities were categorised by date of foundation: under 50, 51-100, 101-150 and over 150 years old. Thirdly, universities were clustered by the number of branches: no branches, one branch, two to five branches, six or more branches. Fourth, according to the number of students, the following groups of universities were distinguished: up to 10 thousand people, 10-20 thousand people, 20-30 thousand people, 30-40 thousand people, more than 40 thousand people. The fifth basis for classification was the number of international students: no more than one thousand people, two to three thousand people, three to four thousand people, more than four thousand people. Short courses and summer schools were chosen as six criteria for grouping universities: no courses, 1-4 courses, 5-9 short programmes, 10-14 courses, more than 15 short courses. The last criterion for clustering was extra-budgetary funding. Share of revenues from non-budgetary sources in the university's revenue structure (the data are presented as a percentage): up to 30%, 30-35%, 35-40%, 40-45% and more than 45%. This division made it possible to more accurately analyse the groups of universities and try to identify the dependencies between various criteria and the level of marketisation.

5.2. Academics and International Relations

The structure of the content topics of the RAEP 5-100 universities' websites differs significantly from the roadmaps of the same universities. In the public sphere, educational institutions focus primarily on faculty, research and students (See Table 5-1). Derivative words "Faculty" are found more than 200 thousand times on websites, followed by "Research" and "School" in the top 3. These words make up from 0.97 to 0.83% of all words published on the portals of universities. In addition to the topics stated above, universities pay attention to development issues, the work of departments and management, economic, mathematical and social disciplines. Of the terms related to marketisation described in the previous Section 5.1, the most popular indicator in this list is the lexeme "international" (16th place in terms of frequency of references — 84.3 thousand times).

Table 5-1. Top 20 stemmed words in 21 RAEP 5-100 universities' websites.

Stemmed Words	Frequency	% Shown	% processed	% Total	No. Cases	% Cases
FACULTI	209394	2.43%	1.57%	0.97%	21	100.00%
RESEARCH	181094	2.10%	1.35%	0.84%	21	100.00%
SCHOOL	178958	2.08%	1.34%	0.83%	21	100.00%
SCIENC	155889	1.81%	1.17%	0.72%	21	100.00%
UNIVERS	149663	1.74%	1.12%	0.70%	21	100.00%
INSTITUT	146291	1.70%	1.09%	0.68%	21	100.00%
PROFESSOR	136884	1.59%	1.02%	0.64%	21	100.00%
ECONOM	125230	1.45%	0.94%	0.58%	21	100.00%
STUDENT	121770	1.41%	0.91%	0.57%	21	100.00%
YEAR	115264	1.34%	0.86%	0.54%	21	100.00%
STUDI	114678	1.33%	0.86%	0.53%	21	100.00%
DEPART	99502	1.16%	0.74%	0.46%	21	100.00%
LANGUAG	93606	1.09%	0.70%	0.44%	21	100.00%
LABORATORI	87804	1.02%	0.66%	0.41%	21	100.00%
DEVELOP	85016	0.99%	0.64%	0.40%	21	100.00%
INTERNAT	84330	0.98%	0.63%	0.39%	21	100.00%
RUSSIAN	81769	0.95%	0.61%	0.38%	21	100.00%
SOCIAL	73673	0.86%	0.55%	0.34%	21	100.00%
MANAG	72783	0.85%	0.54%	0.34%	21	100.00%

The lexeme "international" is in the top six most popular words among all university websites (See Table 5-2). Using the Wordstat 8.0 "word-in-context" function, the basic patterns of this word have been studied. Targeting an international audience is one of the reasons for this popularity. Universities operate in an international environment and compete for faculty, students, and resources. International students turn out to be one of the main topics on the pages of the websites. International projects and international research are also popular. Universities are also proud of their positions in international rankings, achieved, among other things, through international co-operation. The frequent use of the word "international" in public space is intended to highlight the strength of the university's brand and demonstrate to a wider audience that the institution conducts cutting-edge research alongside leading foreign institutions.

Table 5-2. Top-20 words in 21 RAEP 5-100 universities' websites.

Words	Frequency	% Shown	% processed	% Total	No. Cases	% Cases
FACULTY	207466	2.69%	1.54%	0.96%	21	100.00%
SCHOOL	174159	2.25%	1.29%	0.81%	21	100.00%
RESEARCH	163502	2.12%	1.22%	0.76%	21	100.00%
PROFESSOR	132216	1.71%	0.98%	0.61%	21	100.00%
INTERNATIONAL	124578	1.61%	0.93%	0.58%	21	100.00%
INSTITUTE	122144	1.58%	0.91%	0.57%	21	100.00%
UNIVERSITY	122012	1.58%	0.91%	0.57%	21	100.00%
YEAR	97126	1.26%	0.72%	0.45%	21	100.00%
DEPARTMENT	94605	1.22%	0.70%	0.44%	21	100.00%
SCIENCES	85720	1.11%	0.64%	0.40%	21	100.00%
STUDENTS	85694	1.11%	0.64%	0.40%	21	100.00%
LABORATORY	83671	1.08%	0.62%	0.39%	21	100.00%
RUSSIAN	80432	1.04%	0.60%	0.37%	21	100.00%
EDUCATION	79851	1.03%	0.59%	0.37%	21	100.00%
STUDIES	78210	1.01%	0.58%	0.36%	21	100.00%
SOCIAL	73116	0.95%	0.54%	0.34%	21	100.00%
SCIENCE	70271	0.91%	0.52%	0.33%	21	100.00%
ECONOMICS	63125	0.82%	0.47%	0.29%	21	100.00%
ECONOMIC	61876	0.80%	0.46%	0.29%	21	100.00%
DEVELOPMENT	60123	0.78%	0.45%	0.28%	21	100.00%

The penetration of marketisation into the public view of universities can be most clearly shown after clustering individual words by topic (See Table 5-3). The dictionary formed in the previous Section 5.1 of the study made it possible to combine some of the most important terms into topics. Traditionally, universities paid attention to the work of academics (teachers, tutors, professors) and students (applicants, students). Also, universities focused on teaching and educational programmes. Using the Wordstat software, the top 100 topics most frequently encountered on university websites were analysed. The top three topics include academics (2.2% of the total number of words), managers (0.9%) and students (0.81%). Universities pay as much attention to the work of managers as to work with students. The research ranks fifth in terms of frequency of mentions. Teaching dropped to 44th place, educational programmes to 53rd place, and knowledge to 87th.

Table 5-3. Top 100 popular words and topics of RAEP 5-100 universities with abbreviations

#	Words	Frequency	% Shown	% processed	% Total
1	ACADEMICS	474220	9.98%	3.59%	2.20%
2	MANAGERS	193715	4.07%	1.47%	0.90%
3	STUDENTS	174599	3.67%	1.32%	0.81%
4	SCHOOL	170123	3.58%	1.29%	0.79%
5	RESEARCH	163502	3.44%	1.24%	0.76%
6	WORLD	151041	3.18%	1.14%	0.70%
7	INSTITUTE	122144	2.57%	0.93%	0.57%
8	UNIVERSITY	122012	2.57%	0.92%	0.57%
9	YEAR	97126	2.04%	0.74%	0.45%
10	DEPARTMENT	94605	1.99%	0.72%	0.44%
11	SCIENCES	85720	1.80%	0.65%	0.40%
14	ENGLISH	79283	1.67%	0.60%	0.37%
15	STUDIES	78210	1.65%	0.59%	0.36%
26	ASSOCIATE	54594	1.15%	0.41%	0.25%
27	BUSINESS	51629	1.09%	0.39%	0.24%
36	HUMANITIES	37537	0.79%	0.28%	0.17%
37	RANKINGS	35380	0.74%	0.27%	0.16%
38	INFORMATION	35158	0.74%	0.27%	0.16%
43	LEADING	32332	0.68%	0.24%	0.15%
44	TEACHING	32298	0.68%	0.24%	0.15%
45	SYSTEMS	31123	0.65%	0.24%	0.14%
53	EDUCATION_PROGRAMMES	27962	0.59%	0.21%	0.13%
54	POLICY	27900	0.59%	0.21%	0.13%
67	COMPETITIVENESS	22647	0.48%	0.17%	0.11%
86	FIELD	16966	0.36%	0.13%	0.08%
87	KNOWLEDGE	16897	0.36%	0.13%	0.08%
88	PROJECTS	16705	0.35%	0.13%	0.08%
95	MARKET	16230	0.34%	0.12%	0.08%
96	HIGHER	16147	0.34%	0.12%	0.08%
100	HIGH	15479	0.33%	0.12%	0.07%

Global ambition and global business focus are among the most popular topics on university websites. "World" is in the top six most popular topics on all university websites (more than 151 thousand mentions). Everything related to the study of English and other foreign languages is ranked 14th in the frequency of publication (79 thousand mentions). Universities position themselves as part of the global scientific ecosystem. English has long become a lingua franca for world science, and Russian public universities are making great efforts to study foreign languages in order to successfully work in the global educational market. Higher education as a business is understandable for Russian universities. The topic "business" is found on websites more than 51 thousand times. Universities are involved in business projects, looking for ways to obtain additional funding and arrange collaborations with Russian and foreign companies.

Rankings, as one of the key marketisation indicators, are ranked 37th among the most popular topics on university websites. More than 35 thousand times universities have referred to various league rankings and tables. Site ratings are described in three different contexts. First, the university's ranking helps the university to position itself. Some universities mention positions in the ratings in the sections "About us" or "Facts and Figures". Secondly, universities indicate rankings as targets. Educational institutions describe intentions or specific actions to be higher by several lines in league tables in a few years. Thirdly, rankings are used to attract students and teachers (including foreign ones). Positions in international, national, subject rankings are indicated as reasons why a future applicant should choose this university.

Mentions of the market and competition are in the top 100 website topics. More than 22 thousand times universities talk about rivalry and competition (67th place), the market is outlined more than 16,000 times (95th place). Worldwide university ambitions are 9.3 times more likely to appear in website text than market mentions. Russian public universities operate in the global higher education market, focusing mainly on global interaction. As will be shown below, universities have little interest in selling their services and do not perceive other educational institutions as competitors. On online platforms, universities use market terminology, but do not trade knowledge. Marketisation is manifested in the growing influence of management, in the increased attention to the promotion of educational programmes, rankings and brands. At the same time, the "educational market" and "competition" are outlined much less often.

5.3. Student-made Business or Business for Students

Russian public universities focus on several key topics on their website pages. Academics and research have become the two most popular topics on the online portals of Russian public universities 5-100. Thanks to the Co-occurrence feature of the Wordstat software, you can see that the strongest relationship exists between the two (See Figure 5-2). The universities focus on the work of the faculty and talk about their research. Academics are also involved with the topic of learning English and other foreign languages. This may indicate the growing popularity of

English-language programmes and may also be related to the ambitions of universities on the world stage (see the previous Subsection 5.2). The number of study programmes and their content are an important part of the online positioning of universities. At the same time, the topic of key performance indicators (KPIs) is almost absent from the texts of university websites.

The second major related group was students, managers, the world and business. It turned out that mentions of the topic of business primarily have strong connections with students. A detailed study of the context of the use of words in these groups shows that universities often write about the development of student business and the creation of business accelerators for students. Universities do not consider students as a source of funding, as may be evidenced by the low number of references to tuition fees and student engagement. International students are also much less frequently outlined in roadmaps, compared to students in general. Educational programmes and teaching are also associated specifically with academics and do not correlate with students or knowledge acquisition.

Topics such as rankings, performance, leadership, and branding that have been popular on roadmaps have turned out to be virtually unrelated either to each other or to the core activities of universities. The fact that universities broadcast to the authorities in order to receive budgetary funding is weakly correlated with how universities position themselves online. Much attention was paid in roadmaps to the need for the development of massive open online courses (MOOCs), but on the websites of universities they are barely outlined, and the courses themselves are closer to business than to students. Universities declare the need to attract talented students in roadmaps through the provision of scholarships. However, scholarships are far from the most popular topic on websites (6734 mentions, 26 times less than student mentions). Moreover, scholarships and "talented students" have nothing to do with students in general or with student involvement.

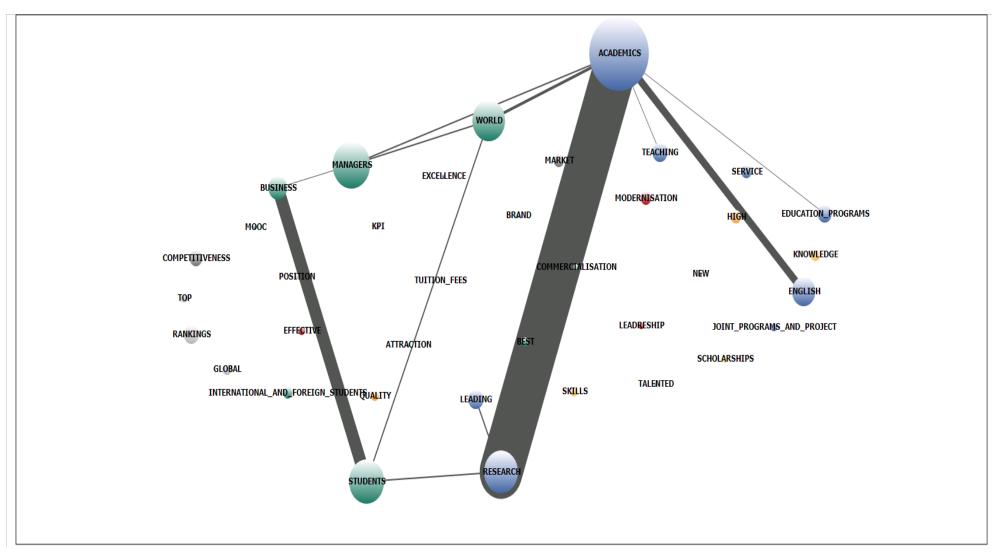


Figure 5-2. RAEP 5-100 websites co-occurrences mapping

Correspondence analysis shows that universities are homogeneously distributed depending on the topics that are described on their websites (Figure 5-3). The Higher School of Economics (HSE) in Moscow and the Far Eastern Federal University (FEFU) in Vladivostok stand out from the main group of universities. All universities of the RAEP 5-100 project occupy leading places in Russian and international rankings, and compete for students and funding, primarily among themselves, and have approximately the same understanding of the meaning and content of their work. On the other hand, HSE conducts active research in the social sciences; it is an active, young university with several branches and many international students. HSE is more likely to appeal to online courses and learning English. FEFU is located on the eastern edge of Russia and is focused on regional development. The university works with the Asia-Pacific region and is engaged in the popularisation of the Russian language and culture with countries near and far.

The distribution of topics in the Figure 5-3 shows that tuition fees, as an important element of the marketing of universities, stand apart from all other topics and have nothing to do with students in the texts of websites. The commercialisation of research and development, making a profit from the work of universities is not connected with the market as such or with business. Despite the low frequency of mentions of the topic of student attraction and the rare mention of talented students, both topics are adjacent to each other. It can be concluded that universities are interested in attracting talented students. At the same time, universities do not single out local or international students here, although in the roadmaps a special emphasis was placed on working with foreign applicants.

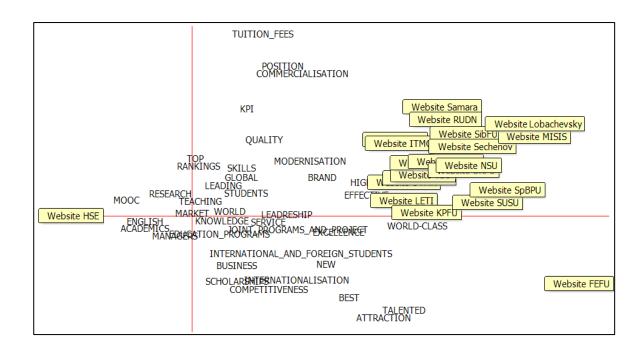


Figure 5-3. RAEP 5-100 websites (level 4) Crosstab Correspondence Analysis

Based on the analysis of the roadmap, topics related to both marketisation and traditional areas of university work (teaching, research, etc.) were identified. Using the Co-occurrence function, a dendrogram was compiled depending on the strength of the association of concepts with each other (See Figure 5-4). The revealed patterns make it possible to assert that one of the marketisation signs of "high quality" is related both to educational programmes and research, and to the work of academics and teachers. This group also includes the study of English and other foreign languages. At the same time, managers and students are more strongly associated with the topic of "world" and "business". The separation of students from teaching and research can be interpreted as one of the signs of the ongoing marketisation of the work of universities.

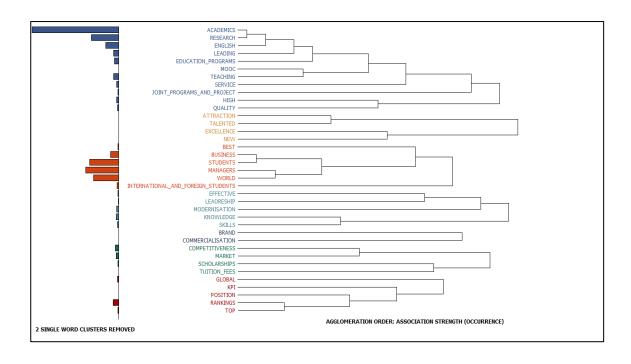


Figure 5-4. RAEP 5-100 websites (level 4) Co-occurrences dendrogram

Thus, universities perceive students as an independent variable associated primarily with the organisation of business by the students and alumni themselves, as well as with research and the need to work on a global scale. Associated attributes of marketisation such as tuition fees, efforts to attract students, and the development of a university brand fade into the background and are barely not represented on university websites. The "battle for rankings" declared in official documents, the desire to occupy a leading position in the world and attract only talented students, does not coincide with the content of the online portals of Russian public universities. These topics occupy only a small part of the total volume of texts on university websites and do not correlate with the main topics.

5.4. Marketisation: Student and Management Perceptions

Signs of marketisation described in the previous sections of the study can be combined into a single block to assess how, in general, this topic relates to other areas of university work on online portals. As shown in the Subsection 5.1. marketisation-related words were aggregated into a multi-level structure, and meaningful groups of concepts for universities were summarised by topic (e.g., "academics", "research", "teaching", "students" and others). Using the Co-occurrences function in WordStat, a hierarchical cluster analysis and

multidimensional scaling of all keywords was performed. Based on the cooccurrences (co-matches) of such concepts, a dendrogram of their proximity was constructed. Co-occurrences occur whenever two words or two categories appear in the same case. Automated analysis using WordStat showed the relationships between these themes.

The web site macro dendrogram shows three main groups of topics: first, there is a significant link between academics, research and educational programmes (See Figure 5-5). Second, managers, students and teachers are closer to marketisation than other topics. Third, knowledge and skills are no longer associated with students and constitute the smallest group of attributes. This division may indicate an increased influence of managers on student learning. Academics are more involved in research and the creation of academic programmes and are not involved in the transfer of knowledge and skills to students.

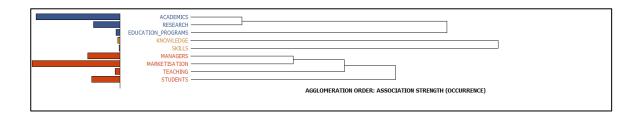


Figure 5-5. RAEP 5-100 websites (level 1) co-occurrences dendrogram

Concepts related to marketisation, consolidated under one topic, are starting to play a more prominent role on university websites. The Co-occurrences link analysis illustrates that marketisation has more to do with management and teaching than with students (See Figure 5-6). All four topics are combined into a single cluster and exist independently of academics and research. The thickness of the lines in the graph shows the strength with which each of the topics are related. This means that the research group is much more closely related than the marketisation-managers-student-teaching group. Educational programmes turned out to be closer to marketisation than to research and educators, but they were not associated with any of the groups. A similar situation happened with skills and knowledge. These traditional topics in higher education were less represented on university websites.

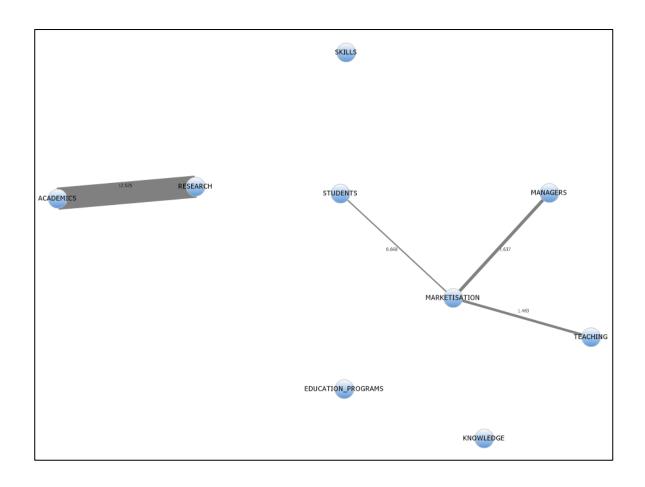


Figure 5-6. RAEP 5-100 websites (level 1) co-occurrence's link analysis

Marketisation after the combination of individual words and phrases begins to play an important role in the content of university websites (See Figure 5-7). The set of topics related to marketisation turned out to be comparable in terms of the number of references to academics and teachers. The enlargement of the categories of analysis allowed us to confirm the strong connection between teachers and research. However, the market transformations themselves have more to do with managers and students. Marketisation also affects teaching, but the process of transferring knowledge itself turns out to be associated not with scientists, but with managers. There is no connection between the "academics" and "teaching" topics on the websites, i.e., words related to these topics are rarely used close to each other (See Figure 5-6, Figure 5-7). There is a weak link between educational programmes and marketisation, while the programmes are not related to either research or academics. Knowledge and skills are separated into a separate small group and are not related in any way to other topics.

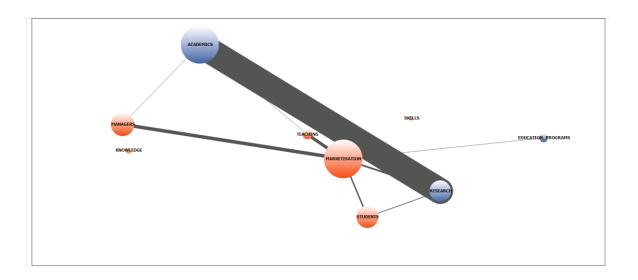


Figure 5-7. RAEP 5-100 websites (level 1) co-occurrences mapping

All this allows us to conclude that marketisation had an impact primarily on students and managers and affected the work of academics indirectly. Marketisation is linked to curriculum and teaching, and while the links between these themes are not found on websites, in fact, it is the teachers who implement the learning process. The high popularity of topics related to research, academics and students seems natural for the web portals of large universities. Modern trends are also bringing the topic of management and the work of managers to the fore.

5.5. Chapter Summary

Russian universities have responded to the processes of marketisation by changing the way they communicate with a wide external audience and by adapting the market language on their websites. The topic of marketisation has its own characteristics on the websites of universities of the RAEP 5-100 project. World, English and Business became important topics. This is due to the desire of universities to work on equal terms with leading foreign higher educational institutions. At the same time, there is barely any mention of the market as such in published texts. Minimal focus is on brand building, tuition fees, competition, and positioning.

The most visible sign of marketisation is rankings. If we consider marketisation as a process of changing the language of communication of universities, then many important concepts that are actively used in roadmaps are barely absent from websites. Universities barely do not pay attention to KPIs, brands, positions (less than three thousand mentions each or 0.01% of the total number of words). A little more often universities write about quality and services; they want to find especially talented and best students.

Herein lies the key difference between the content of websites and roadmaps. In official documents, universities use market terminology to comply with government requirements and obtain additional funding. As noted in the previous Section 5.4, the government is pushing universities to work in the education market and universities are demonstrating a formal willingness to the marketisation processes. The analysis of websites shows that HEIs are in fact not as involved in market relations as described in official documents. Indicators that are important for operating in a market environment and that relate to the attraction of extrabudgetary funding are rather poorly expressed. The other group of marketisation indicators aimed at competition, rankings and attracting the best students is presented more widely. This situation can be explained by the fact that Russian public universities use government resources to achieve their goals rather than make money in the open educational market.

The support of the Russian government allows public universities to focus on interaction with foreign educational institutions. The issues of organising the educational process, the work of professors and teachers, as well as interaction with students, traditional for universities, form the basis of the content of websites. Budget funding allows less attention to be paid to tuition fees, brand development and the commercialisation of developments. The popular topic of business on websites is strongly related to students and student projects, and not to research and R&D. Therefore, to find out the real situation with work in market conditions and the penetration of the market language into the daily life of universities, a series of interviews with university staff is required. The analysis of websites made it possible to identify the most prominent areas of marketisation in public universities and, based on the comparison of roadmap and website analysis data, develop questions for interviews with managers and academics to assess the impact of marketisation on them.

6. The impact of marketisation on HEIs: interviews with academics and managers

6.1. Introduction

Interviews with managers and academics working in the universities under investigation will allow the researcher to find out how the marketisation processes declared in roadmaps and on university websites affect the work of employees. Using the snowballing method (detailed below), 11 people were selected among the employees of RAEP 5-100 universities, working in the positions of lecturers, heads of admissions committees, deans, etc. The sampling process aimed to maintain an approximate equal distribution of managers, teachers and those who combine management and teaching positions. The list of interview questions was formed on the basis of a literature review as well as an analysis of the roadmaps and websites of universities (see Appendix D). As was shown in previous chapters, the New Public Management approach suggests that public universities borrow management techniques from private business. Marketisation processes and the need to participate in the higher education market has been stimulated by the government. Therefore, interviews with staff allowed the researcher to find out how marketisation has affected the work of the universities studied.

Each of the respondents was interviewed by phone (or using Zoom software or WhatsApp), lasting from 50 minutes to 2 hours. The qualitative element was focused on the analysis of a single group of 'leading public universities in Russia' and did not set himself the goal of identifying differences between individual universities. Prior to each interview, the researcher received a verbal, recorded audio consent forms from each respondent. The methods and the main questions were approved by the Ethics Committee of Social Policy and Social Work Department (SPSW) at the University of York. The interview was semi-formal, with questions being slightly adjusted depending on the answers and direction of the interview.

A significant effort of finding relevant respondents has been undertaken. Snowball sampling beings with an initial list of potential interviewees. In order to achieve the objectives, the researcher tried to reach all 21 universities of the RAEP 5-100 project. The emails were sent to staff of each university inviting them to participate in the interviews. The final sample was planned to be drawn in such a way that the respondents included employees of metropolitan and regional universities, as well as managers and academics. In the period from October 2020 to January 2021, more than 200 individual emails were drawn up for employees of the studied universities. Each email contained two attachments in PDF format: a personal request from the researcher with a signature and justification for the need to conduct an interview, as well as a document confirming the status of the researcher. All emails were sent from the researcher's personal university mailbox. The researcher also called selected universities and attempted to arrange telephone interviews.

The COVID-19 coronavirus pandemic had a major impact on the data collection process. On the one hand, more university staff were willing to conduct interviews online. On the other hand, the workload of teachers and university managers has only increased, making it more difficult to agree on when to conduct interviews. Coronavirus constraints allowed the researcher to obtain higher quality interviews, as respondents could choose the most convenient time to talk (it was not necessary to conduct interviews only during working hours). Some respondents preferred to be interviewed from home in a more relaxed and conducive place for frank conversation. Finally, the ability to conduct online interviews allowed the universities with greater geographical diversity to be covered (financial constraints would not have allowed the researcher to travel to some regions in person). Given the time difference, as well as the busy work schedule of the respondents, some interviews at 5AM UK time were conducted.

Table 6-1. Position of respondents (Source: Author)

Position	Manager	Academic
Deputy Head of Department	+	
Head of the Department	+	
Deputy Dean of the Faculty	+	
Deputy Head of International Department	+	
Doctor of Science, Professor, Vice-Chancellor of the Faculty	+	+
Deputy Head of Department, Professor	+	+
Head of the Department	+	+
Associate Professor and Head of the International Office	+	+
Associate Professor		+
Senior Lecturer		+
Senior Lecturer		+
Total academic positions		3
Total managers positions	4	
Total combining positions		4

The position of the staff and the region of the university were the key criteria in selecting the respondents. To collect data on all types of HEI staff, people in managerial positions, academic positions and those who combined both types of positions were selected from all who agreed to be interviewed. The second criterion, which was to serve to increase the objectivity of the study, was the location of the university. Respondents were selected from universities in Moscow (the capital of Russia), universities in St. Petersburg (the second largest city in Russia), and several regional universities. The sample consists of 6 female and 5 male participants.

Eleven interviews were conducted with employees of seven universities: four universities are in Moscow and St. Petersburg and three are regional universities. All respondents were divided into three roughly equal groups according to the type of position each respondent held (See Table 6-3. Characteristics of the interviewees). Three people are engaged only in research and teaching and are not involved in the management of their structural units. Four people perform only managerial functions and are not involved in teaching. Finally, four more people combine the academic and managerial positions: for example, they lead the faculty and give lectures or teach and coordinate work with international students. All characteristics of respondents were coded in NVivo to identify common patterns in

the responses and find possible correlations between the same positions, types of universities, etc. (to be explored in more detail later in this chapter). Thus, the research contains approximately the same number of responses from university staff in different positions. An attempt has been undertaken to analyse how university staff perceive the processes of higher education marketisation.

In parallel with the search for respondents, the data was process from interviews already conducted. Respondent data was anonymised, and participants' names were coded in such a way that the readers of the research could not identify the respondents and in no way could jeopardise the professional future of the respondents. Interviews with employees of Russian universities were conducted in Russian. There are few applications that can recognise Russian speech and translate voice to text. Considering the substantial volume of interviews, no readymade free solutions were found to perform such work. All anonymised interviews were transcribed using online tools and further manually verified. The text versions of the interviews were additionally processed and proofread to avoid possible errors and to ensure further correct work on data analysis.

Table 6-2. Number of words and characters in interviews

Interview title	Number of words (Russian)
A5	6456
B6	10343
F4	7649
G1	7228
K5	5914
K12	7652
L7	15873
S11	6188
V5	8483
V12	9143
Y11	7052
Total	91981
Average	8362

The text versions of the interviews were read and edited in such a way that it was impossible to establish the position and personal data of the respondents from the content of the documents. For example, instead of specifying a current position

(dean of the specific faculty), the general position of "dean" was indicated. If the respondent during the interview referred to other universities participating in the 5-100 project, the names of such educational institutions were also excluded from the analysis. References to specific numbers of student enrolment, financial performance and data on co-operation programmes were also summarised to avoid the possibility of identifying the respondent. The adjustments were minimised as much as possible and were carried out in such a way as not to affect the main meaning and content of the interview. Interview texts have been translated from Russian into English for easier comparison with the results of the analysis of road maps and websites of RAEP 5-100 universities. Each interview was coded, and references to the names of respondents employing institutions were replaced with "my university". The free software Google.Translate was used for translation, and the ready-made texts were additionally edited to avoid the incorrect use of terms and definitions.

Analysis of all interviews using Nvivo software revealed the most frequent themes that respondents raised in interviews. The interview questions themselves had some influence on the content of the answers, but respondents were able to choose the direction and length of the answers themselves. Among the most frequent themes mentioned were "students", "number", "activities", "organise" and "change". For the purposes of this study, it is important that respondents, regardless of their position or the location of the university, operate freely with numbers and quantitative indicators ("number"). On the other hand, the list of the most popular words differs from the one that universities use in roadmaps or on websites. Marketisation markers such as "tuition fees", "rankings" or "key performance indicators" and others are not among the top popular topics of interviews. The reasons for this situation and the versions of the topics will be explained in the following sections of this chapter.



Figure 6-1. Word cloud of interviews RAEP 5-100 universities employees (Most popular topics with generalisations)

6.2. The Marketisation of Public Universities: Management, Staff, and Students

The impact of marketisation processes on Russian public universities can be analysed in several ways based on interviews with university staff. The perception of higher education and the goals of universities in general have changed: universities are increasingly helping students realise their private goals rather than working for the public good. Public universities seek extrabudgetary funding, care about league tables and distribute profits from their departments. According to the respondents, market values influence the work of HEIs both directly and indirectly. HEIs employees operate according to KPIs, quality and efficiency are evaluated not only by the government, but also by students. Finally, the perception of students has changed, tuition fees in public universities are now the norm and a new source of funding; self-paying students are compared to those who were paid for by the government. The goals and literacy levels of students are changing. The number of students has grown, international students have come, education has become a service and students have become customers. All these issues will be discussed in more detail later.

Table 6-3. Characteristics of the interviewees

Current Role	Interviewees Age	Work Experience in HE	University location	English Language Proficiency Level
Academic	Under 33 y.o.	5-9 years	Moscow	Full Professional Proficiency
Academic	41 y.o. and over	16 years and more	Regions	Full Professional Proficiency
Academic	33-40 y.o.	Less than 5 years	Moscow	Full Professional Proficiency
Job Share	41 y.o. and over	16 years and more	Regions	Elementary Proficiency
Job Share	Under 33 y.o.	10-15 years	Regions	Elementary Proficiency
Job Share	33-40 y.o.	10-15 years	Regions	Full Professional Proficiency
Job Share	41 y.o. and over	16 years and more	Regions	Full Professional Proficiency
Manager	33-40 y.o.	Less than 5 years	Moscow	Full Professional Proficiency
Manager	33-40 y.o.	10-15 years	Moscow	Full Professional Proficiency
Manager	Under 33 y.o.	5-9 years	Moscow	Full Professional Proficiency
Manager	Under 33 y.o.	5-9 years	Regions	Elementary Proficiency

The perception of higher education among university staff also appears to have changed. As indicated in the previous Section 3.5 of this research, higher education in Russia inherited the features of German universities and was strongly integrated with the state and the socialist economy during Soviet times. Soviet universities trained specialists for industry and other sectors of the economy (Article 46, Law on Public Education of the USSR). Since the 1990s, the official tasks of universities changed under the influence of neoliberal ideology. Universities now began to work to meet the needs of the individual "for intellectual, cultural and moral development" (Article 8 of the Law on Higher Education of the USSR). A decade ago, among the official aims of higher education appeared "the staffing of scientific research" (Law on Higher and Postgraduate Education 2012). University staff describe their perceptions of higher education in similar terms.

The following sub-sections of the Chapter 6 will contain a discussion of several key topics that have been exposed to marketisation processes. Firstly, the perceptions of higher education by HEI staff will be discussed (Sub-section 6.2.1). Secondly, academics and managers will talk about how they formulate the goals of their universities (Sub-section 6.2.2). Thirdly, the impact of league tables on HEIs from the staff perspective will be explored (Sub-section 6.2.3). Fourthly, the funding structure and its dependence on government transfers, tuition fees, corporations and market conditions will be discussed (Sub-section 6.2.4).

The next few marketisation-related topics will also be explored in detail. Key performance indicators play a significant role in the marketisation of public universities from the perspective of the academic literature (Sub-sections 2.5.2 and 3.6) and from the study of the official documents of Russian HEIs (Sub-section 4.10.3). KPIs for HEIs in general and for individual staff members will be the subject of discussion in Sub-section 6.3 below. Another area influenced by marketisation was the perception of students by university staff (Sub-section 2.5). Russian official documents refer to the goal of higher education as the fulfilment of individual interests (Sub-sections 3.5 and 3.7). Together with the fact that higher education institutions have been able to sell fee-based educational services, the perception of students has changed. The idea "students as clients" will be discussed in Subsection 6.4. Finally, the last three sub-sections will address the perception of market changes directly by HEI staff: the labour market (Sub-section 6.5.1), for which many HEIs prepare graduates, the Russian university market (Sub-section 6.5.2) and the international higher education market (Sub-section 6.5.3).

6.2.1. The perception of Higher Education

Marketisation appears to be changing perceptions of higher education among university staff. The respondents' answers were divided into three groups. First, the formal notion that higher education is an official document, a diploma, confirming the fact of successful graduation. Second, several people (managers and academics) indicated that higher education serves the purpose of personal development. For example, a staff member combining positions at a Moscow university said: "It is an opportunity for young people to acquire the necessary knowledge and competencies that should help them in their future life" (an academic from a metropolitan university). Finally, 45% of people defined higher education as a process of preparing people for work in the real economy "which allow students to somehow position themselves later in the labour market" (an academic from a regional university). As outlined in the first part, marketisation leads to a change in the perception of higher education from public good to personal good. This is how respondents view tertiary education. Higher education has become a place to prepare people for the labour market rather than a way to search for truth and scientific discoveries.

The employment orientation of graduates possibly influences the perception of all higher education among managers and academics. If university study is seen as "the opportunity to expand your horizons, improve your level of education, but not always get those competencies that you will need in the labour market" (Academic, Capital University), then the value of higher education lies in successful employment. A few respondents noted that students in Russian higher education institutions were engaged in fundamental science that is not applied to life, they educate "graduates who are then unable to work with this knowledge, and graduates cannot find a job. It seems to me that this situation is not correct" (academic, university of the capital). Higher education is no longer valued as a public good but becomes important only in the context of future employment.

Employees at Russian public universities in my sample perceive a focus on the needs of the economy as one of the indicators of the university's success. The manager of a Moscow university wonders what an employer will receive from a young graduate besides a university diploma. A modern university should design its curricula so that the graduates are prepared to work in real companies. An employee who combines managerial and teaching duties at a regional university states that the management of their institution assesses the quality of teaching annually, including through surveys of graduates: "Do they have a workplace? Where will they go to work in the nearest future?" The academic from Moscow stresses that universities should be guided by the needs of the economy in creating their curricula:

It is necessary to create bachelor's programmes and, especially, master's programmes that give graduates more opportunities to adapt to the labour market, opportunities to learn again and apply a certain set of skills in different fields.

Moreover, academics compare Russian universities with European and American universities, which, in their view, are better adapted to the requirements of the labour market. For example, a manager of a Moscow university argues that it is worth taking the example of European universities because in Europe "education is connected with the labour market, after all, universities understand what educational programmes are needed for the country and for the economy". Another manager stresses that a university should build its development strategy, as the

employment rate of graduates is one of the indicators for calculating the university's position in international league tables. Another manager of a Moscow university claims that Russia's leading public universities are unable to fully implement the concept of an "entrepreneurial university borrowed from the USA, because American universities are entrepreneurial because they know how to profit from their decisions".

At the same time, according to another part of the respondents, Russian public universities are not much influenced by the market situation and do not always respond to the demands of private and public companies to employ graduates. An academic from a university in the capital city points out that higher education does not always have to be directly linked to the type of job one will find after graduation: "Not necessarily a specialist in medieval literature becomes exactly what he is supposed to become — a professional archivist. Here we are talking about the fact that he has competence, soft skills". A professor from a regional university describes the situation similarly at his own university. On the one hand, there are not many universities in the region to compete with, so there is no need to change educational programmes. On the other hand, the best graduates always leave the region, and simply good students can find work in their specialisation quite easily: "Therefore, the labour market in our case does not have much influence on the university".

The perception of higher education among managers and academics have become more practice-oriented. HEIs themselves are deeply integrated into the economy and closely interact with other economic players. However, this process has not proceeded quickly; universities have changed their curricula belatedly. As an employee of a Moscow university, who combines the positions of an academic and a manager, notes modern students "do not always get those competencies that they will need in the labour market". University staff are positive about adapting curricula and courses to the demands of the labour market, although they point to some related problems. One regional university staff member, who combines a managerial and a professorial position, was more straightforward:

There is more commodity*. This is now sales, not only education.

^{*—} In the original Russian, the reporter used the word 'shirpotreb',

which is an abbreviation for "[goods] of wide consumption". In the USSR, this was the term for cheap, low-quality goods that were easy to buy.

The impact of the labour market will be discussed in more detail later in the Section 6.5.1 of the research.

6.2.2. University goals

The goals of universities were only partially subject to marketisation processes. The respondents formulated the goals and objectives of their institutions in different ways. As the literature review demonstrates, marketisation primarily manifests itself through aspirations for leading positions in league tables, improving efficiency, introducing new principles of control and management. In addition, evidence of increasing marketisation can be seen in the explicit orientation of universities towards the labour market, the requirements of other economic market agents. Each of the respondents was asked the same question about how they would formulate the goals of their universities.

All three managers of Moscow universities who participated in the interviews said that the aim of their universities is "the formation of the future political and intellectual elite of the country" (one respondent's quote). In their opinion, the universities are currently on their way to global academic leadership, also thanks to additional support from the government through the RAEP 5-100 programme. The remaining answers cannot be grouped by respondents "position or regional affiliation of universities" but can be divided into several groups. First, the purpose of universities was named regional development and training of personnel for the economy of the country and the region. As a professor of a regional university notes, a university today "is not just an educational institution, it is rather a real actor on the market, in the region, it is a participant in the development and life of the region".

Secondly, university staff suggested that the focus should be on the individual development and the needs of students. For example, the person, combining academic and faculty roles, formulates the goal of their university as follows: "The goal of the university is to educate a harmonious person who is able to realise

herself in a multidisciplinary wide world". Another common goal of universities is "to replenish students to the labour market". And only two out of 11 respondents outlined "the development of scientific research and R&D developments related to this fundamental research" and the development of science in general among other aims and objectives of universities.

The goal of my university is to develop these very competencies and to train specialists for the future and the present — those who are now used in the labour market, who is currently needed there, who will be in demand in the near future for the economy. (Academic from Moscow)

Thus, applied principles and orientation towards the market economy have significantly influenced the perception of university goals among both managers and academics. Managers of metropolitan universities have been most affected by marketisation: they operate freely with league table indicators, set goals for achieving global leadership positions and focus on measurable results of university performance. Regional universities are also influenced by the market, but this time they focus on local economic ties and training specialists for the needs of the labour market. Most universities are focused on personal development and meeting the needs of students. Only two university representatives outlined the "classical" goals of higher education institutions: research and scientific development.

Such findings can be interpreted in different ways. On the one hand, there are significant differences between the RAEP 5-100 universities: some of them are historically established as regional HEIs, others are too small to claim a global impact. On the other hand, the focus on the labour market and the needs of the economy can be seen as a legacy of the Soviet past, when universities operated under tight control of the government. There may also have been some confusion here because of the interview topic (the planned title of the thesis was announced before the start of each interview), but the questions were framed in such a way as not to direct the respondents and not to determine their answers. Nevertheless, the role of the university has changed: most universities, regardless of size and location, now do not seek new knowledge and do not focus on research and development, but help students find jobs, monitor rankings and work with the regional economy.

75% of respondents (or three out of four managers surveyed) said their universities have global ambitions. All of this demonstrates the impact of marketisation on the role and goals of public higher education institutions in Russia.

6.2.3. League tables

The increased influence of university rankings is one of the key evidence indicators of marketisation. As has been shown in the Section 4.9.3, many modern universities have fallen into the "ranking trap". Institutions have become more competitive with each other to attract the most talented students and staff, as well as to make more money. International ranking companies offer unified systems for evaluating the achievements of universities, so universities are forced to standardise research areas, open new study programmes, and develop fields of study they had not previously pursued. Entire departments are springing up at universities specifically to collect and track the indicators that count in league tables. On the other hand, the government prefers "results-based management" and decides on the allocation of funding based on formal indicators and positions in national and international rankings. Finally, external audiences (students, employers, research clients from private business, and even other universities) use rankings to make decisions about enrolment or co-operation with a university. The specifics of these processes in the public universities of the RAEP 5-100 project will be investigated further.

All respondents are aware of the rankings of their universities and outlined league tables in their interviews. Only three people said that they were quite distant from this topic and were not ready to give more details about the specifics of the rankings of their educational institutions. Contrary to the assumption that only managers were involved in the ranking process and only they know about rankings, it was found that academics are also quite aware of the situation with league tables.

Among those who were least aware of the positions of universities were an academic, a manager and an employee combining the positions of a researcher and a manager. On the other hand, among the respondents there were two people involved in the promotion of their universities in international rankings. They were the ones who spoke in more detail about how universities are developing this area

of activity. All other respondents are involved full-time or partly in teaching and research, so their view on the impact of rankings was not "professional", but it was their comments that highlights the extent to which marketisation has affected universities from this point of view.

Most of the teachers interviewed do not see a problem in universities participating in rankings, as it does not directly affect their work, even the subject of publications does not change. A manager from a Moscow university finds two reasons for the relaxed attitude to the league tables: firstly, the management of their university can create comfortable conditions for an academic if he/she needs to adjust the research topic. Secondly, the topics in scientific journals are formulated broadly enough, so "it seems to me that there is no big problem with this". A professor from a regional university emphasises that rankings also change and reflect the needs of external actors. It is useful for universities to pay attention to what has been happening "outside", to compare it with their own perceptions of reality. For some respondents, the issue of rankings comes down to mentions in internal correspondence. For example, a teacher and deputy head of one of the departments of a regional university commented on the impact of rankings on her work as follows: "I just see when they write about our victories that we are great".

Some academics perceive the impact of the rankings positively. The RAEP 5-100 universities rank high in the national rankings, which allows them to enrol the most talented students with excellent academic performance, said 45% of respondents. One academic at a Moscow university points out that the results of the Unified State Exam (USE), which all schoolchildren in Russia take to apply in university, have increased significantly among their university applicants in the past few years. A recent trend has been international accreditation of educational programmes, which is also counted among the ranking indicators. Such accreditation makes it easier to find partnerships with other universities, exchange experiences with foreign counterparts and attract international students. Professors are therefore interested in having their study programmes accredited. The measurable results that rankings require "allow for effective reforms, increased publication activity and the redesigning of educational programmes", states a senior lecturer at one university.

Managers involved in the work with rankings find positive aspects of universities' participation in such activities. For example, a manager from a regional university stresses that they have never seen rankings as a goal of the university: "We talk about them as a tool". League tables allow managers to measure the ambitions and results of a university, so it is important to use them properly. Secondly, a university uses the variables on which international (QS, THE Times, ARWU) and national (MSU rankings) ratings are based to assess the quality and effectiveness of education. Universities track feedback from employers and employment of graduates (immediately after graduation and after five years). In the opinion of a manager from a Moscow university, it is an assessment of a particular university's quick reaction to changes and market demands: "what specialists are needed now, and what graduates will be needed in five years' time" (the effectiveness and quality of education will be investigated in more detail later).

Third, it is easier for relatively small technical universities to advance in subject rankings, while it is more difficult for a large Russian university to catch up with global leaders. Russian technical universities are traditionally well-developed; there are universities with Nobel laureates, which helps in promotion. Also, many of the ranking variables are "scientometric", so the achievements of a small highly specialised university are easier to promote:

There are overall rankings and there are subject rankings. This path has already been suggested to us by the ranking agencies themselves. No university in the world can be famous and developed in all possible areas. Everyone is strong in one thing. (Manager of a Moscow university)

The fourth argument in favour of participation in the rankings is that some indicators can be interpreted "to one's advantage". For example, continues one manager, some of the indicators in the rankings are counted in percentages rather than in absolute numbers, which allows a small HEI to advantageously emphasise its advantages. One respondent cites the percentage of international students as an example. For a large university with more than 30,000 students, reaching the figure of 25% of international students is "practically impossible". On the other hand, if the university has only 5,000 students, it is enough to attract 1,250. As a result, a large

federal university "will have ten times as many students, and the percentage that the ranking considers will be lower. There is such a certain game here. You can both rise in the rankings, knowing these rules of the game and understanding where, what buttons to push in order to rise", concludes the manager.

Employees of Russian public universities adapt to the requirements of international ranking agencies, but they do not always perceive league tables as a positive change. Among the main problems voiced by respondents there are several. First, the rankings are conducted by private companies, so they are not always objective. Even though each of the major players has monitored its reputation, they are all interested in making additional profits. Universities can adjust their positions by strengthening some indicators that actually have nothing to do with the actual quality of research and teaching at the university. This is how one of the managers of a Moscow university commented on this situation:

Often there is such a commercial factor there, when [universities] for certain financial subsidies, consulting and benchmarking, commissioned from ranking agencies, universities can advance in these league tables. This is not an objective assessment of the effective work of a university. We know that some universities, thanks to financial subsidies, have taken higher positions, and we know quite strong universities which have fallen out of the rankings and lost positions because they did not pay for their place. (Manager of a Moscow university)

The second reason why the interviewed employees of public universities believe that rankings have a negative impact on their work is that they are biased. The "rules of the game" in rankings are invented by foreign universities and by no means always these requirements fit the conditions in which Russian universities operate. One manager cites Nobel laureates as an example. This is an important indicator in all the league tables, "but during the Soviet era, our scientists were mostly not nominated for the Nobel Prize, although our achievements in sending a man into space, splitting the atomic nucleus, isolating the DNA code, are no less significant in the world than the Americans or the British achievements <...> at that time our country had a different policy".

A third reason for dissatisfaction with the rankings was the excessive cost of the process. Despite government support and the RAEP 5-100 programme, not a single participating university has featured in the world's top 100 general academic rankings in recent years. Only Moscow State University (MSU) has remained on the list according to some ranking agencies. According to the manager of one of the universities "over the last ten years, when the 5-100 programme was being implemented, many higher education institutions voluntarily or involuntarily gave up the game, did not make any special efforts to be there [at high positions in the league tables]". According to respondents, this leads to questions about the efficiency of spending budgetary funds allocated for promotion in the world rankings. Moreover, Russian authorities have begun the process of creating their own university rankings, considering the specifics of Russian universities' functioning.

The desire to take the best places in the rankings alienates universities from their original priorities. According to one respondent, it takes a lot of time and effort to establish a good academic school. Many large foreign universities are aware of this problem, so they simply buy off-the-shelf research teams to strengthen the new research area that is taken into account when determining league table positions. There are specialists who monitor the work of leading scientists in the country, realise that they are on the threshold of breakthrough research and offer big money for an academic and his team to come and work for 1-2 years in another university:

You [academics] come to us [to another university] for a year or six months for certain kind of money and we show your results in order to move up in the league tables. I know such practices. I even know certain teams that migrate in this way from one university to another, improving the scientometrics.

(Manager of one of Moscow universities)

The emergence of rankings also has an inherently negative effect on universities and the team climate. Leading Western and Asian universities have been working systematically for decades to improve their performance, monetising their developments and adapting their courses. Russian public universities are highly dependent on the will of the government and have to try to demonstrate similar results under time and money constraints. According to one of the managers

of a Moscow university, Ministry of Education officials set very strict deadlines and requirements for universities to achieve formal indicators. Managers and academics responsible for meeting the norms begin to "rush around" looking for ways to solve the problem, and staff turnover at universities has increased:

This is nothing short of shock therapy: in other words, "take it out" of the top 1000 universities within a year to receive into the top 300 — this is unrealistic. Even within a decade, it is very unlikely. (Manager of a Moscow university)

Rankings inflation was the next problem that can be highlighted from the analysis of the interviews. The Russian government allocated additional funding for universities in the RAEP 5-100 project depending on changes in their positions in the international rankings. Therefore, it did not matter how much a particular university did, what mattered was whether it could do more than others and rank higher than the previous year. One respondent gives the example of Chinese universities. Since China became an active participant in THE Times rankings, the inflation rate of indicators and data has risen significantly. This is not just because new players have entered the international higher education market. If 20 years ago it seemed that 100 publications in journals in the first quartile [list of the most important scientific journals] was a lot, now the situation has changed dramatically. To be in the first place according to this indicator it is necessary to publish already 1500 scientific articles a year: "Now if you look at Scopus or Web of Science, you will see that out of ten new publications six or seven are Chinese. That's an indicator, it's called data inflation", said the manager.

The rankings and government support for some state public universities under the RAEP 5-100 programme have exacerbated the stratification between national higher education institutions. According to the manager of one of the universities, the RAEP 5-100 programme has "fundamentally reshaped the scientific and educational landscape in Russia in recent years". Only 3% of the state's 800 universities have received additional financial support. It is the universities participating in the 5-100 programme that have become the calling card of Russia in world rankings: "We are now beginning to be recognised as a country with the top universities in medicine, IT, natural sciences, physical sciences, life sciences, but

only thanks to those five years of the 5-100 program". The resulting stratification is perceived positively by an employee of a Moscow university. Moreover, the manager suggests that the number of federal budget-funded places for students (and therefore also government funding) should be increased, and that additional budget funds should be allocated, because the market leaders "have already mastered the technology of progress, and if you give a little fuel, the car will run faster".

In the opinion of a professor who works for one of the regional universities (who also performs management functions), most Russian universities turned out to be unprepared for the pursuit of rankings. League tables, instead of an objective assessment of the results of scientific activity, have come to be seen as an opportunity to strengthen the commercial potential of universities. Students who are ready to pay for their education make their choice on the basis of these results; rankings influence state financing. Many Russian universities, according to the respondent, do not have sufficient financial resources to really change the situation, so they are forced to adapt and "pump up" the indicators important for the rankings:

As soon as you run out of funds to achieve these indicators through unnatural, spontaneous, emergency measures, you lose your position. They are unstable: today we are in the ranking, but tomorrow there is a good chance that we will not be visible at all. Or even worse: by getting into these rankings and becoming more attractive, we deceive our future applicants, and that is a big reputational

(Professor, head of department at a regional university)

As a result, some respondents point to the significant dangers of the "race to the top': instead of showing real results, gaining true excellence, doing meaningful science, universities come up with ways to circumvent these rules and show pseudo results". Instead of real changes, we will get what the government wants from us. And "we ourselves will maintain the status quo", states an academic from a regional university. It is these results, which are not based on objective indicators, that form the basis for higher positions in the rankings, and which the government considers when deciding on the allocation of funding.

Thus, according to respondents, the emergence of rankings has rather negatively influenced the development of Russian public universities. The ideas described in some thematic publications about the impact of league tables on the standardisation of research (within the "rankings catch" problem, see subsection 2.5.2) have not been confirmed: academics continue to work in their fields partly because of the rather broad requirements of the rankings, partly because of insufficient funding for cardinal changes. High positions in the rankings allowed universities to attract more talented students, obtain additional funding and establish partnerships with foreign universities. But at the same time, the rankings have required significant efforts to achieve new higher positions. University staff have highlighted the bias in the indicators, the commercial interest of providers, data inflation and lack of funding. All this creates additional pressure on both research teams and university managers, forcing universities to look for ways to demonstrate the desired results in roundabout ways. Universities cannot change the situation, abandon the rankings, or change the requirements of the Russian government, so they are forced to look for ways to work and find funding in the current difficult conditions.

6.2.4. The funding structure

Marketisation affects the funding structure of universities. Public universities in the USSR were 100% financed by the government. Higher education was free of charge for both nationals and international students. The Soviet structure of university management was quite complex: in addition to different types of universities (regional, technical, pedagogical, etc.) there were sectoral universities, strongly dependent on ministries and government departments (the Mining University trained personnel for the mining industry, graduates of the Transport and Communications University went to work in the railway industry, etc.). These ties and structure have been preserved in today's Russia, but now public universities use extra-budgetary sources of income in addition to state funding.

Based on interviews with university staff, several areas of university funding in general and individual departments that have been found to be under the marketisation processes influence were identified. First, public universities actively

attract self-paying students. Second, public universities have created programmes that are more popular in the higher education market, generating additional income for higher education institutions. Third, universities compete with each other and compete on the global higher education market with foreign HEIs for international students. Summer schools and short programmes have become another market-influenced area, which help universities not only to generate additional income, but also to promote themselves to a wider audience. Universities work with large corporations and commission them to develop new technologies. Extra-budgetary funding occupies an important part of the total revenues of public universities. Finally, the very principles of university funding by the government have changed and include KPI management and competitive funding. All of the above features of HEI financing have emerged due to the influence of market technologies, but they have been significantly transformed compared to what was predicted in the foreign studies examined in the literature review. The peculiarities of each of these points will be discussed below.

6.2.4.1. Self-paying students and paid educational programmes

For Russian public universities, attracting paying students "has become the new norm": managers and academics take this situation calmly. However, unlike many Western universities, where the number of paying students determines the financing of the educational institution, Russian public universities have other reasons for dealing with self-paying students. Most respondents admit that in the current situation, universities have three main sources of financing: tuition fees, state subsidies and R&D. Tuition fees enable universities to obtain an additional source of income. An academic from Moscow comments on his attitude towards the emergence of self-paying students as follows: "I am neutral about this. Apparently, there is some kind of objective process. This is probably due to the fact that universities need money, they need to finance their activities. Those budgetary funds that are given for budget places are apparently not enough, and therefore there is such an increase".

According to the respondents, tuition fees are not the main source of income for a public university and in most cases do not have a significant impact on the revenue structure of the university. The manager of a regional HEI is not interested in increasing the number of students paying their own tuition fees, as the number of students "does not affect the development of the university at all. If, relatively speaking, 600 people came to us for a bachelor's degree contract, then that's good. 400 came — well, that's fine too. 1,000 — well, there is nowhere to teach". University staff are more interested in motivated, talented applicants, whose tuition they are prepared to cover from their own funds and provide selective scholarships.

An employee combining positions in Moscow explains that universities are primarily looking for promising students and are prepared to pay for their studies themselves, rather than agreeing to allocate funds with the state, as "the government is a big bureaucratic machine that is difficult to move". The manager of another university explains that seeking paying students is not a priority for his university: "In my university almost everyone studies for free, and study for free because my university is a blacksmith, an accelerator forgathering the most talented applicants in the country <...> It is clear that the state is ready to pay money for such children and teach them for free". At the same time the manager of another Moscow university claims that his university is "smoothly migrating" towards paid education and aims to reach 70% of self-paid students. The peculiarity of this approach is that most students will still receive full or partial scholarships:

it competently builds a discount policy, that is, in the end it turns out that it doesn't matter if you are smart, you have a big chance to learn for free or for little money. Therefore, paradoxically, for some reason, students are not our main source of income.

(Manager of one of Moscow's universities)

Government restrictions are another barrier to wider implementation of tuition fees in public Russian universities. According to the dean of one of the regional universities, tuition fees cannot be lower than the norms set by the state for budget financing. That is why universities cannot pursue a flexible policy and set low prices for some educational programmes: to attract talented applicants they have to use scholarships, as there are not enough places financed by the federal budget. The manager of a Moscow university supports this idea and points out that the two largest cities with suburbs account for a maximum of 25% of the population that can

pay for their education on their own. In the regions, the level of real income has fallen, so universities are holding back tuition fees and providing scholarships: "Life in regions below the poverty line, they have no money for contract quality education, and universities survive because there are no contract students. And where does science come from if universities do not have the opportunity to buy technology and equipment? And here again a vicious circle".

Another limiting factor for the development of fee-based education in state universities is competition with foreign universities. After the 2014 crisis, when the Russian currency exchange rate against other currencies almost halved, studying in Russia became an attractive destination for those students who could not afford an American or British education, but wanted to receive better knowledge than in their home country. One of the indicators based on which Russian public universities receive federal funding is the number of first-year students enrolled. The budget funding does not cover all the costs of the university to create new study places. And "if you convert the cost of education at a Russian university into US dollars", continues the manager of a Moscow university, "it turns out that this money is not enough to compete with the leading foreign educational programmes: In the States, this is 50-100 thousand dollars per year, this is a lot of money, and universities often live on this money in the States".

Summer schools and short-term educational programmes are not controlled as much by the government, so universities are free to determine the cost and content of tuition on their own. The manager of a metropolitan university claims: "Summer and winter schools and short programmes are an excellent source of funding because the middle class of Russia is slowly, in my opinion, getting stronger". In the slightest degree some kind of backbone appears, and with the time of work and life, people have a need for an educational programme that would also be appreciated, which would give really applied knowledge. At the same time, other universities are less influenced by the market and see short programmes as opportunities to attract talented students and collaborate. For example, a lecturer at a regional university points out that he organised several short educational programmes with grant funds: the tuition for students there was completely free of

charge. Almost the same opinion is supported by a lecturer from a Moscow university combining a management position:

Yes, we earn on this, but we earn a little and specifically for me, as an academic leader, running a summer school is more of an opportunity to maintain good relations with colleagues from other universities. Often, we attract partner universities and with them we make a summer school in half, thus inviting students of their university and our university to work together. It's a win-win story that is more about making international connections easier than making money, because usually the income is not very large. (lecturer from a Moscow university combining a management position)

HEIs have slightly more scope to manage their income from fee-based education programmes. A lecturer who combines a managerial position in one of the regional HEIs pointed out that his faculty uses the money of self-paying students to pay bonuses to employees, run the admissions campaign and use it to cover additional expenses. Another lecturer at a regional HEI also pointed out that for the past few years, the faculty has been able to manage the money from paying students independently to pay bonuses and cover expenses for business trips and events. But the situation in regional HEIs varies depending on the location and popularity of the university as a whole or of individual educational programmes. The dean of one of the faculties of a regional university raises the problem of low demand for certain programmes: "in law school, in journalism, in most natural sciences, technical specialties, we do not always close even budget-funded places, so there is definitely not so much demand for a contractual form of study".

Marketisation has had an impact on Russian universities: all the universities surveyed offer fee-based study programmes. Some universities strive to ensure that the majority of students pay their own tuition fees. In other universities, the vast majority of students study with federal funding. The disciplines are also important: in some departments, students mainly study at the expense of the state, while in other departments "90% of our students study on account of their own money and are not funded by the state, since we work very closely with the market" (an

employee combines positions, regional university). In most universities, tuition fees are not the main (or even an important) source of income. Universities receive funding from the state, through partnerships with large corporations, through R&D, and the income from self-paying students only helps to cover additional costs.

6.2.5. International students' tuition fees

Increased interest in attracting international students is an important marker of marketisation. As the literature review has shown, market relationships are most evident for universities through interactions with international applicants. Higher education has always been international, but with the advent of rankings and feebased education programmes, more and more students from different countries are coming to the most prestigious universities. Universities are responding to this process and raising tuition fees for international students, using them as an important source of funding. Universities become dependent on foreign applicants and, as fully-fledged private corporations interested in increasing their profits, spend additional resources to attract foreigners. Entrance requirements may be lowered, while the number of fee-based educational services increases. Universities are forced to modify their educational programmes: simplify courses for those applicants who do not speak a foreign language well enough or create new programmes that are most in demand among international students. All these processes are taking place in Russia as well, but the dynamics and reasons for universities' interest in foreigners differ significantly according to respondents.

The number of international students studying in Russia has constantly grown. The manager of one of the Moscow universities cites the statistics according to which in 2020 more than five million students studied abroad, more than 200 thousand of them studied in Russian universities. Most of the universities surveyed are interested in attracting foreigners. "My university is very focused on attracting foreigners", states the manager of another metropolitan university, adding that in some faculties more than 80% of the programmes are taught in English. This helps make the programmes more competitive on the international market. But even at this university this is not the case for all faculties; few international students come to study mathematics, for example. Even so, international students are not a

significant source of funding for the programmes. Another employee of the same university gives the example of an educational programme, in which 25 people were supposed to study. Of these, 20 students are paid from the federal budget, and only five pay for their studies themselves. Universities have more flexibility in accepting paying students, including international students: the number of budget-funded places is fixed, while the number of paying students can be increased if necessary. Some regional HEIs are less focused on attracting foreigners because they realise that they cannot offer competitive educational programmes: "but if we assume that we have a product in which we are really sure that we need to promote it more actively [it is possible to promote ourselves] — unfortunately, there is no product yet" (Dean of one of the regional universities).

The Russian government provides scholarships to international students on a non-market basis. Foreigners can pay their own tuition fees, or they can apply to the government organisation Rossotrudnichestvo [Russian Federal Agency for the Commonwealth of Independent States Affairs, Compatriots Living Abroad, and International Humanitarian Cooperation] for a scholarship. As part of the soft power policy, Russia allocates funding for the education of foreign nationals on a quota basis. Universities then receive a fixed tuition fee for each foreigner from the federal budget. In this case, the university receives the same tuition fee for both a Russian and a foreigner. The problem arises from the fact that international students need more expenses for adapting educational programmes, places in dormitories and support during their studies. Moreover, conflicts arise from time to time during discussions on the need for scholarships for foreigners. Some university staff and parents of Russian students ask "Why the university provides scholarships from Rossotrudnichestvo and fully covers tuition fees for foreigners instead of making more scholarships for Russians?"

In order to make it profitable for universities to attract international students, "tuition fees have to be raised", states the manager of another Moscow university. This leads to other problems: the university can make more money if it raises tuition fees for foreigners. But this is an unpopular measure for potential self-paying applicants. In that case, even fewer foreigners "from far abroad" would come, and their number is an important indicator that the Ministry of Education takes into

account: "We must not fall in the number of foreign contingents, but at the same time we need to somehow survive and increase the cost of training in order to receive money. But if you increase a lot, fewer people will come to you to study. Here's a vicious circle. Universities are balancing between two problems". An academic in a regional university and head of department adds that foreigners have a different culture and it is useful for local students to experience a different view of the world. There are several ways for international students to study at this university: some come on quotas from Rossotrudnichestvo, some receive substantial discounts as citizens of neighbouring countries, some come from abroad "on target recruitment" and do not pay for their studies themselves: "And there are those [students] who come [to study] on a commercial basis, but they are in the minority today".

The government's KPIs have a much bigger impact on international student enrolment than the possibility of earning extra money through higher tuition fees. One university official explains the situation as follows: the government sets KPIs for "the number of foreigners from near and far abroad". The neighbour countries are mainly residents of the former USSR, citizens of neighbouring countries who speak Russian reasonably well. The most prestigious indicator is the number of international students who come from the countries further afield. These students do not know Russian and often stay for a "preparatory year", during which they learn Russian in order to enrol in the main educational programme afterwards. The same official points out that more than 20% of foreigners study at their university, but foreigners from "distant countries" account for no more than 8% of that number.

The requirements of the government rather than those of the market are driving Russian public universities "into a performance trap". One manager points out that all of these indicators take into account the percentage of the total number. Therefore, it is easier for small universities with 5,000 students, for example, to attract 1,000 foreigners. It is much more difficult for large universities with 30,000 students to organise education and work with 20% of foreigners. As a result, small universities fulfil the government's requirements but do not make enough profit from the small number of foreigners. And large universities are forced to invest all their resources in upgrading infrastructure, training staff, and promoting their brand. The

cost of tuition for many international students is limited depending on the funding channel (Rossotrudnichestvo, state corporations), and raising the price for independent self-paying students reduces demand. As a result, universities are forced to balance between these two problems.

Universities attract foreigners in order to meet government requirements, rather than as a source of funding. Respondents point to several key KPIs set by the Russian authorities: the share of applicants from near and far abroad countries, the share of international students admitted as first-year students, the share of winners of international scientific Olympiads among international students, etc. Among these indicators there is no requirement for profit margins: "I said that we have no goal of attracting contractors, in principle, as a category, but international students are always pay for themselves. But that's not the point. Paid tuition are such secondary things!" (Regional university manager). Some universities and individual educational programmes, especially those related to nuclear research and military development, are almost 100% comprised of international students at the expense of Rossotrudnichestvo. Future specialists to work at enterprises abroad are "pre-ordered by the state". The manager of one of the universities explains: "Therefore, it is barely impossible for a person to come from the free market and say: 'I want to receive an education from you for money'".

The education of international students is seen as part of "soft power" and not as a way to make money. Universities receive tuition fees for all international students. the sources of funding and potential but earnings Rossotrudnichestvo sends international students to universities "on a quota" and pays a fixed tuition fee from the federal budget. Large state corporations form a "state order" for certain specialists, including those from abroad. They also pay a fixed amount for the education of their students. All this is done in order to strengthen the country's position on the foreign market. It is not about the higher education market, comments one of the managers, but about the image of Russia in general. For example, the state corporation Rosatom has built nuclear power plants all over the world: they need specialists capable of working at such facilities, foreigners who have an understanding of Russian nuclear technology.

Thus, the growing number of international students in Russian public universities is not a direct consequence of marketisation but is related to these processes more indirectly. Universities are interested in attracting foreigners and promoting their brand abroad for the sake of meeting government requirements, rather than to obtain additional funding. The surveyed universities of the RAEP 5-100 project have been working for the last seven years to achieve formal indicators: to be in the top 100 of the world rankings. The number of international students has become one of the important indicators of the project. Limited budgets, low tuition fees, high costs of modernizing educational programmes and equipment, stringent requirements for the number of international students and the inability to influence tuition fees from students of state corporations and the Rossotrudnichestvo — all these factors prevented the direct influence of market processes on the work of universities.

On the other hand, the management mechanisms themselves have changed: KPI-based management techniques borrowed from business have been applied by the Russian government to work with state universities. Universities cannot set tuition fees too high, as they compare their capabilities and programmes with foreign educational organisations. The government has created a competitive environment among Russian universities, established the rules of the game and allocated additional funding on a competitive basis through the RAEP 5-100 project. All this was done in order to encourage universities to learn to earn their own money from international students and to strengthen their position in the international higher education market. However, as one respondent summarised, the results have turned out differently:

The project is now ending. I recently spoke with colleagues from my university. We discussed the topic of international students. For ten years we chased these international students, competed more, faster, and now it seems like the 5-100 project has ended, and these international students immediately became unnecessary.

(University manager)

6.2.6. Corporations and extrabudgetary funding

Marketisation affects the income structure of universities: state universities receive new channels of cash inflows: through interaction with businesses and extra-budgetary funding. Large corporations act as customers for the development of various R&D projects, offer joint master's programmes, whose graduates received guaranteed employment at enterprises. Universities compete with each other for grants from various foundations and organisations, jointly conduct research with other universities and receive funding from abroad. Russian public universities receive budget funding: base payments for a certain number of places for local and international students, for faculty salaries and for basic research. All other sources of funding are classified by respondents as "extra-budgetary": tuition fees from private individuals, paid summer schools, renting out premises, and student start-up accelerators, as well as the funding channels listed above. All these channels have resulted from the marketisation of higher education and do not relate directly to independent research and teaching. Some features of the impact of marketisation on the funding of Russian public universities will be discussed below.

Many Russian public universities depend on extra-budgetary funding from big business, but this is a non-market dependence. All respondents interpret the term "extra-budgetary funding" in the same way — it is money not from the Russian Ministry of Education. The state guarantees universities funding for research and teaching, as well as for maintenance of research facilities (laboratories, campuses, university administrative buildings) and some other expenses. All funding that universities receive from other sources is described by respondents as "extrabudgetary". But unlike the examples discussed in the Chapter 2, such funding comes not only from private companies, but also from other state organisations.

One of the major customers for R&D for RAEP 5-100 universities is the Russian military-industrial complex. The Ministry of Defence pays for R&D projects every year: this is also state money, but universities do not receive it directly from the Ministry of Education. The peculiarities of military developments and secrecy considerations greatly reduce the opportunities for third-party, private companies to participate in the Ministry of Defence's "state order" tenders. Therefore, a small

number of state universities regularly receive orders and funding from the military. For example, according to one university interlocutor, research in the "nuclear weapons complex is separately funded by the Ministry of Defence".

Large state corporations also sponsor many of the universities in the RAEP 5-100 project. The system of subordination of some universities to large corporations and line ministries has been preserved in Russia since Soviet times. For example, the Railway and Communication University supplies specialists to the Russian Railroad Company, the Mining Institute prepares specialists for the iron ore industry, and Gubkin Russian State University of Oil and Gas works closely with Gazprom, the country's largest gas supplier. An employee of one of Moscow's universities states they have a "big brother" (as he calls one of the big state corporations). This company has a great influence on the life of the university: "This state corporation acts not only as the second sponsor, which finances individual programmes for the development of the university but is the main customer and employer for the majority of graduates. Within the framework of this programme, they put forward those requirements and those wishes that they want to see in educational programmes, in university graduates".

Contracts with major corporations can generate up to half of the university's income each year (according to one respondent working as a manager in a metropolitan university). Universities enter into long-term co-operation agreements with state corporations, banks, industrial companies for research and development. One respondent points out that his university has 20-30 economic contracts with various companies, which bring in around ten billion roubles annually into the university budget. Although many of these corporations are private, the Russian government owns a controlling stake in most of these companies. Therefore, the authorities, on the one hand, indirectly control the allocation of budget funds for R&D and, on the other hand, push large private companies to look for research partners specifically among Russian public universities.

The state has set goals for public universities to seek new sources of funding. An academic at one regional university argues that the authorities are keen for public funding to become "not the main source of funds". Another regional university stresses that co-operation with big business and participation in development

tenders are the main sources of income at their university. Whereas profits from paying students, regardless of how many students study at the university, account for no more than 5% of the university budget. An academic from another regional university supports the idea of seeking new sources of funding in state universities to have additional opportunities for "making the money necessary for development".

Not always extrabudgetary funding means "non state funding". The manager of one Moscow university gave the example of two large state funds — the Russian Humanitarian Foundation and the Russian Science Foundation, which provide large grants to universities. The universities receive this funding on a competitive basis, but initially the money is still allocated by the Russian government. Some universities have stricter requirements for academics and managers to participate in competitions and apply for grants. In other universities, special departments are in charge of attracting such funding. In addition to large grants and contracts, which are allocated by the government on an annual basis, universities are interested in relatively small grants, which can be applied for by individual professors or research teams:

We have an understanding that a teacher cannot do everything: you have to teach and write articles, but it is impossible to do everything [including searching for extra income]. It is not harsh, it is encouraged, we receive mailings: please see what contests there are, you can take part. But no pressure. (Manager of one of Moscow's university)

The government does not allocate sufficient funding for the development of public universities. As several respondents point out, universities are forced to learn how to earn extra money that they can spend on their own development. Each university has its own specifics, including those related to regional development and links with large corporations. An academic of one of the universities in the capital points out that regional universities "are not always able to earn money on their own, so the state, most likely, supports them more [than large universities in big cities]". However, the principles of allocating funding are changing: the government guarantees only the bare minimum. The government does not allocate additional

budgets directly, but through various affiliated bodies and foundations. Universities are forced to participate in competitions and compete with each other for grants.

The manager of a regional university cites the RAEP 5-100 programme as an additional source of funding. By taking part in this project, the university can get up to 850 million roubles a year. The budget of some universities is six billion roubles a year, so the additional ~15% of income received through participation in just one programme is estimated by the manager of a regional university as "a lot of money". But the state does not guarantee this funding. The university is forced to participate in tenders, meet KPIs, and keep accounts. Most state universities receive funding from various sources, but such "extra-budget money" in most cases still "is also state money", states an employee of a regional university. The government guarantees payments that ensure only the work of state educational programmes, moreover, each programme is evaluated differently, and the universities have to find money for additional development on their own: "It seems to me that the university is obliged to earn money, that's for sure, because you cannot live on state money alone, it's not enough" (manager of a regional university).

Thus, marketisation processes have primarily influenced the principles of university funding distribution. Direct transfers from the federal budget account for only about half of all revenues of Russian public universities. Ties with large corporations and line ministries, preserved since Soviet times, allow universities to receive additional funding for development and R&D. Universities compete with each other for new contracts, funds from foundations and large companies. The peculiarity of the situation is that large corporations are fully or mostly controlled by the government and large foundations are also owned by the government. The government creates a quasi-market environment in which universities compete, but they do not operate primarily in the open market, but with various structures of Russian power. Universities attract "extra-budgetary funding" from other public sources on a competitive basis. The government retains control over the higher education sector, while public universities remain dependent on state contracts. The state creates new market principles for financing not only universities as a whole, but also individual departments.

6.2.7. Autonomy and funding of faculties

Marketisation affects the management structure of universities and the distribution of profits between individual departments. As shown in the first parts of this study, the application of market principles in management leads to greater autonomy and autonomy of individual university departments. New sources of funding contribute to the autonomy of those units that are most successful in applying market methods in their work. Researchers note that universities can now incentivise employees involved in fundraising by paying bonuses based on profit margins. Russian public universities have also been affected by marketisation: some faculties and programmes are more in demand among applicants, the ability to create fee-based educational programmes gives some units an advantage over others, and universities can more freely dispose of money received from non-state sources.

Faculty autonomy varies widely among the different universities in the RAEP 5-100 project. Some universities have historically had a more decentralised management system. One university in Moscow has several campuses in other Russian cities. As a university official explains, each campus has its own budget. Part of the funding for the campuses comes from Moscow, but according to the manager "in principle, we must be self-sufficient". In order to cope with the impact of the corona virus COVID-19 pandemic, one of the campuses had to downsize administrative staff as they did not have enough profit margins to operate on their own. In another Moscow university, the situation is the opposite: funding for individual units does not depend on the profits they bring to the university. As the manager of this university explains, the results of their work depend not on economic but on political reasons. The state and large state corporations are interested in promoting Russian technology abroad. To do this, the government gives 100% scholarships to local and international students. The government uses soft power "to strengthen the position of Russian technologies on the international market, which are used by our former allies since the Soviet era, and to curb the growing popularity of American and Chinese companies".

The financial autonomy of individual departments is determined according to the historical legacy and the amount of profit the unit generates for the whole university. One respondent describes how funding is organised at another university involved in the RAEP 5-100 project: "Historically, they have a very highly decentralised education system in another large university. Many faculties and schools are very independent of each other, recruit independently and even have their own dissertation councils". In some faculties, most students study at their own expense. For example, the head of a department at one regional university claims that over 90% in his department pay their own tuition fees "since we work very closely with the market". Other universities, on the other hand, are very centralised and their management style is more reminiscent of military leadership, where all employees are obliged to complete the management task in full and on time. In such a case, the financing of the unit does not depend on how many self-paying students have studied there or on the number of research grants attracted, because these processes are centralised.

University management has a strong influence on how departments can manage their money. A faculty member in a managerial position from a regional university explains that a faculty is only obliged to spend the federal budget funds on staff salaries. And the money that has come from self-paying students and grant funds can be spent on "purchasing equipment in the laboratory, on paying travel expenses, on improving the qualifications of teachers, on purchasing equipment — computers, and so on". Departments can also spend the money they earn on fringe benefits for managers and teachers as they see fit. Another university spokesperson adds that departments can only apply for grants approved by university management and then spend the proceeds on conference organisation, staff payments and related expenses.

Departments that have learned to earn more than others receive additional benefits. The head of a department at a regional university stresses that university management does not require their department to seek new sources of funding and apply for grants, "because we are doing very well with the extra-budgetary funds that we attract through [self-paying] students". Requirements for other performance indicators have been introduced by management:

We are also responsible for publication activity, but in terms of volume it is much less than those faculties that attract less extrabudgetary funds from the education of students, but they have more budgetary funds invested in science and more scientific groundwork. That is, subject matter is distributed depending on the faculty.

(Academic, combining positions in a regional university)

On the other hand, there is a trend towards centralisation of financial flows in some universities, contrary to the predictions of proponents of the impact of marketisation. One professor at a regional university tells us that ten years ago his department could manage 60% of all the money they earned. Over time, that number began to dwindle. Last year, the rectorate reformed and now all money from all faculties goes to the head office of the university and is then redistributed among departments again: "it is impossible to make as much money from a biology department as from a law school". The university management has introduced a system of KPIs for department managers and lecturers, based on the results of which bonuses are awarded. On the one hand, the centralised system avoids bias on the part of deans in the distribution of bonuses; on the other hand, faculty managers now have no incentive to earn more, as they cannot manage these extra revenues. In another university, the amount of extra-budgetary funds raised has no effect on staff salaries, and most of the extra earnings are transferred to the head office of the HEI. Sometimes some money remains in a special departmental fund, which can be used by the department to pay for students "participation in conferences, living expenses and other incidental expenses". In the end, it is the management of the university that manages all the funds from all the faculties.

Thus, contrary to theorising about the increasing autonomy of individual university departments in the marketisation process, the faculties of Russian public universities have only partial financial autonomy. As indicated earlier, money from self-paying students accounts for a small part in the revenue structure of public universities. At the same time, the number of self-paying students is unevenly distributed across departments. 90% of students in some departments pay their own tuition fees. Such departments received more opportunities to pay bonuses and

associated costs, and they may also be subject to relaxed KPI requirements. In most RAEP 5-100 institutions, on the other hand, it is the university management that manages the financial flows and sets the rules under which faculties pay bonuses and apply for research grants. Staff salaries are not linked to the rate of profit a faculty makes, and their KPIs do not include the search for extrabudgetary funding.

Marketisation has had a significant impact on the funding structure of Russian public universities. Direct federal funding accounts for only about half of all university revenues. Universities have created paid core educational programmes and summer schools, compete to attract international students, and work with corporations. The principles of university funding have also changed: state universities are increasingly competing with each other for funding and participating in competitions for grants from private and governmental organisations. KPI management has become the new norm: the government sets performance indicators for universities in order to allocate additional funding. University management sets KPIs for faculties, encouraging some of them to attract more selfpaying students. Faculties can set KPIs for employees in order to calculate bonuses and extra payments. Finally, HEIs received more freedom to manage extrabudgetary funding. Whereas federal money can only be spent on salaries of employees and the implementation of basic educational programmes, the rest of the income of the university is free to be spent as it sees fit: e.g. upgrade of infrastructure, purchase of equipment, bonuses for employees, etc.

On the other hand, marketisation has not touched many important areas of HEI financing. In most universities, tuition fees for self-paying students do not play a significant role in the overall revenue structure. Many managers and professors are not interested in increasing the number of "self-paying students". HEIs see attracting international students first of all as a way to meet the requirements of the authorities and the government's KPIs, then as a way to diversify the student environment and lastly as a source of income. In some HEIs, the cost of maintaining an office for international students alone exceeds the income from their tuition fees. Government restrictions, competition with foreign HEIs and the low standard of living of Russian residents prevent HEIs from setting high tuition fees. Competitive procedures and co-operation with corporations are not formally directly linked to the

state, but are strictly regulated by the authorities, and most large companies are fully or partially controlled by the government. The national leadership and many university managers retained a centralised management system, but introduced elements borrowed from private business (e.g. KPI-based management, profit margins for divisions, etc.). Market technologies have been significantly transformed by the dominance of state subsidies, while changing the principles and structure of HEI financing. Managers and academics have felt these changes most acutely.

6.3. The Influence of Key Performance Indicators

Key Performance Indicators (KPIs) as one of the areas of marketisation affect the work of public universities. As shown in the literature review, the processes of marketisation are not only related to changes in the goals and ways universities work, but also to changes in the content of the work of university staff. Russian public universities have become part of the global trend and have changed the working conditions of their employees. Key performance indicators (KPIs) and results-based management borrowed from business are pushing employees to work more efficiently and limiting opportunities for independent activity. Universities monitor the quality of teaching and measure staff performance. Universities use a variety of metrics and indicators to do this. Not only salary increments, but also employment itself depends on successfully meeting KPIs and assessing the quality of teaching: failure to meet the standards threatens dismissal. This applies not only to the basic duties of academics, such as lecturing and research, but also to additional metrics such as student satisfaction with the quality of teaching, etc. These and other features of the impact of marketisation on university staff will be discussed below.

6.3.1. KPIs for universities

Public universities in Russia work using key performance indicators. In many Western universities, such a system has been borrowed from private business. Adherents of the new public management theory suggested such borrowing as a way to solve accumulated problems in the public sphere, including as a solution to the problem of high costs and inefficient distribution of money in the higher education segment. Russian state universities inherited a similar system from the

Soviet era. The Soviet Union had a "planned economy" of which higher education was a part. As described in Sub-section 3.2, the Soviet government planned in advance exactly how many specialists in a particular field were required to meet the needs of the state economy. The universities carried out the "state order" and the government funded a certain number of "budgetary places" from the state budget. Government control and integration into economic processes has also been retained in contemporary Russian state universities. Marketisation processes have intensified and expanded the ways in which pressure is exerted on universities, including through the setting of key performance indicators.

The universities of the RAEP 5-100 project work for the sake of achieving the indicators of this programme to improve university competitiveness in the international higher education market. The goal of the project was the appearance of at least five Russian public universities in the top 100 international educational rankings (QS, THE Times, ARWU). The main indicators, which the universities were to achieve, were formulated by the government at the stage of the programme launch. One of the managers of a Moscow university explains that each university created its own project office or directorate to implement the goals set. The university project office creates a roadmap for the university's development for several years ahead. These same people "builds a system of performance" indicators for each year of its implementation". A manager from another university points out that the KPIs set by the universities need to be "defended" to the government on an annual basis. Depending on their success in achieving the targets set and on the assessments of independent experts invited by the government, universities participating in the RAEP 5-100 programme receive funding for the following year. All universities are divided into three groups: 850 million is received by universities in the first group, 300 or 500 million from the second group and 100-150 million is transferred by the government for universities in the third group (the total budget of each of the universities differs and ranges from six to 15 billion roubles). Thus, the government approves key KPIs for the universities, checks that the universities have achieved these metrics, and annually decides which universities will receive additional funding on a competitive basis. Some universities receive a substantial increase in their budget (15%), while others have to meet strict requirements in order to receive no more than 2% of their budget.

Key performance indicators within the RAEP 5-100 programme have a significant impact on the organisation of the work of the public universities that are part of this programme. As the academic, head of the department in one of the regional universities, explains, among the indicators collected in the roadmaps of the university, there are also requirements to change the structure of university management. Among other things, universities rely on quantitative metrics and assess achievements in branding, publication activity in various subject areas, and the position of the university in rankings. All these factors influence each other, so the "management within the university is being rebuilt". The new management has criticised the "old school" and has thought about "re-engineering the processes within the university in order to comply with the new formal indicators".

In 2021, the Russian government has conceived an even more ambitious programme to support public universities based on performance indicators. The Strategic Academic Leadership Programme (SALP) "Priority 2030" aims to support universities through grants. The government issued Decree No 3697-r of 31 December 2020, which explicitly states that the PSAL "Priority 2030" is implemented on a competitive basis and recommends "the development and approval of a list of target performance indicators for the implementation of educational institutions' development programmes". More than 100 public universities are expected to participate in the new programme. In this way, the government plans to encourage universities to attract more international students, update educational programmes, develop academic mobility, etc. According to an employee of a Moscow-based university, the new programme will provide not only for additional payments for achieving targets, but also for penalties for failure to deliver on promises: "Universities will be more disciplined, if they have met the KPI that they set for themselves two years ago, then this money is taken from the university".

The government has not just put up KPIs for public universities to receive more funding. The head of a department at one regional university explained that the education ministry regularly monitors the performance of universities. Audits of universities' work took place both before the RAEP 5-100 programme and continued after it had ended. Information about such monitoring was not publicised, and only a few university departments (for example, the analytical centre or the marketing

department, as well as the university management) were aware that certain data were being collected. A manager of a Moscow university involved in the process of collecting data for the government reports points out that the Ministry of Education requested multi-component data, structured in a special way: "Regulatory indicators have already been collected. We had a month of international monitoring at all universities, I personally collected this information, and this is a nightmare. These are 118 indicators, not personalised lists or just statistics. Authorities are trying to establish a system that would take into account the necessary development indicators for various universities in various sectors so they can use 'objective data' to see what can be squeesed out of this region or university cluster as much as possible, or what can be squeesed out according to the subject area", a university official concluded.

Managers and academics are critical of the need to evaluate the performance of universities by performance indicators borrowed from private companies. During the interviews, four main arguments against using KPIs to evaluate the performance of state universities were voiced. Firstly, formal indicators do not reflect an objective picture of HEIs' development and do not always directly affect funding. A faculty member of a regional HEI wonders: "Can't the government see the inefficiency of the funds invested? Some of the indicators are quite formal and objective and cannot be imitated, but many of the figures sent to the ministry do not correspond to reality". The government allocates funding despite the fact that universities do not achieve their targets. Secondly, KPIs are perceived as being of no value: these indicators are too volatile and unreliable to be relied upon in their work. A manager at a Moscow university calls this phenomenon "bubbles". According to him, the race for indicators, the research of scientific results by quantitative methods, Scientometrics, the excessive reliance on positions in rankings — all this leads to the devaluation and destruction of the well-earned traditions that the Russian higher education system has.

The third reason for scepticism towards KPIs among university employees is the fundamental inefficiency of metrics-based control in public higher education. The manager of another Moscow university illustrates this situation with the example of financial control. Each university is cross-checked by the Ministry of Education, the Ministry of Finance, the Audit Chamber of the Russian Federation and other supervisory bodies. The financial control is very strict, but according to the respondent, these inspections control only about 20% of all the activities of the universities. The Ministry of Education, as a customer, is interested in control, but on the other hand: "The tighter the control over the market conditions of the game, the worse for the indicators". Finally, another problem with performance indicators is that such metrics look to the past rather than the future. The manager of a regional university points out that measuring past performance is an important part of university development, but for quality growth it is necessary to look into the future and structure the university's management system differently.

Thus, thanks to a combination of the legacy of the Soviet past (centralisation, integration into the state economy, etc.), the influence of marketisation processes in the public sphere and the desire for greater efficiency, Russia's state universities have come under strong pressure from the key performance indicators set by the state. Universities track various metrics for bidding for additional funding, for international rankings, for state support programmes, and for various Russian ministries and agencies. According to respondents, all of these KPIs only partially reflect university reality. This is due to imperfect indicators, poor feedback from supervisory bodies, and the fundamental impossibility of controlling everything in higher education, where greater freedom of creativity is required. However, the government and the top management of universities also implement KPIs to manage employees.

6.3.2. KPIs for members of staff

Marketisation promotes the introduction of performance indicators not only for universities as a whole, but also for individual staff members in higher education institutions. Measurable quantitative requirements are beginning to be applied in order to evaluate the performance of academics and managers. The desire to optimise costs, to assess the quality of teaching, the perception of education as a service and other factors contribute to the gradual spread of KPI principles to different areas of university staff. While the control of university performance in general can be partially explained by historical traditions and the legacy of the Soviet

educational system, attempts to establish performance indicators for managers and teachers have started to be undertaken in Russian public universities relatively recently.

Primarily, the key performance indicators concern the work of administrative staff. Managers do not just work and perform their job duties, but also report on the achievement of certain indicators. As one Moscow university employee explains, KPIs for each individual person are constructed based on that person's tasks, because "the university is a very motley structure". There are no one-size-fits-all indicators, but different feedback systems work. For example, in one university, students can contact the dean of a department and complain that someone in the department is doing a poor job and not meeting normative targets. Such a complaint is dealt with very carefully and all staff members try to avoid such a procedure: The administrative staff are subject to "a carrot and stick system" (Moscow university manager).

KPIs for managers are usually set by the rectorate to fulfil government instructions. The manager of one of the universities explains that he has to comply with the requirements of the RAEP 5-100 programme, as well as take into account the metrics of the individual university development programme. Such KPIs are set for all leading employees from top management and middle managers. Among such metrics, depending on the position, the number of international students, the number of self-paying students, the share of students interning at leading companies in the industry, the number of applicants with high scores in the unified state exam, and many other factors can be taken into account. The managers surveyed are not in a position to influence the content and number of metrics that affect their performance appraisal. The manager of a Moscow university explains the situation as follows:

For me, these indicators were not adjustable, they were just set, that's all. You started work, you were given a task — per year you had to recruit so many students, launch so many programmes or send so many people on internships. I just took it for granted, as a guide to action. (Manager of a university in Moscow)

In some cases, managers have the opportunity to adjust the metrics. At the stage of agreeing regular development programmes or before the appearance of the RAEP 5-100 programme, management discusses internally a set of the most relevant indicators and forecasts the topics of movement towards the goals set. At the stage of discussing programmes, managers have the right to make their proposals, but no one guarantees that such proposals will remain in the final documents. The deputy head of one of the departments of a Moscow HEI sets performance indicators for himself and his unit independently. These variables should not vary greatly and should not be lower than the previous year's metrics. The consolidated data from the managers go to the rectorate, which sends reports to the relevant ministry and, if necessary, requests financial assistance or requests to change the indicators. All this data allows managers at different levels to do their job more effectively. Unlike private companies operating in a "free market", the managers of Russian public universities can only partially change their indicators, and their performance is evaluated by the government, not by the "invisible hand of the market".

The perception of the need to work according to KPIs also influenced the work of academics in public universities. Several respondents indicated that they did not have rigorous KPI systems, for example, accounting for working hours during the COVID-19 pandemic when most staff worked from home. That said, most professors and lecturers interviewed stated that there were some performance indicators for them. First of all, university management is interested in high publication activity, so all respondents reported that it is important for teachers to publish a certain number of scientific articles in a certain list of scientific journals. Some university staff indicate that this is the only quantitative indicator they have in addition to the total number of teaching hours. Several academics spoke of more serious control by university management. For example, a lecturer at a Moscow university, in addition to publications, indicated as measurable indicators publications in Russian and international journals (SCOPUS), participation in research projects, fundraising, participation as jury members in scientific Olympiads. Teachers can choose metrics at their discretion depending on their profile and wishes.

The university management strengthens control over the work of academics through several mechanisms. First, KPIs are explicitly spelt out in the employment contract, the validity of which depends on the specific unit. One of the employees of a regional university pointed out that the dean of their department had set a rule that the employment contract was to be renewed every year: "every year you understand that in order to renew the contract, they must fulfil the KPI". An academic from a Moscow university adds that in addition to "fixed-term contracts" based on KPIs, there is feedback from students (a similar system was described above, in the part about managers). Students evaluate the teacher's performance at the end of the course. This evaluation does not affect the bonus, but it can be taken into account when deciding whether to renew the teacher's contract. If the teacher scores too low, the termination of the teacher's contract may be considered early.

University staff point to several problems with the key performance indicators for university management and employee evaluation. Firstly, staff at least two universities pointed out that the system is too rigid: performance indicators must be met, and so they are strictly mandatory performance parameters. Employees have no opportunity to influence the requirements and failure to meet them is tantamount to dismissal. Secondly, many teachers and staff who combine managerial and teaching positions do not understand how exactly the system of KPIs is formed, which of the indicators are more important and which are less important. The non-transparent system of rewards and punishments leads to the fact that people stop keeping track of their indicators and work as if KPIs do not exist at all.

Thirdly, some universities have only "penalties" for failing to meet standards, while there is no fully-fledged system of incentives or they are not commensurate with the work effort required to achieve them. A teacher at a regional university explains that the institution has established a special system of support and bonus payments to employees depending on their performance. For several years this system functioned "on paper only" and only recently have professors started to receive their first bonuses for meeting certain indicators. Often, professors see no incentive to meet additional KPIs because the rewards for meeting them are too low compared to the employee's salary. For example, one university gave a rise of less

than 2,500 roubles (about USD 35) for publishing an article in a first quartile scientific journal, while it takes 6-12 months of painstaking work to produce such an article.

Finally, some respondents pointed out that the constant tracking of indicators distorts the meaning and content of higher education. A manager of a Moscow higher education institution prefers to set only very general indicators and not to interfere in the work of his department, as he understands that "excessive control only slows down the work". A professor, dean of a faculty at a regional university, takes a similar stance: "The evaluation mechanism should help us make managerial decisions. <...> [The problem will arise] if we use a brilliant evaluation mechanism and received results based on which we still do not know what management decisions to make". The existing systems of evaluation of educational activity, setting KPIs for managers and teachers are not ideal. The respondents suggest using other ways of university management based on expert assessments and qualitative research.

Many employees of RAEP 5-100 universities do not use or have stopped using quantitative indicators in their work. As noted earlier, the structure of any university is very diverse, so it is difficult to apply uniform KPIs for all departments. Often KPIs are reduced to either only punishments or optional rewards on a non-transparent basis. The head of one of the departments at a regional university describes his attitude to the indicators as "rather negative". According to him, indicators are always easy to calculate, tabulate data and send to higher management, but they often do more harm than good:

Our teachers manage to adapt to all quantitative indicators in such a way that it becomes a kind of destructive factor instead of an incentive. That is why there was a period when we all had KPIs — in terms of the number of developed manuals, publications, projects... This caused enormous distortions in activity: teachers stopped thinking at all about what they were teaching in class, they started participating in all conferences, improving their qualifications wherever they could. (Regional university employee)

KPIs as part of marketing processes are an integral part of the work of the RAEP 5-100 Russian public universities. KPIs are used both to monitor the performance of universities in general and to manage academics and managers. The Russian government strictly controls both the financing of universities and the spending of funds. Universities are encouraged to seek extrabudgetary funding, thereby setting new performance indicators for them. Among employees, managers have been the most affected by KPIs, who find themselves primarily responsible for fulfilling the government's instructions. Teachers mostly have only one KPI related to the number of publications in scientific journals: depending on the university, this can be an option or an obligation. However, all university staff agreed that KPIs are more of a hindrance than a help in their work. KPIs are often not clearly defined, offer only penalties or optional rewards, the remuneration does not meet expectations, and the data themselves do not always allow for changes in the university's management elements.

6.4. Students as Clients

Marketisation affects the perception of students on the part of university staff. The penetration of market principles is felt not only through new ways of managing public universities, but also through changing attitudes towards students. As indicated earlier, higher education in Russia is a service. Universities are beginning to position themselves as providers of educational services, and students are seen as customers and buyers. A change in student perception is also facilitated by the wide spread of paid educational services in state universities: whereas previously universities were 100% financed from the state budget, now educational institutions are forced to compete with each other for self-paying students. The attitudes of employees of Russian public universities of the 5-100 project towards students will be analysed further on.

All surveyed managers perceive students as customers, and seven people who combine academic and managerial positions agree with this statement. Only seven respondents categorically deny this naming of students, explaining their position by the fact that higher education either does not resemble a service or has such features that students cannot be called clients or customers. At the same time,

all of the employees who refused to recognise students as customers work at regional universities. Employees at Moscow universities always agree that students are more likely to be customers. The patterns described above require additional verification and research, as the current sample is not large enough to draw correct conclusions for individual categories of respondents. However, it is interesting to observe that such differentiation exists depending on the status and location of the institution.

Table 6-4. Perception of students as "clients/customers" by university staff

Position	Location of university, city	Students as clients. quotation
Manager	Moscow	Rather yes, but students are not clients in the literal sense of the word
Manager	Moscow	Of course, yes
Manager	Moscow	Yes
Academic	Moscow	Yes, they are customers
Combining Positions	Moscow	Yes. It seems to me that it is quite possible
Manager	Saint Petersburg	Yes, formally, students are clients, but with some features
Academic	Saint Petersburg	Yes, but it depends on the employee position
Combining Positions	Vladivostok	No, I hate to say "customer"
Combining Positions	Saint Petersburg	No, they are not customers
Academic	Novgorod	No, I do not consider the student to be a client.
Combining Positions	Saint Petersburg	No, because education is a different kind of service

University managers perceive students as customers. One respondent attributes this to the fact that the university has many educational programmes set up independently of the state's wishes. These are commercial programmes which are more student-oriented. Even summer schools and short courses are created depending on "what's trending right now". Paid educational programmes are created based on "our understanding of market needs, our own research and partly on some recommendations from the ministry", states the manager of a Moscow university. Another employee points out that his university is tightly integrated into the country's economic development: their graduates receive quality education and applied specialties. Most students find high-paying jobs in the IT sector or find employment in the nuclear industry. Therefore, most students come to study with very clear requests: "no one is ready to just throw away five years of their life". Finally, another

respondent states that he has always treated the student as a client "who is always right, but if he is wrong, then you need to hear him better".

At the same time, managers "perceptions of students as clients" had some reservations. In contrast to the example in the previous paragraph, the manager of another Moscow university points out that students are not clients "literally, but we have an orientation towards that... not like the client is always right, but at least the client should be satisfied". At this university, the staff try to be student-centred, trying to make the educational process enjoyable for the students, so that "they have fun, and they gain knowledge". The respondent emphasises that the university is client-oriented, but this is not stated explicitly: "no one at the university talks about services and clients". The opposite explanation is given by an employee of another university, who points out that in addition to the rigid admission process, his university has "a very high dropout rate in the junior years. Even the strongest people simply cannot cope with the difficult maths and physics". Thanks to this, graduates really know what they want and do not see study as a pastime. The specifics of higher education at his university are explained by another manager: some services are tangible and others are not. Higher education as an intangible service adds value:

There is a joke I love: higher education is like underwear—
the better and more expensive it is, the more confident you feel,
even though no one can see it.
(Russian university manager)

Some academics and staff who combine the position of teacher and manager also perceive students as customers with some reservations. Many respondents shared attitudes towards the student depending on the level at which the communication takes place. An academic at a Moscow university asked: "When I call applicants, how am I different from a sales manager? Probably nothing. Students are customers, if you think in terms of management, when university staff are engaged in marketing services and programme promotion". Teachers, on the other hand, perceive students differently. To some extent the client orientation remains, but "it is not the kind of market relationship where a student comes to an HEI, signs a contract and is now provided with a full range of spa treatments". Respondents point out that the lecturer is engaged in science, not only providing an

educational service, but also sharing his knowledge, and the student becomes part of the university community. The student in this case is not a client but a "junior partner".

Formally, students are clients because the federal law "On Education" states that education is a service. The respondent from the regional HEI emphasises that it is difficult to equate higher education with a service when it comes to the mission and values of the university. From a formal point of view, students can demand "the level of service and quality that they should receive if they are not satisfied with something". But in practice, the student should be willing to learn and not just act as an object of educational activity. The student should act as a partner for the teacher and go towards the intended goal together, this is "a kind of development". Another respondent positively assessed the change in students' perceptions in the context of client-centredness. Unlike the Soviet system, where the professor "was a certain king and god to whom students prayed", students now have the opportunity to ask questions, demand explanations and disagree with the teacher's opinion, if they do so in a sufficiently respectful and correct manner.

Only every third participant of the survey unambiguously said that they did not consider students to be customers. An employee of a regional higher education institution stresses that "this is definitely a different type of relationship". Although higher education can be called a service and some third-party academics are contracted to provide paid educational services, the learning process itself cannot be called a service, so students cannot be called clients either. Students are "people who came to learn, who want to realise something". A lecturer at another regional HEI sees the educational process as a "mentor-student" relationship (in rare cases a relationship of equals). He argues that this system has survived since Soviet times and is maintained through hierarchical relationships within faculties. Students can demand quality knowledge, but education still has an "educational component", so students cannot be seen as clients. Another reason not to see students as clients is given by a professor from another regional HEI. Even if higher education is seen as a service, the student must be prepared to receive this service, must adequately perceive his/her own capabilities and those of the HEI:

Education is not a massage, so you can't come here as a client to a massage therapist and relax! (Lecturer from a regional university)

Thus, marketisation has had an impact on the perception of students in public higher education institutions. Two thirds of the respondents confirmed that students can be called customers with some reservations. Depending on the HEI, the staff may work entirely in the interest of the student or take a more traditional position. The Russian "Law on Education" states that higher education is a service, so formally students can be considered clients. However, many educators emphasise that higher education has its own specifics, so students can be considered as buyers only at the stage of selecting an educational programme and as clients in the process of solving management tasks. In order for the educational process to work well, it requires active student participation, a desire to learn and to work in partnership with the teacher.

6.5. The Market

Employees of Russian state universities identify three main areas of direct influence of market processes on higher education: the labour market, the domestic higher education market, and the international higher education market. The interview questions were designed in such a way as to leave respondents as much freedom of expression as possible. Only if the respondent had independently outlined market influences the clarifying questions were asked in order to find out the necessary details. The division suggested earlier was created on the basis of respondents' actual responses, rather than being proposed to respondents as the only true classification. The impact of each of the three aspects of the market on the performance of the RAEP 5-100 universities will be investigated further.

6.5.1. Labour Market

A high percentage of graduates' employment has become one of the goals of Russian public universities. According to a professor at one of the regional universities, higher education is "a set of competencies that allows one to position oneself in the labour market". The manager of a Moscow university supports this

position: the university must match the labour market. According to the respondent, the labour market does not need specialities that are too narrow or too broad, so it is important "to find a balance between fundamental education and highly specialised skills". Some respondents point out that the departments they work in should "replenish regional labour markets with new specialists" and their graduates should "be part of the economic life of the region". An academic at a Moscow university believes that a university graduate does not necessarily have to work in his or her speciality, for example, one does not necessarily become an archivist after completing a programme in medieval literature. The university helps its students develop soft skills to prepare specialists in demand in the labour market.

In order to give their graduates an advantage in the labour market, universities co-operate with employers. One Moscow university has set up a special unit for that purpose, which monitors graduates' employment and helps them find a job in their speciality. The manager of another Moscow university stresses that employment efficiency affects the position of the university in international rankings, therefore universities should quickly react to what specialists are needed now and what specialists will be needed in five years. As one of the goals of HEIs, the lecturer who combines a managerial position points to active interaction with business and the state to receive feedback on how the labour market in Russia and abroad has changed. According to the respondent, universities should train specialists "who will be immediately in demand in the labour market" and help them with their employment. A regional university professor notes that their universities have good links with local employers, so their graduates always find jobs. An example of such successful co-operation is given by an employee of a Moscow-based university: training is organised in such a way that a term paper on the Chinese market could become a project brief for entrepreneurs wishing to work in the country in the future.

To actively develop in the labour market, public Russian universities use different strategies. New educational programmes are being created based on an understanding of the needs of the labour market and the universities' own research, and not only on the recommendations of the Ministry of Education. According to one academic at a regional university, competition between universities for graduate employment has increased, and universities themselves are being forced to

modernise their programmes. The head of a department at another regional university supports this view, adding that their region had several technical universities whose curricula were at one point "70% overlapping". Competition in the labour market has forced universities to revise their programmes, each of them choosing their own priority areas for development.

The impact of the labour market brings not only positive changes to HEIs, but also causes several problems, which can be divided into three groups. Firstly, the legacy of the USSR has a negative impact. According to the manager of a university in the capital, there has been a disproportion in Russia since Soviet times, when "everyone needs higher education" [The statistics show that the demand for higher education has only grown significantly since the beginning of 2000s, and in Soviet Russia and in the 1990s, studying at universities was not that popular (See Subsection 3.5.2)]. From the point of view of the country's economy as a whole, it is more advantageous to have a "class division" when only a part of the population receives higher education. This idea is supported by the manager of another university, pointing out that 60 years ago higher education was elite. Back then the labour market provided graduates with jobs. But now there are other players on the higher education market, too many students are enrolled in universities, so it is very difficult to employ a large number of graduates with higher education.

Mass tertiary education has become another problem for universities if they are seen as training grounds for the needs of the economy. A university manager points out that European countries are oriented towards the mass labour market. In Britain, there are still "broad, versatile majors" that are in demand because they train specialists capable of solving a wide range of problems; they do not have to provide narrow, specialised knowledge. According to the interlocutor, in the United States "very elite higher education, it is available to a very small percentage of the population", but this correlates with market needs, as

The market does not need 100 million managers, it only needs one million. In Russia, the demand for higher education is too high and unrelated to the real demands of the labour market. Mass higher education leads to too many students attending university, some of whom are not always willing to invest extra money and

time in short-term programmes. Although the university creates summer schools and short courses to help students find employment, there is very little demand for such programmes, A professor at a regional university describes his problem.

A third group of problems raised by respondents was the lag between educational qualifications and labour market requirements. A lecturer combining positions at a university in the capital city points out that even though their university is "considered one of the best", many specialities are not aligned with labour market needs. The academic at a Moscow university adds that the university often has problems with the positioning of programmes. Parents want to understand what their son or daughter will be working in. According to the interlocutor, the labour market has changed rapidly and it is likely that "graduates will no longer want to work in the field in which they studied". Thus, the labour market has pushed universities to restructure their curricula from single subjects and functions to a broad application of skills in different fields. To bridge this gap, universities are trying to anticipate the demand for graduates in different fields, creating new programmes as well as launching dual degree programmes that allow graduates to adapt more flexibly to the labour market.

"The labour market has no influence on higher education" was the thesis expressed by several respondents from different higher education institutions. According to one Moscow university manager, higher education is "a set of certain competencies in the professional field, but also general cultural and communication and social competences". In Russia, higher education has a different role, more connected with the formal aspect and social pressure. It is important to receive a higher education degree and it does not matter in what field of study the student will work in the future. In European countries the labour market, according to the interviewee, is much more linked to higher education:

Not everyone needs higher education, because there are a number of professions for which a college is sufficient. In the Russian labour market we have a huge need for labour, for simple blue-collar professions, and higher education is all based on economists,

lawyers and this type of profession that were fashionable at a certain time.

Another argument in favour of universities' independence from the labour market was the training of personnel for the needs of the state. One of the managers of a Moscow university explains that their university trains specialists "on order" from Rossotrudnichestvo. For some of the programmes it is impossible to come "from the free market". The situation is similar at other universities, especially in programmes related to the work of the Ministry of Defence. A professor at a regional university points out that the educational programme in which he specialises trains personnel for international organisations. As the university has a high quality of training, there is always a demand for specialists, and many graduates leave the region for the capital or take jobs abroad.

The labour market has become an important determinant of universities. Managers and academics consider the employment of graduates to be an important component of a university's work. Universities are setting up their own units to monitor the employment situation, establish links with employers and overcome problems related to the legacy of the Soviet past. Mass tertiary education and the lag between educational programmes and market demands is a concern for most respondents. Some employees of public higher education institutions believe that the labour market does not directly influence the work of higher education institutions as they train specialists "commissioned by the state" or for international organisations.

6.5.2. Russian HE Market

The Russian higher education market is heterogeneous. Respondents touched on several main themes affecting the development of public higher education in Russia. First, the specifics of the formation of market relations in the 1990s still influence the educational landscape in Russia. Secondly, the Russian government is "pushing" public universities to participate in market activities. Third, working in a market environment has advantages and disadvantages according to respondents. Finally, some respondents pointed to situations where the market has

little or no influence on the operation of public universities. Each of these features of the higher education market in Russia will be discussed in more detail below.

6.5.2.1. Towards the market

Russian public universities have little experience of operating in a market environment. According to a professor at one of the regional universities, state universities first encountered the market in practice in the 1990s, and before that "universities knew about the market only from textbooks". Higher education became known as a service and such changes were openly resisted by the academic community. This was primarily due to the fact that during the Soviet era, universities were perceived "as temples of knowledge rather than participants in market relations". Some academics still find it "offensive" to see higher education as a service.

State universities in Russia were not ready for the market, faced great financial difficulties, a lack of resources and got

A miserable model of the market position of universities, when, conditionally speaking, we started just to sell diplomas... (an employee of a regional university).

Respondents agree that there is no point in admitting a student to study just because he or she can pay tuition fees on his or her own. The negative consequences of the abrupt emergence of market relations in the 1990s remain to this day: there was a strong outflow of intellectual resources from higher education institutions. Higher education in Russia has "lost whole schools of science", particularly the social sciences, which lacked a rich Soviet heritage and found themselves without the necessary resources for development and access to information.

Over the past 20 years, higher education has become a product that is bought around the world. The manager of a Moscow university shares statistics about the higher education market in Russia and the world: more than five million international students study abroad every year, of which about 200,000 foreigners

study in Russia. The total annual income from higher education is about 100 billion dollars. Education is now directly related to the market and is perceived as a product. Higher education institutions participate in economic processes not only as suppliers of highly qualified personnel, but also create new technologies for industry and private companies.

6.5.2.2. "Nudges" of the Russian Government

The Russian government has played an important role in the emergence of a local higher education market. 36% of respondents explicitly indicated that the government "pushes" public universities to participate in market processes. According to a professor of a regional university, the government encourages universities to compete: "it is a good process, competition is an incentive to develop in the education market". The manager of a Moscow-based university points out that the government has pushed universities to compete in the education market and cites "key admission figures (KAF)" as an example. This is the number of budgetary places a university receives within the framework of the state assignment. The Ministry of Education proposes the cost of an educational programme for the coming year, and universities calculate how many people they can educate for that money. Based on the data received, the ministry determines the median value and distributes funding to universities in the capital and the regions. Another peculiarity of this system is that the government allocates funding based on data on future applicants rather than graduates, so it is profitable for universities to recruit many students, but universities are not interested in ensuring that all of them receive a higher education.

The government's RAEP 5-100 programme has greatly changed the educational landscape in Russia. Only 3% of the total number of Russian public universities received additional funding and became "essentially a calling card [of Russia] in world rankings" (a Moscow university manager). The problem with this top-down development is that western universities are living off R&D, the same manager continues,

while in our country "we are approaching it very slowly: universities are actively coming down from the top with the

initiative to commercialise technology". (Moscow university manager)

This is a complicated process for two main reasons: firstly, Russian universities "do not know how to sell technology to business", and secondly, Russian business has no commercial demand for technology: "the market is not ready, the economy has not matured evolutionarily".

"I would not reproach the authorities, because they kind of push and try to give some impulses and vectors in all directions", notes an academic from a regional university: "with one wing [the authorities] are trying to take off, and with the other [wing] they strengthen control and accountability". Respondents point out that, on the whole, the state has tried to develop and strengthen the education system and stimulate the development of universities. Problems arise when "they start to pass some specific instructions: 'Do it this way and that way'". It is clear that state bodies do not always know exactly what to do and how to do it. The figure of the university Vice-Chancellor, who may try to pursue an independent policy, is of great importance here. The manager of another Moscow university adds that there is no clear distinction between the market push by the government and the work of university management:

'If a Vice-Chancellor does not share the party [meaning the United Russia party — note by the researcher] and the Ministry [Ministry of Education of Russia] policies, then he is a bad Vice-Chancellor. Manager of one of Moscow's universities

The government encourages the entry of public universities into educational markets and competition but tries to maintain financial control over them. The manager of one university stresses that many European and American universities have more autonomy and financial independence in contrast to Russian educational institutions. Foreign universities can "work for themselves and decide which processes they will be involved in and which they will not". In Russia the work of state universities is more tightly controlled by controlling bodies. The Ministry of Education sets the rules of the game if universities demonstrate a certain autonomy. Same manager continued that "it is against the ministry's interests". According to

the manager of another university, "strict financial control over the market rules of the game is bad for achieving the right indicators, but the Ministry of Education as the customer is interested in control".

6.5.2.3. Market advantages

63% of respondents outlined the advantages of the educational market in their interviews. A professor at a regional university argues that "it would be good if universities stopped looking at their activities only through their own eyes and looked through the eyes of the market, future employers and the state as a whole". An academic from another regional university adds that universities now have special departments that sell higher education, dealing with marketing.

Market requirements have affected the number of faculties at different universities: some old faculties have closed, while new ones have started operating. Two Moscow universities reacted diametrically opposed to the emergence of the market in education, but in both cases university managers were positive about what was happening. In one of the technical universities, new faculties with humanities specialisations (e.g., the Faculty of International Relations and the Faculty of Economics) have appeared. According to the university manager, this has happened under the influence of the market. A specific feature of the faculties is that they are oriented towards the needs of the employer. For example, at the Economics Faculty they study not just economics, but "economic security", as it is in demand in the university's partner companies: "these are ready auditors, who go to work for Rosfinmonitoring [The Federal Financial Monitoring Service of the Russian Federation]".

The opposite is true at another Moscow technical university: under the influence of market factors, they have abandoned some of the "non-core" departments created in the 1990s and focused on research areas that better relate to their core business. Such changes, according to the manager of this university, help them to progress better in the rankings and allow them to grow in the right direction. Rankings are imperfect, but they help to understand where the university has gone, to adjust educational programmes, to understand how to respond to what

is happening in the higher education market: "I see great potential in this, an excellent resource" (a professor at a regional university).

Market conditions force universities to adapt their educational products to the needs of external audiences, to take into account the demands of applicants, their parents and private companies. Students have different requirements to which universities respond in their own way. Firstly, the choice of students has influenced by the brand of the university. A professor combining management positions from St. Petersburg states that undergraduate students choose universities depending on wheter there is an "international faculty". During the COVID-19 pandemic, it has even become a little easier to work, as it is possible to lecture with renowned academics online.

This keeps the university competitive: "Student enrolment and quality is increasing every year. Students say our university is a very high-profile name!"

A professor combining management positions from St. Petersburg

Secondly, applicants want to know in advance about career opportunities and their future salary. An academic at a Moscow university tells us that new applicants assess their time at university from a market perspective, find out what added value there is in a special course in terms of future employment:

There is no sitting in classes now "out of respect for the professor", [when I was a student], we had a different attitude to it.

An academic at a Moscow university

Thirdly, students pay attention to rankings. An employee of a regional university emphasises that if applicants want a ranked education at a ranked university, they choose that university. If the rating is not so important for a person, he/she may prefer open education online platforms. Fourthly, universities respond to specific requests from students and create paid short-term programmes. The same employee of a regional university states that "we had a request to listen to our dean's lectures. The university has created a fee-based educational programme.

Similar programmes are being created to meet other applicants demands". A professor at another regional university supports this idea:

There is a market [for higher education], and we have to respond to the needs of students and their parents, to give such competencies and skills that graduates will immediately find high-paying jobs. The respondent adds that it is necessary to maintain a balance between practical and fundamental knowledge, shape the labour market and create applications for future specialists for our economy. Professor at a regional university

University staff often refer to their educational programmes as "commodities". An academic from a Moscow-based university points out that international accreditation of programmes is an important tool to promote the university, and higher education itself "is in some sense an experimental commodity". Therefore, accreditation allows applicants to reduce uncertainty and be confident in their choice. The manager of a regional university believes that online education is "as new a product as some further education programmes in universities". According to the interlocutor, the university is creating not only educational programmes, but also student start-ups that enter the market and already produce new products for different audiences themselves.

According to the Moscow university manager, "as soon as society begins to develop, a vicious circle emerges': Businesses try to apply science in their work and turn to universities for technology. Universities receive orders for developments, attract PhD and master's students, sell their research, and as a result university live off R&D. This idea is complemented by an employee of a regional university, who believes that

Universities should enter the market of these new companies and together with them create those products that will be useful to both existing and new audiences.

Employee of a regional university

6.5.2.4. Market disadvantages

The higher education market leads to certain challenges for Russian public universities. Respondents identify several key themes related to the imbalance in fee-based education programmes, the changing content of higher education and the role of universities, the need to find funding, the slow response to market changes, and others. National specifics of different countries, lack of experience in the educational market and insufficient governmental support are also factors hindering the development of Russian public universities.

"Higher education shouldn't just be a commodity", argues one academic at a regional university, who believes that initially his university "had people who wanted to do science or teaching", but under the influence of the market there has been a change among both teachers and students. The Moscow university manager points out that, on the one hand, paid education programmes enable more people to receive higher education, but on the other hand "mass replication of programmes for all leads to a strong loss of quality". A regional university professor believes that the market has influenced higher education along with new technologies. Society's attitude towards education has changed: now "not only the professor but many other sources have become the bearers of knowledge". Trying to work under market conditions leads to a loss of the former attitude, so it is worth returning "to its deep traditions, because back then education was valued".

To operate in a market environment, state universities lack funding and discretion. According to the manager of a Moscow university, efficient development of a university requires a client-oriented business model. To succeed, the university needs funding, which currently comes from three sources: the Ministry of Education, tuition fees and R&D. Another problem is the strict financial control and restrictions by the government, which were described in more detail in the previous Section 6.5.2.2. According to a regional HEI official, university departments that "engage with the market and run marketing campaigns, sales and student recruitment should be freer: 'You can't manage it under a stick, you can't receive anything".

Students' attitudes to quality education have changed because of the influence of market processes. "We are operating in a half-market model", continues

a professor at a regional higher education institution. Every new self-paying student is still seen as an additional source of funding. Therefore, universities are forced to be less demanding in checking the quality of teaching and students "knowledge, which is one of their important sources of income". In some HEIs, self-paying students turn out to be less demanding of the quality of education. According to a professor at a regional university, this situation arises primarily at the undergraduate level because their parents pay for their children's education. In contrast, an academic at a university in the capital believes that students have become more demanding of the quality of higher education regardless of whether they are sponsored by the state or pay tuition fees themselves.

Marketisation affects the principles of university management. The head of department at one regional HEI points out that operating in a market environment requires branding and marketing, as a result you "identify key areas based on some analysis and other areas become ancillary". Some universities have problems implementing change because there is "a very academic environment and there are people who strongly disagree with it". According to the respondent, the rigid management required to succeed in the market realities contradicts the corporate culture of the university:

If you play by the strict rules that are quite clearly formulated in the 5-100 Programme, it is quite difficult to achieve the results that the university declares softly, correctly and amicably. A university respondent

The manager of a Moscow university supports this idea, arguing that Russia has "a more conservative system", universities cannot keep up with the demands of the market and produce specialists the market does not need right now. The gap between the needs of the market and the education system has a negative impact on the development of public universities.

6.5.2.5. The Market does not matter

54% of respondents point out that despite the need to operate in a market environment, the market has little influence on Russian public universities.

According to the manager of one Moscow university, government incentives through the RAEP 5-100 programme are just "another academic leadership programme, they are breaking out all over the world". Governments around the world realise that regardless of the type of economy "it is a mixed capitalist-Marxist system as in China, pure capitalism as in the USA and obscure capitalism in Russia", universities need support everywhere. In Russia, according to the respondent, these changes are happening too slowly, meaning that "we are still in its infancy, we need another 20-30 years".

Market relations have little influence on higher education in Russia, believes one regional university manager, "and this influence should be very strong, because the competition [between providers of educational services] is now disastrous". An academic at a Moscow university stresses that education is a market of services, but his university uses market mechanisms rather for management: "It is not a market relationship when a student comes to a university and receives a full range of sanatorium procedures". A professor at another regional university adds that they are willing to promote an educational product "which we are really sure of, unfortunately, there is no such product yet". Moreover, even working in the educational market, according to the respondent, the university should maintain a certain attitude towards education, develop thinking:

You need to loosen up the brain, form neural connections in the head, because it is not the profession that should become the goal of higher education, at least at the undergraduate level. A professor of a regional university

Market mechanisms do not affect tuition fees. A manager of a Moscow university points out that "in the West you understand what kind of university it is and what you are paying for, the cost of an educational loan includes man-hours of teachers, administrative staff, marketing, etc". In Russia, calculating the cost of education is different. The Ministry of Education approves "educational standards" preserved from Soviet times. Many programmes are unified, but this has "nothing to do with the market or the unification of programmes because of the market". The respondent cites the example of Germany, where higher education in state universities is also paid for by the state, but where the government checks the quality

of programmes but does not influence the content of education. German universities "can choose" who, how and what is taught, what is included in the curriculum.

Russia's state universities primarily fulfil the government's tasks of "educating the population", believes the manager of a Moscow university. Foreign private universities have a very applied science. In the US, the education system is a "business that eats money from people who pay for education, and their second story is applied science". An academic from a regional university adds that competition between universities exists but has little impact on the number of students wishing to enrol at his university: every year there are many applicants, and these numbers are only increasing. The limited influence of the market is also acknowledged by the manager of another Moscow university, who combines a lecturing position:

The market influences us only in the sense that we are offered research topics by the authorities or partners.

In this way, the state remains the main source of funding, the customer and the controlling body for universities. Universities are forced to operate under market conditions primarily because these are the requirements of the state. Under current conditions, state universities do not have the necessary autonomy to operate in an open educational market. Despite the fact that since the first market mechanisms appeared in the segment of Russian higher education, many university employees believe that universities do not have enough experience to operate under market conditions, and state support does not allow them to fully compete with major foreign universities on the international market.

6.5.3. International Education Market

Marketisation complements and accelerates internationalisation processes in Russian public universities. The need to be present in the international education market has been shaped by a number of factors, such as the push by the Russian government, increased prestige from attracting international students, and "soft power" to address political issues. To achieve their goals, universities set up special departments, rebrand themselves, organise summer schools and participate in

international events. The staff of RAEP 5-100 universities single out low funding compared to competing foreign universities, a lack of experience of operating in a market environment and inefficiency of simply copying foreign operating mechanisms as the main problems accompanying international market operations. These factors will be explored in more detail below.

The international higher education market has changed and has become increasingly important among the development priorities of Russian public universities. According to the manager of a Moscow university, over the past 20 years, higher education has "become a product and commercialised". Foreign consumers actively "buy" higher education: there are more than five million international students studying around the world. The higher education system itself is a product and creates new products, technologies, and developments for private companies. National specifics affect the plans Russian universities to operate in a market environment. According to the respondent,

Russia has developed a more conservative system because
Russia "has not long started to live by market laws on a global
scale". Tuition fees at some Russian universities are comparable
to their main competitors in the US, Japan, China, Korea. We are
on the level, we are competitive.
(manager of a Moscow university).

There are three main reasons for entering foreign markets. First, the Russian government encourages universities to start operating in a market environment. According to the head of a department at one of the regional universities: "The ministerial leadership understood that it was necessary to bring the existing developments in higher education to the international education market, and the university has certain potential". The prospect of being left without state funding if the university refused to participate in the new state programme forced the university to initiate changes. The respondent notes that

Our university, being conservative in nature before the change in conditions, would have been closed from the market to the last if there had been such an opportunity.

Secondly, working in the international education market is perceived as part of a "soft power" foreign policy. One university interlocutor mentions a government project, "Export of Education", which was implemented with the support of the government and a major state corporation. One of the aims of the project is to promote this corporation in foreign markets: "The political reason for funding by state corporations is soft power. The state has positioned Russian technology so that it is in the minds of our former allies during the Soviet Union, to strengthen the position of Russian technology in that market rather than American or Chinese. The reasons for engaging in such work are political rather than financial".

A third reason for entering the international higher education market is a desire on the part of university authorities to raise the prestige of their institutions. An academic at a Moscow university explains how the idea of obtaining international accreditation for one of the educational programmes came about:

The administration has an idea of the importance of international promotion. It is a bidirectional process. On the one hand, we have very active teachers and administrators at a relatively grassroots level who are always trying to promote the programme in some way. At some point these two directions collide, and certain conditions are created from above for the next ideas to emerge.

Similar reasons can explain the desire of Russian public universities to attract international students (this process was described in more detail in the Section 6.2.5). Universities are interested in foreigners for the sake of "raising their prestige, entering new markets" — concludes an academic from one of the capital's universities.

To work in the international market, Russian public universities are developing several areas. Firstly, universities are creating special units and departments. For example, the manager of one Moscow university points out that the PR department "spends more time analysing which markets we should send our advertising to". The PR department determines, for example, which international study abroad portals to post to receive more applications from international students. Secondly, universities spend resources on branding. According to an

employee of one regional university, participation in the RAEP 5-100 programme has forced the university to revise its communication processes and create a university brand in order to "actively communicate on the international stage, to position selected subject areas in the external environment". The manager of another regional HEI believes that branding helps to establish contacts with partner organisations and promote its position in the international higher education market:

We used to play in a weak position, but now <...> we have our own opinion, we have an understanding of how we develop and why we do it.

Thirdly, universities organise various events and themselves participate in international round tables and exhibitions. An employee who combines a managerial and teaching position in one of the Moscow universities states that he has started to communicate more with foreign partners and participate in various events and fairs that take place all over the world. The need to position the university on the international market pushes the staff to communicate more closely with trade missions of different countries and to work with regional authorities. Universities hold more guest lectures, organise online learning with international students, hold webinars and record commercials for foreign audiences. Teachers participate in round tables with foreign partner universities.

Fourthly, universities organise international summer schools and short programmes for international students. An academic from a Moscow university gives an example of bringing a summer school to the international market and describes the difficulties in promoting it. To explain to the international students that this summer school is a good, high-quality project is difficult, when in the UK "there is a school that has been there for 100 years, and everybody wants to go there". There are similar summer schools in continental Europe, and it is easier to attract foreigners there because there are no difficulties with visas [residents of most European countries need a visa to come to Russia. — researcher's note]. The university took over the organisation of visas for the school's students:

We had to convince people that it was not difficult. It was a big job, which lasted quite a long time, especially in the first year.

Russia's state universities actively compete with foreign universities but face a number of problems. According to respondents, there are three main reasons for the difficulties in operating in the international market. First, foreign private universities have more autonomy and greater financial opportunities. According to the manager of a Moscow university, "American universities have their own budgets, they work for themselves. It is clear that they are free to make their own decisions about the path of their development, about which processes they will be involved in and which they will not". The manager of a regional university stresses that American universities have incomparably large budgets, but Russian universities spend their funds more efficiently.

The manager of another Moscow university adds that compared with even some Asian universities, the budgets of Russian public universities are too small. As an example, he cites the Harbin Polytechnic University in China, with whose staff he recently spoke. Three offshore technology parks have been built for this university, and its funding reaches 25 per cent of China's entire science budget:

If you convert that at the exchange rate of how many yuan to the rouble, I am even embarrassed to say how much money it turns out to be. No other university in the Russian Federation (neither my university, nor the other universities in the RAEP 5-100) or anyone else can compare with them in terms of the amount of this money, the number of laboratories and the opportunities they can afford.

It is also difficult to compete with foreign universities because the principles of financing universities are different. The manager of a Moscow university explains that at a certain technological stage in the development of society, business tries to apply science to develop its technologies. To do this, private companies turn to universities abroad. The universities, in order to fulfil the order, attract graduate and post-graduate students, conduct scientific and applied research, the results of which are then sold. Then the university is involved in this process at different levels, and the university itself lives on the money received from R&D.

In Russia, public universities exist mainly due to state funding. Therefore, Russian universities have more easily survived the consequences of the Covid-19

pandemic. American universities lost a significant source of income after restrictions were imposed on international students. According to a manager of one of studying universities, Russian HEIs do not have enough potential to attract contract students and to fully compete on the open market with foreign universities. The local population is quite poor: they have no money for contractual, quality education. It is more difficult for universities to develop science when there are no sources of additional funding and "there is no possibility to buy new machinery and equipment".

Secondly, the Russian higher education system is more traditional, and state universities have little experience of working in a market environment. University education is regulated, among other things, through a federal standard in which everything is regulated, "it is too voluminous, too big" (manager of a Moscow university). According to the manager of university in Moscow,

In the West, capitalist society has advanced a lot: there, everyone understands which components make up their tuition fees. Making the same distinction in Russian state universities is very difficult and it is not clear what to pay for.

Thirdly, simply borrowing from the experience of other universities does not work in a market environment. The manager of one of the universities explains that "you cannot just copy names". Many state universities now use "buzzwords: entrepreneurial paradigm, research university, etc". If you start calling yourself a "research university", the university will not change overnight. American and Chinese universities are entrepreneurial because they know how to capitalise on their solutions, know how to respond quickly to the needs of students and employers, take "old products" off the market and create new ones, while Russian universities "just like such titles, according to which we are now an entrepreneurial university".

Endowment funds are another example of unworkable copying tools of additional funding for universities. The management of our universities looks at Harvard's endowment fund and thinks "why don't we create such a fund" (Moscow university manager). MIT has a "laboratory or centre of excellence, why don't we do that". The university manager claims that Russian universities "completely fail to

understand" the mechanisms for which such structures are created and simply copy the names. In American universities the system of fraternities (sororities, etc.) exists as an element of culture, "a person from his student years is brought up in a certain system, and then, without losing touch with his alma mater, he reaches certain heights and is ready to help his university financially".

6.6. Chapter Summary

The interviews with the staff allowed the researcher to formulate more precisely the main forms of marketisation of Russian public universities (Research question No. 1) and to identify those that have had the greatest impact on the HEIs. Secondly, the interviews revealed how universities have responded to marketisation processes (Research Question No. 2). Respondents explained their vision of what documents and policies have emerged in universities as a result of marketisation. Third, the interviews revealed the impact of marketisation processes on the work and outlook of academics and managers at Russian public universities (Research Question No. 3). Not all the areas of marketisation described in the research literature and mentioned in the roadmaps of universities had the same impact on the work of university staff.

Interviews with employees of Russian public universities allow conclusions to be drawn about the impact of marketisation processes on the system of higher education in Russia. During the Soviet era, state universities were thoroughly integrated with the planned economy and tightly controlled by the state. In the crisis years of the 1990s, the state could not afford to fully provide the necessary funding for higher education and market mechanisms were introduced to provide universities with new sources of funding. New fields of study appeared, opportunities for the international market opened up, universities were able to attract self-paying students and work more actively on the educational market. On the other hand, the state continued to play an important role in the life of public universities and retained control over higher education.

The market has also influenced the perception of higher education among university employees. The practical and applied aspects of higher education have become more important. Public universities are deeply integrated into the market

economy and interact closely with other economic actors. The process of such restructuring is rather slow and HEIs change curricula and management methods belatedly and do not always have the full range of competences to work with the requirements of the labour market. The orientation of universities towards the applicability of graduates "knowledge to real sectors of the economy is positively assessed by university staff". Higher education in Russia is gradually being commercialised.

The applied nature of education and orientation towards the market economy have significantly influenced the perception of higher education objectives among university staff. University managers have been the most affected by marketisation processes: they treat universities as private companies, operate freely in market terms, set achievable goals and work according to KPIs. Metropolitan and regional universities have different perceptions of their tasks in the context of market relations. While Moscow universities are more oriented towards international markets and Russia as a whole, regional universities see their goal as solving economic problems at the local level and training specialists for the regional labour market. An absolute majority of respondents (82%) believe that university goals should correlate with personal development and meeting students' needs. Only two respondents outlined "classical goals" of higher education institutions: research and development. The role of universities has changed: universities help students find jobs, monitor rankings and focus on market interaction with the economy.

One significant manifestation of marketisation can be seen in ranking tables. The RAEP 5-100 programme was created by the Russian government to help at least five Russian universities to receive into the top 100 world rankings. Although the official goal of the government support programme was only partially achieved, all of the universities studied were affected by the "race to the top". In contrast to the foreign studies described in the literature review, according to respondents the rankings have not had a significant impact on the research directions of universities. This is due to insufficient funding, rather broad requirements of rankings and less than ideal ways of managing HEIs.

Employees of universities point out advantages and disadvantages of international rankings. On the one hand, high positions in league tables allow attracting international students, increasing requirements for applicants and

concluding contracts with leading foreign universities. On the other hand, there is a danger of demonstrating pseudo results and instead of real research and gaining true superiority, start inventing ways to bypass these rules of the game. Achievement of planned indicators is demanding, some indicators are biased, the ranking providers can be biased, and data inflation levels out the previously achieved indicators. Substantial government pressure and objective difficulties in promoting their positions, create additional pressure on both academics and managers, forcing them to seek workarounds to realise their goals. Universities are forced to fight for positions in the rankings, they cannot change the situation, abandon this race or influence the government's demands, so universities are looking for new sources of funding to achieve their goals.

Marketisation processes have affected the structure of funding for public universities in Russia. On the one hand, despite the fact that state funding still dominates the structure of university revenues, direct transfers from the Ministry of Education now account for only about half of all revenues of state universities. Universities actively use various sources of financing: they co-operate with corporations, conduct R&D, attract international students and launch new educational programmes. The principles of public funding have changed: increasingly, public universities compete with each other and participate in grant competitions.

KPI-based management has become the new norm for public universities in Russia. The government sets performance indicators for universities, on the achievement of which additional funding depends. The rectorate sets KPIs for departments and affiliated institutes, encourages divisions to attract more self-paying students and raises admission requirements. University departments set KPIs for employees in order to calculate bonuses and fringe benefits. Extrabudgetary funding gives the university more flexibility and the ability to spend money as it sees fit without the approval of the Ministry of Education.

On the other hand, the impact of marketisation on university funding cannot be called comprehensive. In most universities, tuition fees from students do not play a significant role in the university's revenue structure. The staff are not interested in increasing the number of self-paying students. Universities do this for the sake of complying with government requirements and to diversify the student environment,

and only lastly as a source of additional income. Often the cost of the office to deal with self-paying international students exceeds the income from their tuition fees. State universities are unable to set high tuition fees due to the low income level of Russians, tight control by the government and competition with foreign universities.

Market methods of financing often turn out to be just a new form of receiving monetary aid from the state. Competitive procedures are used to obtain resources from state funds, and many of the partner corporations are wholly or partially owned by the Russian government. The management system within universities is often tightly centralised, only now elements borrowed from business (profit margins, KPI management, etc.) are used for greater control. The state has retained its dominant position in Russian higher education and many market technologies have been significantly transformed in this environment. But all these processes have changed the principles and structure of HEI financing.

KPIs have become another prominent area for marketing Russian public universities. KPIs are used to control universities as a whole, individual departments and even the work of managers and academics. The state primarily controls universities' revenues and expenditures, encourages universities to seek extrabudgetary funding, and sets new performance indicators for this purpose. Managers are more likely to work using KPIs (including those set by the government) for other HEI employees. Academics are less exposed to results-based management, but many HEIs have requirements on the annual number of publications in scientific journals. Depending on the university, such metrics may be optional or mandatory. Nevertheless, respondents state that the metrics help rather than hinder their work. Some KPIs are poorly structured, do not include guarantees of bonuses or, on the contrary, set only penalties for failure to meet targets. The use of KPIs often becomes redundant because once all the metrics are collected, HEIs cannot change HEI management or government requirements.

Another example of the manifestation of marketisation was the change in the perception of students among university staff. Most respondents view students as customers with some reservations. At the stage of attracting students, the university also acts as a private company that wants to sell its goods, so students can be considered as customers. The Russian "Law on Education" states that higher education is a "service". Therefore, many managers and academics emphasise that,

from a formal point of view, students can be called clients. The peculiarity of the situation is that the student has to be actively involved in the educational process. To graduate successfully, according to respondents, students must want to learn and act in partnership with the teacher.

Russian public universities are directly influenced by the market in many of its manifestations. The labour market has become an important determinant of public universities. Academics and managers assess graduate employability rates as an important part of universities' work. Institutions are setting up departments to liaise with employers, monitor the employability of graduates and overcome problems of the Soviet past. Many respondents express concern that educational programmes are lagging behind labour market demands and that mass education has fallen to produce first-class graduates. The impact of the labour market is not comprehensive, as in some cases universities educate students "on behalf of the state" or for jobs in international companies, where there is always a demand for such graduates.

The higher education market in Russia has its own peculiarities associated with the specifics of the change from a planned economy to a market economy and the restructuring of the management system in the field of higher education. One of the important factors influencing the decision of universities to integrate into the market economy remains the requirements of the Russian government. In order to receive state funding, universities are forced to participate in international rankings, introduce fee-based programmes, interact with private businesses, and attract international students. Only a small proportion of respondents indicated that the market has almost no direct impact on their work. Most managers and professors believe that operating in a market environment gives universities more opportunities and freedom to choose their funding sources and research areas. On the other hand, state universities lack experience and are constrained by governmental requirements and internal problems of the Russian market. Universities are forced to compete with major international players, whose budgets significantly exceed the financial capabilities of Russian universities. Thus, marketisation processes have a significant impact on the development of Russian public universities.

7. Conclusion

7.1. Introduction

This thesis contains several contributions to the literature concerning the analysis of the impact of marketisation processes on Russian public universities. First, this study represents the first generalised analysis of the changes in Russian higher education over the last 30 years in the context of the marketisation of the public sphere. It demonstrates how the emergence of market mechanisms has contributed to structural changes in the work of universities. By the example of the analysis of public universities of the RAEP 5-100 project, it was revealed that the leading universities created special units (departments and divisions) to work in a market environment (for attracting international students, marketing departments, etc.) and adjusted their educational programmes to meet the demand from future applicants. Secondly, significant new evidence was presented on the strong influence of the state on the marketing processes of HEIs. The Russian government initiated market reforms and transformations and pushed universities towards market competition at different levels. Russian authorities have created "rules of the game" that oblige public universities to compete with each other for financial and other resources, as well as to promote their positions in the international higher education market. Third, this thesis demonstrates that the government's neo-liberal reforms based on the new public management theory have not promoted autonomy and the emergence of a real market for higher education. Universities have maintained and reinforced their dependence on the decisions of the authorities and on public funding, and their participation in the market remains only to the extent necessary to obtain subsidies from the state.

The final part aims at reviewing the key findings of this study to answer the key research questions and discuss them in terms of neoliberal theory and new public management. First, the marketisation processes preconditions in Russia after the collapse of the USSR will be discussed. Second, the specifics of reforms in the 1990s and their impact on Russian public universities will be reviewed. Third, the leading role of the Russian government in the process of introducing market mechanisms at various levels of government will be demonstrated. Fourthly, conclusions will be summarised on one of the key findings of this study: how

universities demonstrate high levels of marketisation to meet government requirements and obtain funding. Fifthly, the findings on the impact of marketisation processes on university staff will be explored (based on interviews with managers and academics of RAEP 5-100 universities). Finally, assumptions will be made about the directions of future theoretical research based on the identified patterns.

7.2. Marketisation Influence on the Directions of Russian Universities' Development

In Chapter 3 (Russian case study), a periodisation of the impact of marketisation processes on Russian higher education reforms was developed. The hybrid nature of the Russian welfare regime has found its reflection in higher education (Gel'man, 2016; Shibanova et al., 2021). Russia has developed a unique combination of the Soviet legacy (accessibility of higher education, state funding, state orientation, high centralisation, etc.) and neoliberal ideas (higher education as a private good, introduction of tuition fees, decentralisation, etc.). The leading role of the state in modernisation of public institutions is reflected in top-down marketisation.

The prerequisites for market reforms and the two main stages of market transformation that have had the most significant impact on the directions of Russian public universities' development will be discussed below. The Soviet system of higher education was non-market, but some of its features significantly influenced the reforms of higher education in Russia after the collapse of the USSR. This study has identified the features of Soviet universities that facilitated and hindered the marketisation of higher education in Russia. Strong dependence on state funding, low autonomy of universities, poor development of socio-humanitarian disciplines, high ideologisation of the educational process, and unification of educational standards made it impossible to maintain the former system of higher education in the 1990s. On the other hand, deep integration of universities with industry, standardisation of educational programmes and the existence of "specialised universities" for economic sectors proved to be in demand during the period of market reforms.

Introduction of tuition fees was an important factor in marketisation of Russian public universities. The Russian government reformed all sectors of the planned economy and tried to make the transition to a "free market". The protracted economic crisis and the need to fulfil its social obligations (higher education in the USSR was completely free of charge for students) forced the state to offer universities new sources of extra-budgetary funding. As shown in Chapter 3, today about half of all students in Russia pay their own tuition fees, and tuition fees have become an additional source of income for public higher education institutions. At the same time, staff at public universities emphasise that fee-paying students are not the main source of income for universities, and in some cases universities are not interested in attracting such students at all (Sub-section 6.2.4).

Another important feature of marketisation that has emerged in Russian higher education has been the admission of private educational providers. Unlike other sectors of the economy, where privatisation of state enterprises has played a significant role, public universities have not been affected by this process. But the emergence of private universities, whose total number had reached several hundred by the end of the 1990s, had a significant impact on the work of state universities. Private educational institutions were better adapted to the market economy, offered more marketable courses in social sciences and humanities, and were more efficient in marketing and promotion. Public HEIs, traditionally stronger in STEM disciplines, had to start offering new educational programmes to attract more self-paying students. The need to compete with private higher education institutions forced public universities to start setting up dedicated marketing departments. Finally, the opportunity to choose not only the fields of study but also the content of educational programmes has contributed to a change in the perception of higher education in general. Instead of a "public good", university education became perceived as a "private good", necessary to achieve a better position in society and a higher salary in employment.

In the early stages of reforms, marketisation and widespread introduction of "free market" principles in public sphere management contributed to deideologisation of educational programmes, strengthened self-governance mechanisms in HEIs and decentralisation, changed perception of students' role not only as recipients of knowledge, but as subjects of educational process. The government sought to integrate the country into the international market, including in higher education. Advice and funding from international organisations such as the IMF and the World Bank were used to overcome the economic crisis. Programmes have been launched to improve efficiency, quality control and measurability of results, marketing and making higher education more accessible. Globalisation processes and more open borders have enabled Russian universities to establish links with foreign universities and to enter the international higher education market.

After the first few years of reform, the problems brought by marketisation in higher education became apparent. Russian public universities had no experience of operating in a free market environment, so their efficiency and responsiveness to the demands of society and government was low. State funding was significantly reduced, leading to a protracted crisis in higher education. The dual funding of educational programmes from the state and from tuition fees did not cover the needs of universities. Low compared to market salaries of university staff and open borders contributed to the mass outflow of personnel from universities and emigration of Russian scientists abroad. Decentralisation and greater autonomy collided with a lack of managerial skills and sufficient funding in state universities.

The new features of marketisation processes began to play a defining role in the development of Russian public universities after 2000. As shown in Chapter 2, marketisation in higher education is manifested not only through privatisation, the introduction of tuition fees or the emergence of a higher education market, but also through changes in university management mechanisms, both by the state and within educational organisations. The Russian government has managed to overcome the economic crisis and strengthen its position in the public sphere. The influence of international organisations has diminished, but universities have continued to integrate into the global knowledge economy. Accession to the Bologna Process was one example of this movement. The standardisation of educational programmes, characteristic of the Soviet educational system, became relevant again, but on different grounds.

The government used new market mechanisms for university management, which involved unifying the criteria for determining quality and the allocation of

funding for universities. The government retained state standards for higher education and periodically accredited universities and individual educational programmes. University admission was reformed and the Unified State Examination for school leavers was introduced. The government has encouraged the downsizing of private universities and reformed public universities by merging small universities into large educational centres, changing the status of some universities, and closing down inefficient and unclaimed educational institutions.

As a result of a series of market reforms over the last 30 years, Russian public universities have obtained new ways of financing, integrated into the international knowledge economy, and started to compete and with private providers of higher education. On the other hand, the assumption of a reduced role of the state due to neoliberal reforms, described in Chapter 2, has not been confirmed. The Russian government retained a monopoly of control over public universities, large-scale privatisation did not affect universities, and management methods borrowed from private companies were used to strengthen control over educational institutions. Marketisation has generally affected the perception of higher education in general and students, changing the direction of universities and the way universities are managed. Conclusions on how exactly Russian universities have responded to the processes of marketisation will be drawn next.

7.3. Responses of Russian Universities to Marketisation Processes

This study reveals for the first time the ways in which Russian public universities react to marketisation processes. Based on the analysis of official documents from leading universities in the RAEP 5-100 project, it demonstrates how universities respond to government requirements and the situation in the higher education market in general. Quantitative analysis of data from universities' websites allowed us to correct these perceptions and find out how universities present themselves to a wide audience.

It is possible to assess how Russian public universities have responded to marketing processes through several indicators. As we showed in Chapter 2, such indicators include not only new directions for universities and changes in the traditional functions of higher education, but also the use of market-related terminology. This study shows for the first time which of the markers of marketisation are applicable to Russian state universities and which do not have a significant impact on the sphere of public higher education in Russia. Most often, marketisation manifests itself through the emergence of private providers of higher education, tuition fees, dependence on rankings, privatisation, competition for resources, changing funding structures, efficiency and accountability, quality assessment and KPIs, internationalisation and English, commercialisation of university operations, and direct marketing (higher education market, HEI brands, etc.). The specifics of Russian public universities' response to each of these processes will be discussed below.

The emergence of private providers of higher education had a strong impact on the work of public universities in Russia during the first decade of reforms. Public universities were not prepared to operate in a market environment and could not meet the demand from prospective students. The emergence of private universities facilitated the creation of new educational programmes in public universities. A series of reforms in the last decade have contributed to a reduction in the number of private HEIs, which over the last 30 years have still not been able to compete substantially with public HEIs either in terms of research quality, student volume or positions in international rankings. Therefore, the influence of private providers was strong only in the early years of reform.

Tuition fees have had a significant impact on the operation of public universities. The dual funding of educational programmes by the students themselves and by the federal budget allowed the universities to overcome the economic crisis of the 1990s. These processes coincided with the massification of higher education, so the additional money was used by universities to offset the drop in revenues from the state and to launch new educational programmes. As shown in Chapter 3, in today's Russia about half of students at all public universities pay their own tuition fees. At the same time, the dependence of public universities on government decisions has not decreased. A series of interviews with university staff (Chapter 6) revealed that universities are not able to set tuition fees (the price depends on the student's cost to the federal budget). The state still regulates the number of "budget places" and only some fields of study are really profitable. Finally,

many universities do not consider tuition fees as an important source of income, as the share of income from this work in the total budget of universities is insignificant.

Russian public universities are trapped in international rankings at the initiative of the government. The government makes decisions on financing universities based on their positions in international rankings (the RAEP 5-100 programme is an example of such decisions). The objective of the RAEP 5-100 programme was to bring five Russian universities into the top 100 world rankings. To achieve this goal, the government allocated funding and organised additional support for the universities over several years. The universities developed a promotion strategy, a reorganisation plan, created roadmaps and approved performance indicators to meet the government's requirements. Thus, it was the government that pushed the universities to participate in the rankings. Based on the interview data (Chapter 6), it appears that the universities gained some market advantages from participating in this project (stronger brand, increased interest of local students), but the aim of the universities was not to be more successful in market activities, but to meet the government requirements to obtain additional funding. Instead of helping universities to operate in the international market, the government established rigid "rules of the game" and continued to control both the operation and funding of universities.

The government has initiated a change in the funding structure based on competition and results-based management. Public universities no longer receive funding from the government in a single tranche. The government now uses different channels to form the budgets of educational organisations. For example, through participation in the RAEP 5-100 programme, universities could receive an additional 15% of their annual budget, subject to meeting KPIs. To meet the targets, universities began to actively compete, for example, for school leavers with higher USE scores. This indicator is not only quoted among students but is also considered by the government when assessing the success of universities. Measurable KPIs allow the government to organise "management by results".

Project management and KPI management have two key problems. First, the correct indicators are not always used. For example, some HEIs use "number of international events" to evaluate international activities; what these events are, how

many participants they involve, and whether these conferences and workshops are needed by the HEI are not specified by the authors of the roadmaps. Second, based on the analysis of the interviews (Chapter 6), not all features of universities' work can be measured in quantitative indicators, and the "race for indicators" hinders the achievement of the true goals of higher education.

This study indicates that public universities are uniquely responsive to competition initiated by the Russian government. Unlike competition in the free market for private funding and solvent students, competition among public universities in the Russian higher education market appears to be artificial. Russian public universities are indeed interested in admitting more and more capable students, do work with private corporations and receive up to 50% of extrabudgetary funding. But a closer examination of these phenomena shows that universities are interested in attracting talented applicants in order to obtain additional funding from the government. Working with large private businesses often turns out to be only indirect co-operation with the government. As shown in Chapter 2, many Russian public universities had strong links with large businesses as far back as the Soviet period. After privatisation, many corporations became private, but the state retained a significant stake in them. Therefore, in most cases, large corporations are in fact state-owned companies that redistribute budgets for universities. Thus, universities are forced to compete for state funding, only on different platforms. Work on the free market is still often perceived by university staff as an optional, unimportant activity (see Chapter 6).

This study shows that leading Russian universities are responding in a peculiar way to the challenges of marketisation associated with working in the international higher education market and internationalisation. Universities are concluding agreements with foreign universities, promoting themselves at international exhibitions, and running advertising campaigns to attract foreign applicants. An analysis of the universities' roadmaps proves that the universities provide the government with a detailed plan for increasing the number of international students. The websites of the leading universities are also translated into English and describe the HEIs as excellent destinations for study, life, and leisure (see Chapter 5). At the same time, there is no correlation in the roadmaps

between the notion of "international student" and "tuition fees". Universities are not interested in recouping the costs of attracting and educating foreigners. Unlike universities in many countries, which form their budgets primarily at the expense of international students, Russian universities spend the federal budget for this purpose. In interviews, university employees admit that, on the one hand, the allocated funds are not enough to drastically increase the number of students; on the other hand, universities cannot raise the prices for international students, because then there would be no demand for these programmes. For example, an employee of a Moscow university states that the budget for the department for attracting international students in his university exceeds the income from tuition fees for foreigners. In this way, the university suffers a loss from the education of international students.

As a current academic discussion presented in Chapter 2 universities have adapted to the higher education market. To attract international students (as we found out earlier, primarily to comply with government requirements rather than as a main source of funding), Russian public universities are setting up marketing departments and running advertising campaigns. Universities work on branding, positioning and promotion, among other things, in order to build partnerships with foreign partners. Paid higher education programmes, paid summer schools and lifelong learning programmes contribute to the commercialisation of higher education in state universities. However, most public universities are working in this direction to meet government requirements rather than to ensure their financial independence in the local or international market.

Privatisation and deregulation have been the two forms of marketisation least seen in higher education in Russia. Despite extensive privatisation of state property in the 1990s, the Russian government retained control over most state universities. Moreover, management mechanisms borrowed from private companies have been used by the government to increase control over universities. In addition to state accreditation of higher education institutions, the standardisation of research has been reinforced. Unified educational standards were already in use in the USSR, and with the growing influence of rankings, teaching quality assessment and results-

based management, trends towards standardisation and unification have only intensified.

The study's unique contribution to understanding the marketisation processes of public universities is that universities have had to operate in a market environment to obtain funding from the government. Despite government efforts, universities have not seen the higher education market as a sustainable source of funding and a way of gaining independence. The introduction of market mechanisms took place to the extent that it was required to meet the KPIs set by the government. The country's authorities also used market techniques not to weaken, but to strengthen their control over the performance of HEIs. Standardisation, the introduction of various metrics and indicators, a ranking system and competition for budget funding increased pressure on public HEIs and their staff.

7.4. The Impact of Marketisation Processes on Academics and Managers of Universities

Marketisation processes have had a significant impact on the work of academics and managers at Russian public universities. To answer this question, a series of interviews were conducted with senior managers and academics of leading universities in the RAEP 5-100 project. The anonymised semi-structured interviews made it possible to obtain an invaluable array of information on the situation in Russian higher education and to correct some theoretical assumptions about the role of the market in the work of public universities. The broad geography of the universities represented, from Vladivostok to Moscow, and the diverse gender and age composition of the participants (deans, heads of departments, heads of departments, professors) allow for a more unbiased analysis of the impact of marketisation on the work of university employees.

Marketisation has affected the perception of higher education among university staff. Half of respondents claim that higher education prepares students for work in the real economy and helps them to succeed on the labour market (see Chapter 6). Successful employment of graduates is an indicator of the quality of public universities as set by the Russian government. This view is also shared by almost half of the respondents. Higher education has begun to be perceived as more

practice-oriented due to increased co-operation with big business and increased demand for applied programmes from applicants. Higher education is being commodified, an element of sales is being added, and this situation is of concern to respondents.

Marketisation processes affect the perception of students among university staff. As indicated in Chapter 3, higher education in Russia is legally a "service". Respondents are beginning to perceive universities as "service providers" and students as buyers and customers. This is facilitated not only by the commodification of public life (a topic for a separate study), but also by the widespread spread of fee-based educational services in public universities. Employees of universities create new educational applications according to the needs of the market. Two thirds of the respondents perceive students as customers and only one third believe that students are participants in the educational process. However, all respondents point out that higher education has its own specifics: the attitude towards the student changes depending on the situation, and the student should participate in the life of the university rather than passively receive "services" (Examples of the perceptions of students varied across respondents; see Table 6-4).

Employees perceive the purpose of universities in a new way. First, the traditional purpose of universities in the search for truth, research and teaching was outlined by only two respondents. The majority of responses boiled down to the formation of the country's future elite and the individual development of students. Orientation towards the needs of a planned economy was characteristic of Soviet educational institutions; in a market economy, the perception of higher education has retained its former orientation but has been given new reasons for this. Secondly, every three out of four respondents outlined their university's global ambitions. Orientation towards the international higher education market, work to attract international students, and promotion in league tables demonstrate the impact of marketisation processes on the staff of public universities.

The increased focus on league table positions from both the Russian government and university management has an impact on the work of managers and academic staff. First, each of the universities in the RAEP 5-100 project has

established a unit dedicated to promoting the university in global rankings. The professional activities of two the respondents were directly related to securing the required positions in the league tables. Secondly, the assumption that in a marketised system that only managers are involved in rankings was not confirmed. Only three respondents said that they were "far from rankings". The rest of the teachers and managers, even those not directly involved in the positioning of higher education institutions, showed an interest in the topic. Thirdly, contrary to the concerns described in the literature review, most Russian academics interviewed do not see a problem with rankings as these processes, in their words, "do not affect our work" (see Chapter 6). Teachers point out that there is no need to adjust research topics, and the topics of scientific journals are formulated quite broadly. High positions in rankings make it easier to establish partnerships with leading foreign HEIs. International accreditation of educational programmes also has a positive impact on both league table positions and the number of gifted applicants.

This thesis contributes significantly to the understanding of the problems that the need to participate in the race for rankings brings to HEI staff. Firstly, the leading rankings are compiled by private companies and are not always objective, but university staff must work to improve performance. Secondly, the positions in the rankings, according to respondents, can be "biased": employees of Russian universities have to work harder to achieve the same indicators. The third problem is that the cost of changing positions is too high; the staff of higher education institutions would prefer to redirect funding to other tasks. Some foreign universities "buy entire research teams" to achieve good positions in the rankings; this leads to an outflow of staff from Russian public universities. Finally, rankings have a negative impact on the team climate. Leading foreign universities spend decades to improve their positions in league tables, while Russian universities are highly dependent on government requirements and have to find ways to change their position in the rankings with insufficient funding and in a very short time frame. Other problems of the ranking system affecting the work of managers and academics include inflation of rankings (to achieve the same indicators, much more effort is needed than before), increasing inequality of universities (top universities received more support, better students and teachers), lack of understanding of how rankings work (not enough subject specialists for that), and reputation losses (instead of real changes show the indicators that the ranking company or government demands).

New funding principles based on market mechanisms have different effects on the work of HEI staff. Most respondents are not interested in increasing the number of self-paying students. Thanks to state funding, academics and managers are more interested in talented applicants. The high cost of tuition, the availability of discounts and scholarships, government restrictions and the lack of KPIs on tuition fees make the impact of this indicator of marketisation minimal. Universities are freer to manage the money generated from fee-based educational services. Teachers and managers can organise summer schools or short programmes, but the funds generated are, in the words of one respondent, "quite small". On the other hand, these revenues may be distributed among faculty members as bonuses or spent to pay for participation in research activities and business trips.

This study suggests that the performance of teachers and managers at Russian public universities has a weak correlation with the enrolment rates of international students. Although increased tuition fees for international students are seen in the literature as an important criterion of marketisation, these processes have their own specific features in Russia. Most university staff are interested in international students, but not for the purpose of additional income or bonuses, but to improve the position of their universities in international rankings, as well as to increase diversity among students and improve English language proficiency. International students often receive grants from the federal government and are also admitted to universities through Rossotrudnichestvo. Thus, it is not the international student himself/herself who pays for his/her studies. The number of international students from "near and far abroad" is an indicator of the quality of the university to receive federal funding. Moreover, the government in some cases considers the education of foreigners "as part of soft power". Therefore, the staff is interested in attracting foreigners but does not care about profits. Despite the government's efforts in pushing universities to operate in a market environment, it is the government that remains the main source of funding for universities. All this was done to encourage universities to learn to earn their own money from international students and to strengthen their position in the international higher education market. As has been shown in section 6.2.5, once state priorities change, public universities' interest in international students could quickly disappear.

Another factor of marketisation, which affects the work of university academics and managers in different ways, was the financial autonomy of university departments and divisions. Each university determines its own management structure. Some HEIs maintain a rigid hierarchy, while others introduce decentralisation to better adapt to market demands. The distribution of profits among the units also has no uniform patterns: in some HEIs the employees of more demanding faculties receive higher salaries, while in others the working conditions do not depend on the profit rate. But in any case, the more revenue sources an individual department has, the more opportunities such a department has to pay out allowances to employees and financial freedom in general. Such departments are subject to less stringent requirements in terms of the number of publications or events.

KPI management borrowed from private business has become the new norm in Russian public universities. University management has introduced various incentive systems for employee performance, which include both mandatory indicators and additional ones. A faculty manager may have a plan for admitting a certain number of local and international students. Depending on the position, the manager's performance may be assessed by the number of self-paying students, the number of students in an internship at a top company, the level of the average score of incoming students, etc. A typical example of a performance indicator for an academic would be the mandatory number of publications in top scientific journals. Seeking extra-budgetary funding is rarely a KPI for managers and teachers, only if their position does not directly involve such work. Research has shown that KPIs are often too rigid, it is difficult to influence their content, and non-compliance can lead to dismissal. Employees do not always understand which KPIs are more important and how the system of rewards for meeting them is structured. Sometimes university management only sets penalties and does not offer positive incentives. Eventually, the excessive focus on indicators "distorts the meaning of higher education" and slows down the work of higher education institutions, so some university staff have stopped using quantitative indicators in their work.

This study shows that marketisation processes differ significantly from country to country (see Chapter 2), and that marketisation in the post-Soviet space in particular in Russia takes place with its own unique characteristics. Some elements become more important than others depending on the historical context, government efforts, the economic situation in the country and other factors. In Russia, the emergence of HE markets was superimposed on the existing Soviet culture and certain institutional frameworks. Neoliberal reforms and the introduction of New Public Management contributed to the marketisation of higher education. The strong association of Soviet state universities with the planned economy has been transformed. Universities in modern Russia did not become more independent after the collapse of the USSR but integrated into the higher education market and began to produce graduates for the labour market.

Nowadays Russian law defines education as a "service", implemented not only for the "public good" but also for the interests of the individual ("private good"). The privatisation of state universities did not take place, but the principles of their funding were changed. Tuition fees introduction and co-operation with private companies allowed universities to gain more independence, while at the same time the government pushed public universities to compete with each other for federal funding and to operate on international markets. NPM principles were used both at the level of relations between the state and universities and for the internal management of universities. The role of managers and vice-chancellors of HEIs was strengthened, KPI management and new specialised marketing departments responsible for ranking positions and branding appeared. Public HEIs remain highly dependent on the decisions of the government and are trying to balance the demands of the market, the requirements of applicants and their own interests.

7.5. Limitations of This Research and Areas for Further Research

This research has several limitations. First, the conclusions about the impact of marketisation on Russian public universities were drawn based on an analysis of the RAEP 5-100 group of universities, which includes 21 leading universities. Although the surveyed universities differ significantly from each other both in terms of campus locations, foundation dates, and number of students (see Table 4-1), they

represent only a small fraction of the total number of the country's public universities. Second, the research has a limited sample of respondents. More than six months were spent, and hundreds of emails were sent in order to find current HEI employees and gather a representative group of managers and academics (see Chapter 6). Given the COVID-19 and time constraints, it was not possible to significantly increase the number of respondents.

Another limitation was the lack of comments from representatives of Russian authorities. During the research process, it became clear that the processes of marketisation of higher education in Russia were largely initiated and supported by the Russian government. Although this study analyses in detail the data from official documents and websites of universities and includes interviews with university staff, a more objective picture would require opinions of current and former members of the government and relevant ministries. A final significant limitation is the position of the researcher himself. All ethical clauses were respected, the respondents were honest and free to talk about their work, and their identities were anonymised (see Sub-section 6.1). However, the data might have been more concrete if the study had been conducted by an insider, such as an employee of one of the universities studied, who could have described the impact of marketisation "from the inside".

The research process has identified several areas that can be addressed in the future. Firstly, marketisation is a multifaceted process that affects the field of higher education from different angles. In this study, official documents and websites of HEIs were analysed and interviews were conducted with the staff of these universities. The findings of the study show that the main agent of higher education marketisation is the Russian government. Thus, current and former employees of line ministries managing state universities can be approached to develop this perspective further. The comments of government officials could provide a deeper understanding of the causes and directions of market-oriented reforms, as well as the original ideas that guided the reforms.

Secondly, the research has touched upon the problems of massification of higher education in Russia. As outlined in Chapter 3, the number of students in Russia after 2000 has almost doubled compared to the RSFSR. The popularity of higher education in contemporary Russia has been explored in some publications

which were not a part of this study. About half of all these students study at state universities at their own expense. To understand what motivates applicants in choosing an institution, a series of interviews with school leavers and current students can be conducted. This way, it is possible to assess the efforts of the government and universities to create a Russian higher education market, as well as to investigate the effectiveness of certain actions taken by universities in attracting students. A separate area of research could look at the recruitment process of foreign applicants enrolled in Russian universities through the Rossotrudnichestvo system.

The third area of research, which allows to better understand the impact of marketisation on Russian HEIs, will be the analysis of the work of non-state stakeholders. Large corporations, private businesses and the start-up industry interact with state universities. Universities train future employees for private companies, retrain existing employees, conduct R&D, and monetise their developments in business. Collecting quantitative data on the volume of such cooperation, as well as interviews with representatives of the business community, will provide an independent perspective on the work of universities in a market environment.

Finally, another promising area of research will be the analysis of the new programme to support Russian public universities. The goal of the Priority 2030 programme is "to establish more than 100 progressive modern universities in Russia by 2030 — centres of scientific, technological and socio-economic development of the country" (Russian Government, 2021). An analysis of the programme documents, the proposals of the participating universities, and the opinions of a broader number of stakeholders could reveal the impact of marketisation processes on the work of public universities over the next 10 years.

This research has provided further evidence into the marketisation of Russian public universities. The marketisation processes of Russian public higher education is rather ambivalent. Despite the historically high connection between universities and the economy in Russia, and despite operating in the local and international higher education market, the dependence on public funding remains very high. An important finding has been that universities demonstrate a mastery of "market

language" in official documents but use less market terminology on their websites. The introduction of NPM methods in HEI management has affected some areas of academics' work, and university managers have become interested in improving their positions in the ranking tables. But at the same time, the rankings have not had a significant impact on academics' research and areas of work. There has been a shift in the perception of higher education (education as a service) and a change in attitudes towards students (students as customers). And at the same time, it turned out that it is often not economically profitable for higher education institutions to attract foreign students, but the institutions are forced to do so in order to comply not with market demands, but with federal government requirements. Another example of the duality of marketisation is the relationship with industry. Universities co-operate with private companies and earn money on R&D projects, but most of the partners of universities are large state corporations. As a result, universities still receive state funding, only in other ways.

The findings of the research can form the basis for further reform and management of the Russian higher education sector. Understanding the heterogeneity and ambiguity of market reform processes may, on the one hand, reduce pressure on academics and, on the other hand, remove communication barriers between the government and universities. The findings of this study can help to create a new system in which universities do not need to "imitate" market activity, but rather use market instruments to truly gain greater independence and development opportunities.

Appendix A. TOP-1000 most common words in the RAEP roadmaps

Top 1000 stemmed words from 21 roadmaps of RAEP 5-100 universities were selected among the 0.5 million words of all selected documents using the NVIVO Software and sorted from the most to the least common:

university', develops, researching, educational, programs, numbers, internationally, students, activization, academics, implements, russians, technology, systems, projects, scientific, including, leading, science, year, institutions, centers', new, staff, foreign, management, 2020, december, strau, areas, supports, ranks, plans, faculty, competitiveness, highly, trains, positively, world, organs, innovators, total, indices, 2018, basing, schools', globally, increase, 100, works, model, publicly, units', studying, creating, members, masters, markets, programmes, strategic, using, engines, field, informing, participation, resources, sharing, establishments, process, attracting, target, improving, federal, partners, industry, least, professional, pers, initiatives, 2019, graduation, courses, actions, provide, companies, performing, tasks, subject, community, results, level, funds, joint, networks', socially, creation, cooperation, regions, products, structure, services, young, times, within, promotion, involving, 2017, states, materials, well, calculation, key, scopus, postgraduate, quality, 200, degree, enhancing, physics, economic, specialists, qtr, laboratories, formats, integrity, recruitment, higher, web, one, aimed, measuring, modernized, reporting, priority, forms, nationals, hse, follows, environment, focus, humans, talented, basis, english, goal, language, effects, achieving, countries, employment, group, personnel, financial, business, events, ensure, personalized, russia, phd, infrastructure, index, mainly, among, applications, part, objects, databases, sources, medicines, additional, throughout, roadmap, advanced, full, journals, changes, mobility, teaching, articles, practices, openness, average, top, learning, spaces, competency, department, yes, medical, bachelor, 150, design, cultures, experiments, digitization, also, etc, experts, non, excellence, revenues, scientists, conducts, partnership, platforms, data, according, applied, stage, 2016, government, percentage, efficiently, special, employees, set, citation, tech, director, enrolment, administrative, class, period, relativity, professors, centre, order, heads, strategy, building, mephi, first, fundamental, kfu, electronics, interdisciplinary, individuals, terms, monitoring, transformations, current, ratings, annual, methods, biology, 500, mechanisms, interactive, complex, conferred, grants, continuously, requires, mathematics, internships, potential, analysis, teams, 300, knowledge, taking, budget, computing, external, equipping, budgetary, approach, framework, 2013, sechenov, carrying, rudn, technical, rector, making, online, skills, standards, methodology, september, collaborations, council, oriented, best, corporate, allow, intellectual, itmo, incoming, value, places, selection, table, directions, subsidy, major, publishing, generation, challenges, economy, receiving, doctoral, functions, fefu, enterprises, leaders, people, introduction, become, large, launching, mipt, natural, 151, finance, associations, contracts, various, general, succession, nsu, account, introducing, preparing, november, core', chemistry, organisations, control, amount, unique, expanding, important, lists, 400, campus, office, approved, prospects, score, tpu, appendixes, basic, growth, commercially, existing, conditions, significantly, future, problems, cis, board, breakthrough, operator, organizational, 250, life, agreements, completion, subtask, nrtsu, principles, facilities, subdivisions, policy, 101, january, relevant, straus, lectures, range, media, teachers, cumulative, demand, nuclear, analytics, assessment, vice, presented, reputation, meeting, refers, sibfu, elements, energy, entrepreneurship, items, possible, starts, access, clinics, opportunities, different, help, three, tools, expects, together, www, brands, motivation, concentration, two, unified, offered, ratio, modules, duplications, solving, post, authors, etu, accreditation, long, pool, responsible, sustaining, deputy, interest, strengthening, necessary, october, cluster, engaging, ecosystem, representatives, susu, purpose, divisions, security, maps, roubles, properties, alumni, moscow, april, citizens, holding, solutions, transfers, particular, evaluation, far, issues, leadership, updating, specific, frs, sector, oil, promising, track, manufacturing, needs, pharmaceutical, procedures, urfu, contribution, adaptive, capitalization, environmental, tests, translator, asia, due, num, road, components, smart, excluding, obtaining, ras, society, determined, 2014, regular, extra, comprehensiveness, managerial, curricula, content, documents, seminars, volume, annex, power, candidate, east, foundation, optimizing, admission, careers, decision, city, undergraduate, ending, samara, searching, agency, executives, unn, quantity, 600, biomedical, geology, mln, wide, role, investments, mooc, 800, academy, mission, self, factors, million, consulting, disciplines, youth, rub, sau, types, able, figure, internet, kpi, small, without, 350, creative, lines, may, progress, software, transitioning, gas, march, reserves, points, tyumen, site, 700, health, misis, popularizing, 2012, abroad, advantages, february, iii, double, entrepreneurial, impact, raising, costs, exchange, living, sews, wos, distance, consortium, earth, expansion, overall, 201, assistants, expertise, history, photonics, ministry, profile, trends, allocation, date, 2010, children, nust, olympiads, portfolio, qualified, remote, autonomously, available, constructions, distribution, example, imaging, labs, means, multidisciplinary, scholars, coordinator, diploma, reach, scale, audience, expenses, producing, recognition, address, dynamics, enable, realization, arwu, concept, pacific, spbpu, tomsk, 2015, entering, experimental, held, independent, instruments, agenda, 251, local, robots, thousand, capable, eastern, healthcare, lobachevsky, identify, inviting, qualification, sphere, centralized, usa, accelerator, chemical, china, exam, facilitate, actual, retraining, com, trajectories, last, branch, corresponding, summer, topics, website, capacity, cells, population, ability, consists, flexible, multi, previous, delivering, characteristics, close, diagnostics, incentives, name, virtual, 900, germany, made, proportion, traditional, intensive, speaking, august, connection, decree, http, less, taught, urals, urbanism, mass, papers, workers, supervision, recommends, sessions, aging, diseases, maintain, quantum, sections, 2011, body, defined, combining, exhibits, compared, internationalization, upgrade, arts, devices, efforts, polytechnic, real, recognized, description, growing, registered, review, rounding, given, outside, linguistic, phase, drug, european, intelligence, petroleum, psychology, second, optics, respectively, links, provisions, whole, campaign, considering, encourage, parks, since, territory, already, philosophy, primarily, senior, theory, ways, portal, cross, signs, third, big, covered, factory, regulations, along, cutting, disciplinary, diversification, formula, largest, single, transport, biotechnology, runs, collective, 211, advisory, around, biomedicine, sas, socio, agriculture, located, visits, acts, automation, awards, laser, schedule, serves, curriculum, features, forecasting, low, percent, astronomy, committee, consideration, scholarship, stimulation, ecology, four, inphe, labor, regard, siberian, examination, arctic, europe, fact, gain, paid, reduce, short, findings, demonstrating, steps, bring, pages, physbio, phystech, record, scope, icis, thus, zones, adjustment, affiliations, domestic, elite, fulfilment, laplas, msmu, plant, supervisory, 120, climate, contacts, edge, electrical, expenditures, mandatory, next, novosibirsk, others, sports, took, 301, contests, forums, schoolchildren, south, goods, exploring, cited, five, president, strong, via, 4th, across, balance, influence, prototypes, residents, users, foster, protection, emerging, guidance, kazan, molecular, nespi, rosatom, tuition, certification, entrants, political, stakeholders, writing, composite, limits, accrual, aerospace, affairs, aspects, brics, certain, comfortable, ideas, presence, secondary, see, series, siberia, telecommunications, consolidated, implies, 849, accrued, ats, coming, delivery, foresight, island, jsc, pre, taken, workshops, 351, admitted, bio, brain, criteria, customs, lyceum, postdocs, qualitative, views, accumulation, 110, channels, free, housing, sociology, technoparks, therapy, today, genetic, 170, another, calendar, dormitories, early, incubator, massive, parameters, phds, radiation, several, shows, 1000, analyzing, cognitive, common, critical, details, elaboration, endowment, extensive, grading, june, legal, maintenance, minimum, must, patents, petersburg, proposed, russky, salary, similar, sum, winners, magnetism, segments, broad, done, geography, patient, premises, rapid, supplementary, towards, commission, context, mining, accepted, artificial, billion, chart, described, france, hereinafter, library, paths, venture, vocational, bank, thinking, 160, attention, getting, gifted, license, ongoing, private, psc, therefore, vpo, benefit, intends, machine, modernisation, things, discussions, drivers, law, month, neuroscience, pilot, preventive, submitting, 450, contemporary, estimates, pedagogical, sensors, passing, 140, academic, awareness, beginning, categories,

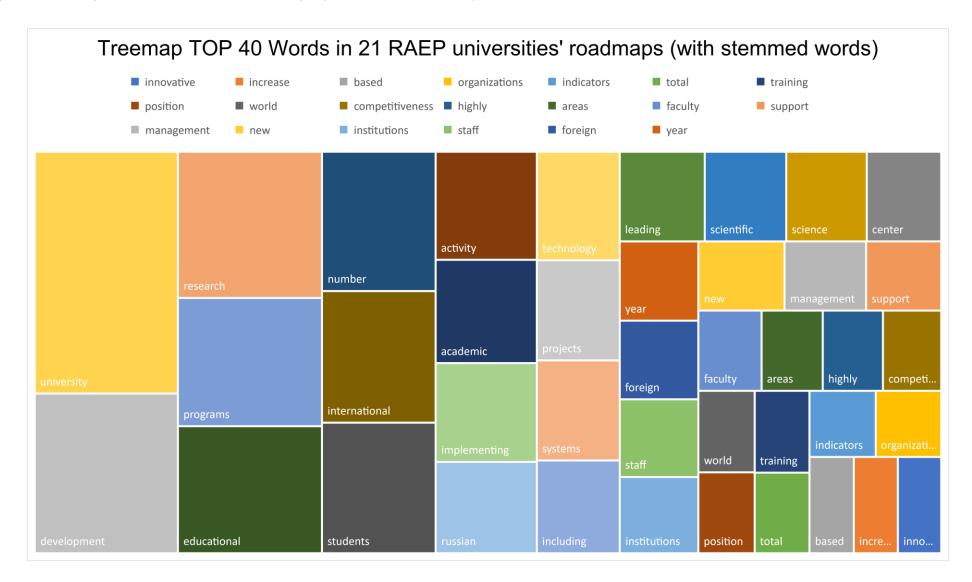


Figure 7-1. Treemap TOP 40 Words in 21 RAEP universities' roadmaps (with stemmed words)

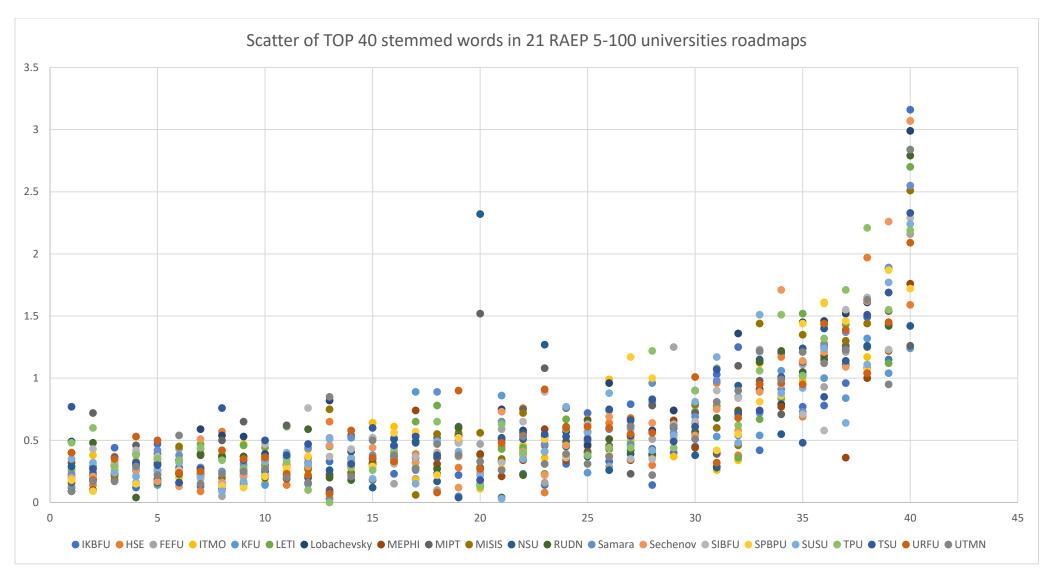


Figure 7-2. Scatter of TOP 40 stemmed words in 21 RAEP 5-100 universities roadmaps

Table 7-1. Correlations between TOP-40 stemmed words in 21 RAEP 5-100 universities' roadmaps

	1	1	1		1	I	1			-			1	1	1		1												1	1							1	$\overline{}$	$\overline{}$	\neg
	university	tacon and to the	research	1 8	educational	number	international	students	activity	academic	implementing	Russian	technology	projects	systems	including	leading	scientific	science	center	year	foreign	staff	institutions	new	management	support	faculty	areas	highly	competitiveness	world	position	training	total	indicators	organisations	based	increase	innovative
university	1.00																																							
development	0.12	1.00																																						
research	0.15	-0.03	1.00																																					
programmes	0.10	0.20	0.52	1.00																																				
educational	-0.04	0.35	-0.14	0.23	1.00																																			
number	0.04	-0.03	-0.06	0.15	0.58	1.00																																		
international	0.36	0.26	0.53	0.11	-0.21	-0.23	1.00																																	
students	0.01	0.08	-0.07	0.04	0.10	0.15	-0.15	1.00																																
activity	0.00	-0.21	0.02	-0.08	-0.34	0.06	-0.17	-0.25	1.00																															
academic	0.23	0.04	0.43	0.02	-0.54	-0.54	0.49	-0.01	-0.21	1.00																														
implementing	0.04	0.26	0.13	0.45	0.24	0.13	0.04	0.25	-0.11	0.07	1.00																													
Russian	-0.16	-0.04	-0.15	0.08	-0.14	0.23	-0.29	0.25	0.05	-0.06	0.26	1.00																												
technology	-0.18	0.36	0.07	0.35	0.39	0.10	0.10	-0.28	-0.28	-0.04	0.32	-0.24	1.00																											
projects	0.14	0.26	0.02	0.11	0.17	0.11	0.20	-0.22	-0.17	0.12	-0.06	-0.21	0.04	1.00																										
systems	0.40	0.43	0.05	0.00	0.40	-0.06	0.03	-0.02	-0.27	-0.01	0.30	-0.21	0.22	0.00	1.00																									
including	0.33	0.30	-0.08	0.18	-0.14	-0.34	0.20	-0.05	-0.19	0.34	0.13	-0.03	-0.28	0.35	0.07	1.00																								
leading	-0.06	0.24	-0.04	0.10	0.35	0.18	-0.14	0.22			0.61	-0.10	0.38	-0.29	0.41	-0.09	1.00																							
scientific	-0.44	-0.05	-0.33	0.05	0.07	0.02	-0.52	0.24	0.28	-0.46	-0.02	-0.10	0.00	-0.41	-0.25	-0.10	0.23	1.00																						
science	-0.32	0.05	0.33	0.47	0.07	0.04	-0.27	0.32	0.01	-0.20	0.27	0.19	-0.11	-0.19	-0.01	-0.09	0.21	0.35	1.00																					
center	-0.03	0.20	0.32	0.28	-0.04	0.00	0.25	-0.51	0.23	-0.06	0.14	0.07	0.38	-0.02	0.03	-0.30	-0.07	-0.22	0.09	1.00																				
year	-0.50	-0.09	-0.19	-0.01	0.17	0.26	-0.52	0.20	0.26	-0.40	-0.26	0.13	-0.10	-0.37	-0.41	-0.32	0.17		0.35	-0.04	1.00																			
foreign	-0.08	-0.10	-0.54	0.08	0.37	0.34	-0.57	0.29	0.00	-0.52	0.26	0.25	-0.23	-0.18	-0.06	0.27	0.25	0.56	0.21	-0.46	0.31	1.00																		
staff	0.23	-0.03	0.43	0.15	-0.06	-0.15	0.28	-0.20		0.63	0.04	-0.26	0.20	-0.04	0.11	0.16	0.30	-0.38	-0.03	0.07	-0.23	-0.27	1.00																	
institutions	-0.36	-0.33	0.01	-0.30	-0.12	0.07	-0.13	-0.73	0.30	-0.19	-0.41	-0.10	0.12	0.06	-0.10	-0.30	-0.29	-0.03	-0.25	0.28	0.01	-0.23	-0.05	1.00																
new	-0.21	0.20	-0.01	0.05	0.57	0.14	-0.21	-0.04	-0.24	-0.36	-0.17	-0.55	0.43	0.25	0.42	-0.34	0.13	0.14	0.10	0.04	0.09	-0.14	-0.06	0.21	1.00															
management	0.44	-0.01	0.29	0.14	-0.30	-0.57	0.32	-0.20	-0.18	0.28	-0.23	-0.19	-0.22	0.24	0.27	0.35	-0.50		0.09	0.02	-0.55	-0.32	0.11	-0.09	0.00	1.00														
support	-0.34	0.31	-0.23	0.24	0.04	-0.31	-0.27	-0.06	0.13	-0.10	0.30	0.08	0.08	-0.16	-0.07	0.31	0.22	0.53	0.37	0.12	0.31	0.42	-0.10	-0.19	-0.16	-0.09	1.00													
faculty	0.28	-0.09	0.31	0.02	-0.11	0.34	0.00	0.35	0.15	0.10	0.07	0.42	-0.62	0.11	0.05	-0.03	-0.09		0.34	-0.01	-0.08	-0.01	0.06	-0.18	-0.24		-0.32	1.00												
areas	-0.17	-0.02	-0.08	-0.03	-0.42	-0.35	-0.02	0.01		0.09	-0.16	0.02	-0.11	-0.13	0.04	0.30	-0.15	0.19	0.11	-0.26	-0.20	0.05	-0.07	0.22	0.04		-0.02	-0.10	1.00											
highly	-0.03	0.10	-0.03	0.19	0.05	0.26	-0.25	0.09	-0.05	0.09	0.31	0.16	0.34	-0.34	0.10	-0.04	0.70	0.27	0.19	-0.11	0.32	0.20	0.28	-0.13	-0.15	-0.43	0.17	-0.11	0.02	1.00										
competitiveness	0.08	0.07	0.36	0.23	-0.31	-0.14	-0.05	0.07		0.26		0.23	-0.13	-0.16	0.17	0.21	0.26		0.49	-0.01		0.07	0.09	-0.03	-0.32		0.24	0.26	0.24	0.46	1.00									
world	0.08	-0.05		0.23	0.30	0.32	-0.26	-0.04	0.24		0.32	0.08	0.20	-0.38	0.34	-0.27	0.53		0.34	0.13		0.22	-0.10	-0.07	0.08		0.01	0.00	-0.17		0.15	1.00								_
position	0.10	0.05	0.36	0.29	0.06	-0.28	0.08	-0.35	0.14	0.01	0.19	-0.20	0.15	-0.01	0.46	0.09	0.21	-0.05	0.30	0.14	-0.14	-0.15	0.04	0.13	0.17		0.04	-0.10	0.08	0.08	0.38	0.58	1.00					\neg	\neg	\neg
training	0.28	0.35	0.05	0.08	0.26	0.48	0.15	-0.07	0.09		0.27	0.30	0.36	-0.23	0.28	-0.22	0.17	-0.11	-0.26	0.34	-0.08	-0.02	-0.11	0.11	-0.11		-0.23	0.03	-0.15	0.28	0.14	0.26	-0.03	1.00				-	\dashv	\dashv
total	0.16	-0.29		0.19	-0.04	0.31	-0.17	0.33		0.20	0.35	0.40	-0.13	-0.04	-0.24	-0.14	0.19		0.18	-0.12		0.18	0.33	-0.39	-0.37		-0.11	0.50	-0.35	0.19	0.02	0.13		-0.07	1.00			\neg	\neg	\neg
indicators	-0.05	-0.09	-0.13	0.11	-0.24	-0.42	-0.10	-0.04			0.29	-0.06	-0.06	-0.11		0.38	0.09		0.14	-0.03		0.30	0.09	-0.30	-0.45		0.68	-0.33	-0.21	0.08	0.22			-0.35		1.00		\neg	\neg	\exists
organisations	-0.21	0.01	0.27	0.43	0.13	-0.06	-0.17	0.25	-0.04	-0.19	0.49	0.00	0.12	-0.35	0.07	-0.12	0.36	0.48	0.77	0.13	0.23	0.30	-0.01	-0.30	0.01		0.54	-0.03	-0.11	0.24	0.54	0.31		-0.09		0.48	1.00			\neg
based	0.22	0.22	0.20	0.25	-0.16	-0.56	0.36	-0.41	-0.03	0.29	-0.10	-0.36	-0.03	0.28	0.11	0.64	-0.22	-0.05	-0.12	0.14	-0.15	-0.19	0.06	-0.02	-0.06		0.33	-0.36	0.08	-0.18	0.10	-0.15	0.40	-0.26	-0.55	0.35		1.00	-	\neg
increase	-0.04	0.01	0.17	0.23	-0.10	-0.17	0.13	0.25	0.11	0.13	0.21	-0.24	0.28	-0.52	-0.03	-0.05	0.47	0.33	0.15	-0.19	0.20	-0.02	0.16	-0.35	-0.07		0.14	-0.37	0.12	0.50	0.06	0.43		-0.03	0.05	0.24			00	
innovative	-0.03	0.31	0.22	0.11	0.01	-0.20	-0.02	0.08		0.17	0.45	0.02	0.25	0.03	0.30	-0.02	0.31	0.10	0.22	0.21	-0.07	-0.17	-0.04	-0.05	0.09		0.08	-0.04	-0.09	0.12	0.57	0.09		0.27	-0.11	0.17			0.04 1	.00
Jvative	-0.03	0.31	0.22	0.11	0.01	-0.20	-0.02	0.08	-0.02	0.17	0.45	0.02	0.25	0.03	0.30	-0.02	U.31	U.1U	U.ZZ	U.21	-0.07	-0.1/	-0.04	-0.05	0.09	-0.01	U.U8	-0.04	-0.09	0.12	0.5/	0.09	U.4Z	0.27	-0.11	0.1/	0.39	J.U8 -0	1.04	UU

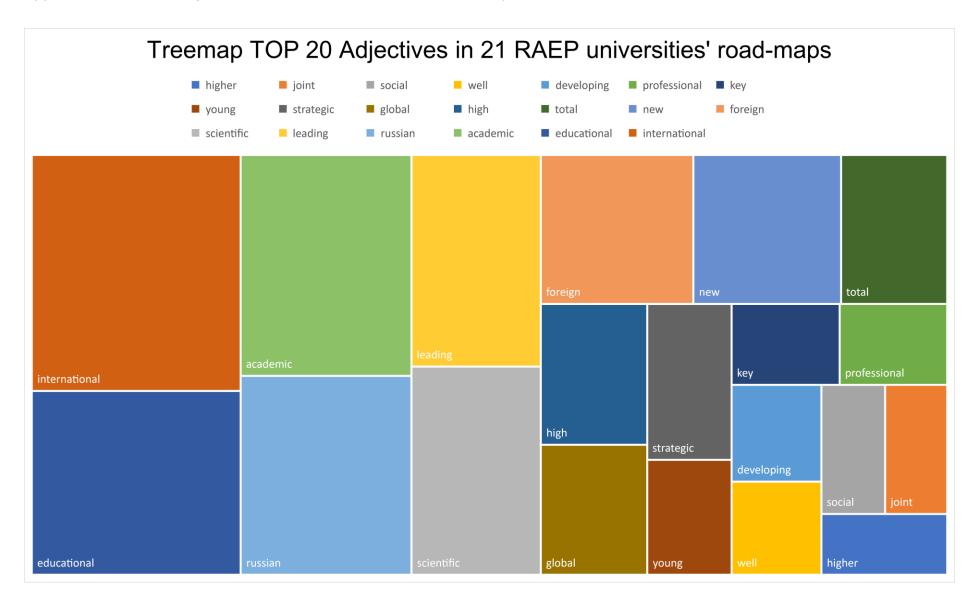


Figure 7-3. Treemap TOP 20 Adjectives in 21 RAEP universities' roadmaps

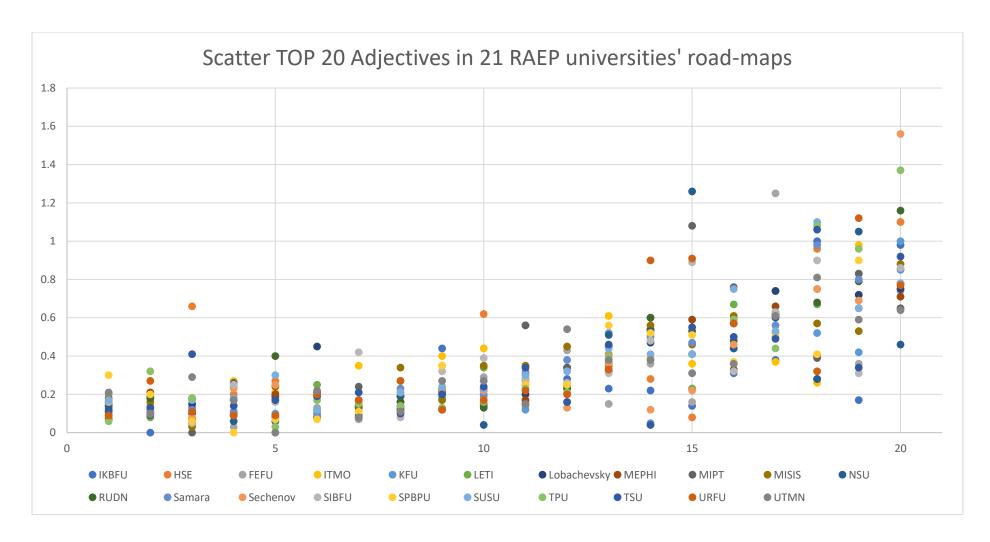


Figure 7-4. Scatter TOP 20 Adjectives in 21 RAEP universities' road-maps

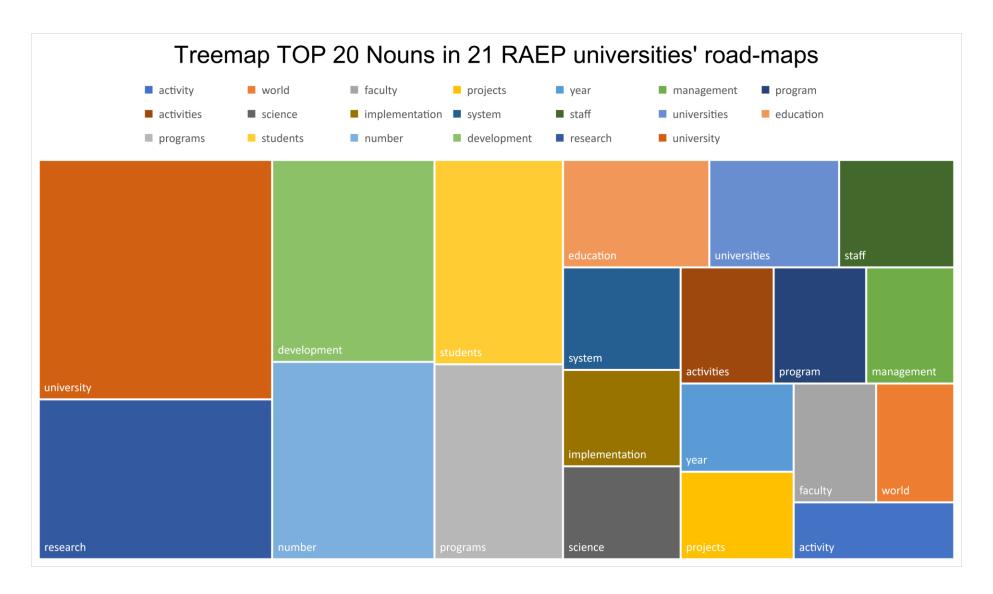


Figure 7-5. Treemap TOP 20 Nouns in 21 RAEP universities' road-maps

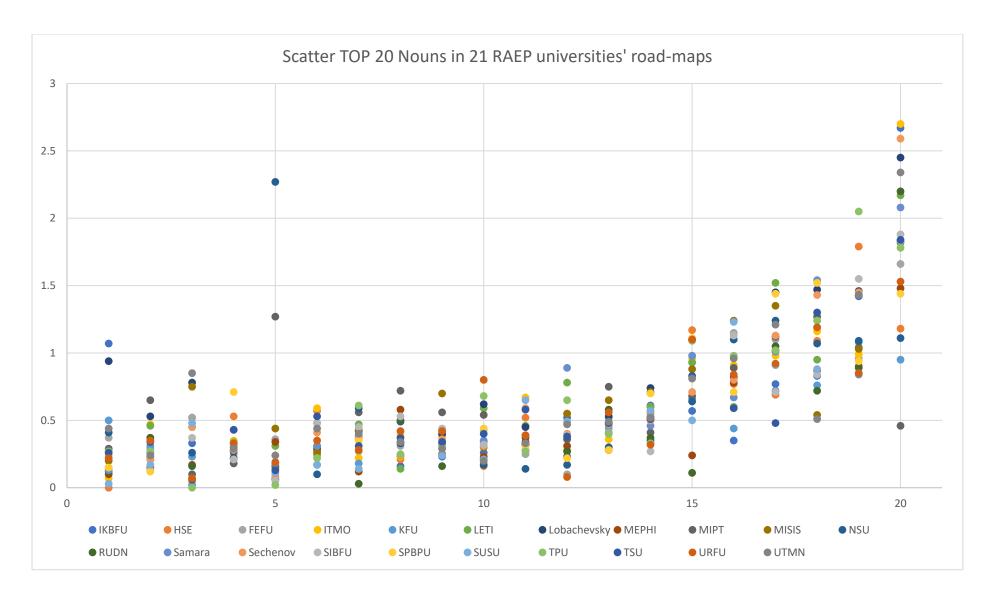


Figure 7-6. Scatter TOP 20 Nouns in 21 RAEP universities' road-maps

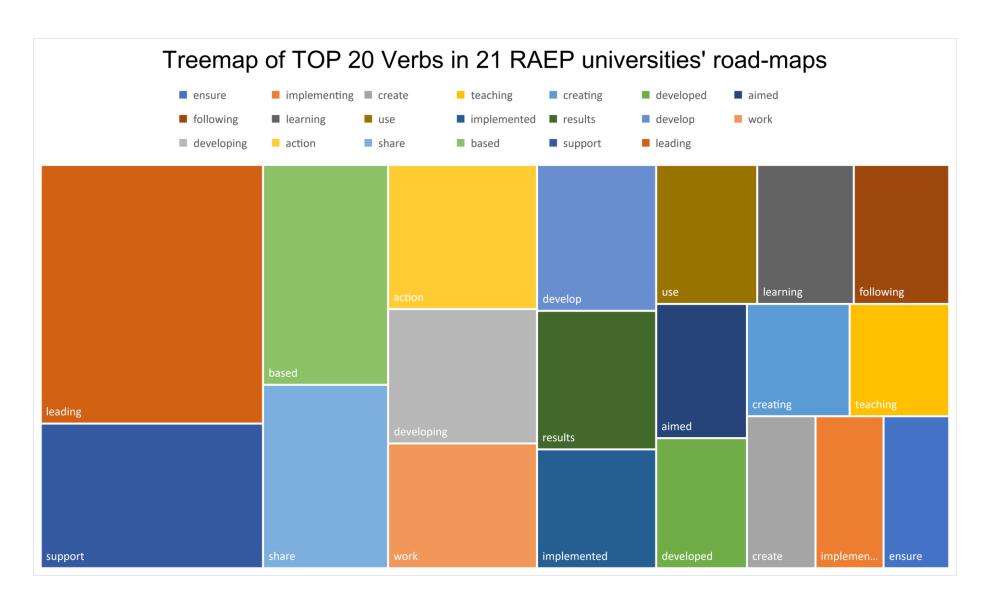


Figure 7-7. Treemap of TOP 20 Verbs in 21 RAEP universities' road-maps

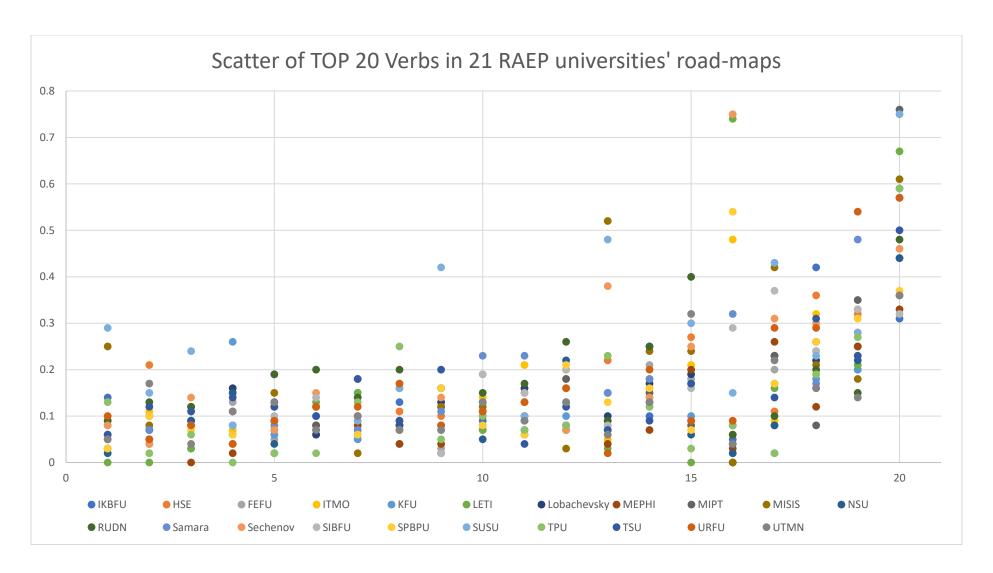


Figure 7-8. Scatter of TOP 20 Verbs in 21 RAEP universities' road-maps

Appendix D. Python script for parsing the content of the English version of university websites (using 'mipt.ru' as an example)

```
import os
from helpers import GetPage, write_json, get_json, get_all_links, save_text
domain = 'mipt.ru'
site = 'https://mipt.ru'
path = 'data/' + domain
content tag = ['#mainblock', '#col-main']
    links = get json(domain + '.json')
except:
    links = ['https://mipt.ru/en/',]
    write_json(domain + '.json', links)
has_no_content = ['servertree', '?t=']
must_have = ['/en/']
read mode = False
try:
    os.mkdir(path)
except:
    pass
for l in links:
    parse_file_name = 1.strip('/').replace('https://www.','').replace('https://','').replace('/','_')
    is_parsed = False
    for file_ in os.listdir(path):
    if file_.startswith(parse_file_name):
            is_parsed = True
    if not is parsed:
        print('parsing')
        page = GetPage(1, r404=True)
        parse_page = page.get()
if parse_page == '404':
             links.remove(1)
             write_json(domain + '.json', links)
             continue
        no_content = False
        for nc in has no content:
            if nc in parse_file_name:
    no_content = True
                break
        if 1 == site:
            no_content = True
        if not 'text/html' in parse page.headers['Content-Type'] and not no content:
            save text(parse file name, path, parse page.content, 'wb')
            pq = parse_page.html.pq
             links = get_all_links(pq, site, links, must_have)
             write_json(domain + '.json', links)
             if not no content:
                 for selector in content tag:
                     content = pq.find(selector).remove('style').remove('script').remove('img')
                     if content:
                         page_text = content.text()
                          save_text(parse_file_name + '.txt', path, page_text)
                         break
    elif read_mode:
        page = GetPage(1, r404=True)
        parse_page = page.get()
        if parse_page == '404':
             links.remove(1)
             write_json(domain + '.json', links)
        continue
if 'text/html' in parse_page.headers['Content-Type']:
             pq = parse_page.html.pq
             links = get all links(pq, site, links, must have)
                write json(domain + '.json', links)
```

Appendix E. Participant Information Sheet

My name is Vladislav Popov, and I am a doctoral student in the Department of Social Policy and Social Work at the University of York

What is the purpose of the study?

The purpose of the study is to determine the impact of marketisation processes on the work of public Russian universities. Over the past 30 years, many countries have undergone through a lot of transformative processes, and Russia, in particular, has completely changed in many ways. Marketisation reflected things which were happening in other countries and became one of the areas of change that had a significant impact on the public sphere in Russia. The thesis plans to investigate whether the marketisation processes have had an impact on public universities and their management as well as the sources of such influences, ways in which they relate to the Russian state and how they were experienced by both managers and academics and universities.

Explain is simple terms what the research is seeking to achieve and why this might be important. How might this new research make a difference? If you are a student, explain that this research is in support of your degree (and detail what course and level of degree this work is supporting).

Why have I been invited to take part?

You are invited to take part because you are an employee of one of the universities of the RAEP 5-100 project which are the focus of my project and I am interested in researching your views on marketisation in Russian Universities and your experiences of marketisation processes in your Department.

What does taking part involve?

The researcher is trying to find out the impact of marketisation on the work of Russian public universities. It is planned to ask questions about the organisation of the work of universities, about the perception of students, about the influence of league tables, etc. It is planned to record the answers to all questions on audio, pseudonymise and transcribe. The research activity itself will be carried out at the University of York as part of the PhD course of the SPSW department. This study began 3 years ago and is scheduled to be completed within the next year.

Provide a detailed explanation of what taking part involves. This should include, as applicable:

- What the research activity involves, including the subject matter of any questions being asked
- How any information they provide is being documented
- Where research activity will take place
- For how long, and how often, research activity will take place

Do I have to take part?

No, participation is optional. If you do decide to take part, you will be given a copy of this information sheet for your records and will be asked to complete a participant information form. If you change your mind at any point during the study, you will be able to withdraw your participation without having to provide a reason within the 14 days after the interview.

What are the benefits and risks of participating?

Benefits. There are no benefits of the study for the respondents. The research is of an educational nature and is designed to assess the impact of the marketing processes on Russian public universities.

Risks. The researcher plans to ask questions about the characteristics of the respondents' work for about an hour. In the event of any discomfort or emotional stress, the respondent has the right to interrupt the interview at any time. In this case, the remaining questions can be asked later at a convenient time for the respondent, or the interview will be completely cancelled, depending on the wishes of the respondent.

Benefits may include a description of any high street vouchers or incentives they may be entitled to. You may also consider describing indirect benefits such as the potential for the results to improve services or decision-making, for example.

Risks may include emotional distress or discomfort that may arise, and how they would be mitigated. Any physical, social, economic or legal risks must also be described clearly.

Will I be identified in any research outputs?

Respondents will not be listed in any survey results. All respondents will be universally identified. If it is necessary to quote directly, the words of the respondent will be corrected to preserve the meaning but remove the possibility of identifying the respondent. In addition, the research will not include the exact job titles and universities. It is planned to use only the areas of work of the respondents (manager or academician). For example, instead of "Head of the department HSE for work with foreign students, Elena Ivanova", "Head of department at one of Moscow's universities" will be written.

Consider both direct identification (by name, or unique job title) or indirect identification that describes the individual with sufficient detail as to render them identifiable.

How will you keep my data secure?

Interviews will be recorded on an encrypted recording device, with this data being transferred at the earliest opportunity to the University of York's secure file server. This will be the only copy of the audio file; there will be no copy stored on the recording device (i.e. the recording will be deleted from the encrypted recording device).

For how long will you keep my data?

After participants have completed interviews, they will have the right to withdraw from the study at any point up to and including the 14th day after the interview (e.g., for interviews conducted on 01.10.20, participants can withdraw at any point up to and including 15.10.20). "Withdraw" here means that their data will be withdrawn from the study and securely destroyed; their involvement with the research project will end at this point.

Will you share my information with anyone else?

The information collected during the interview will not be available to third parties.

Answer these three questions in a language suitable to your research population. You can explain that further detail is available in the separate "data information sheet" (see below) - however it is still important to highlight these key points in a digestible language here.

Who is funding the research?

My doctoral research is funded by the Government of the Russian Federation (Global Education Program). You can find out more detailed information about the program on the website: https://educationglobal.ru/en/info/

Who has given approval to conduct the research?

This research is approved by the Ethics Committee of the Department of Social Policy and Social Work at the University of York.

How do I find out more information?

If you would like further information about the project, please contact my Supervisors: Dr Kevin Farnsworth kevin.farnsworth@york.ac.uk
Dr Zoë Irving zoe.irving@york.ac.uk

How do I make a complaint?

In the first instance complaints should be directed to the principal investigator of the research Vladislav Popov <u>vp631@york.ac.uk</u>.

If you are not satisfied your complaint has been addressed, you may approach the Departmental Ethics Committee using the email address: spsw-ethics@york.ac.uk.

Appendix F. Data Information Sheet

The Impact of marketisation processes on Russian public universities since the 1990s

The purpose of this information sheet is to explain how your data will be used and protected, in line with GDPR.

On what basis will you process my data?

Under the General Data Protection Regulation (GDPR), the University must identify a legal basis for processing personal data and, where appropriate, an additional condition for processing special category data.

In line with our charter which states that we advance learning and knowledge by teaching and research, the University processes personal data for research purposes under Article 6 (1) (e) of the GDPR:

Processing is necessary for the performance of a task carried out in the public interest

Special category data is processed under Article 9 (2) (j):

Processing is necessary for archiving purposes in the public interest, or scientific and historical research purposes or statistical purposes

Research will only be undertaken where ethical approval has been obtained, where there is a clear public interest and where appropriate safeguards have been put in place to protect data.

In line with ethical expectations and to comply with common law duty of confidentiality, we will seek your consent to participate where appropriate. This consent will not, however, be our legal basis for processing your data under the GDPR.

How will you use my data?

Data will be processed for the purposes outlined in this notice and in the main information sheet. All interviews will be audio-recorded (with consent). The device used for audio-recording will be password protected; the audio file will be transferred to the secure University of York encrypted fileserver at the earliest opportunity and then deleted from the recording device. You will be required to provide informed consent for participation. This will include your signature. These consent forms will be kept in a locked cabinet that only the researcher has access to. The anonymised findings will be analysed, and a research paper submitted to the University and to a journal with the aim of publication. A summary of the findings will also be shared with those who took part in the study.

How will you keep my data secure?

The University will put in place appropriate technical and organisational measures to protect your personal data and/or special category data. For the purposes of this project we will

ensure that all audio files and interview transcripts are password protected and saved onto the secure University of York fileserver.

Information will be treated confidentiality and shared on a need-to-know basis only. The University is committed to the principle of data protection by design and default and will collect the minimum amount of data necessary for the project.

Will you share my data with 3rd parties?

Data will only be accessible to the researcher himself. I may request that other researchers have access to the anonymised transcript for future research, but you will have the opportunity to opt out of this at the consent stage.

Will I be identified in any research outputs?

You will not be identified in any research output. You will be allocated a pseudonym and your real name will not be used. Consent will be required to use direct quotes in publications, but these quotes will be untraceable back to participants. Participants do not have to consent to this.

How long will you keep my data?

Data will be retained in line with legal requirements or where there is a business need. Retention timeframes will be determined in line with the University's Records Retention Schedule. Anonymised transcripts will be kept for ten years from the end of the study; consent forms will be kept for three years from the end of the study; audio recordings will be deleted at the end of the study.

What rights do I have in relation to my data?

Under the GDPR, you have a general right of access to your data, a right to rectification, erasure, restriction, objection or portability. You also have a right to withdrawal. Please note, not all rights apply where data is processed purely for research purposes. For further information see, https://www.york.ac.uk/records-management/generaldataprotection regulation/individualsrights/.

For this particular study, you have the right to withdraw your data up to two weeks after your interview has taken place.

Questions

If you have any questions about this participant information sheet or concerns about how your data is being processed, please contact kevin.farnsworth@york.ac.uk and zoe.irving@york.ac.uk. If you are still dissatisfied, please contact the University's Acting Data Protection Officer at dataprotection@york.ac.uk.

If you are unhappy with the way in which the University has handled your personal data, you have a right to complain to the Information Commissioner's Office. For information on reporting a concern to the Information Commissioner's Office, see www.ico.org.uk/concerns.

Appendix G. List of Interview questions

All questions were asked in Russian (hereafter, the English translation made by the researcher is used). Depending on the context of the interview, some questions were modified or not asked. The full list of questions that were used as clarifying questions, depending on the respondent's answers, included the following:

1. General questions

- 1.1. What do you think "Higher Education" is?
 - 1.1.1. What is the purpose of your university? What is the purpose of your unit?
- 1.2. Do you think the market and market relations affect higher education? If yes, how exactly?
 - 1.2.1. Does this process cause any problems? If yes, what kind of problems?
- 2. RQ1. What are the key forms of marketisation that have been introduced into Russian universities, and how they have interacted with other policies, eg funding, and influenced the direction of provision, strategic development and growth?
 - 2.1. Does your university assess the quality and effectiveness of education? If yes, what exactly does this process look like?
 - 2.1.1. How does the KPI management system (or other system) affect your work?
 - 2.2. What do you think about the current level of tuition fees (high, low, how will it change in the future)?
 - 2.2.1. Are students who pay their own tuition fees different from those who study on state budget funds?
 - 2.2.2. How are today's students different from those of 10 years ago?
 - 2.2.3. Do you perceive students as "customers"?
 - 2.3. How have university rankings (international and national) affected the development of the university?
 - 2.3.1. Are you forced to change or standardise research areas?
- 3. RQ2. How have Russian Universities responded to marketisation processes?
 - 3.1. How do you feel about the increase in the number of students studying at their own expense? What does this have to do with?

- 3.1.1. How do fee-based educational programmes (summer schools, courses, etc.) differ from state-funded programmes? Can you choose the topics and cost of such programmes yourself?
- 3.2. How has the need to attract international students affected your work?
 - 3.2.1. Do you adapt your current courses to suit international students or develop new ones?
 - 3.2.2. Why do you need international students?
- 3.3. How much do you need to combine teaching and administrative positions?
- 3.4. How does the search for extra-budgetary funds affect your work?
 - 3.4.1. How involved are you in this process?
- 3.5. What areas of work have emerged in the university to provide leadership in rankings?
 - 3.5.1. What does the Russian government want from universities? To make money on their own, or does the government expect more control (the market provides more freedom usually)?
- 4. RQ3. How have marketisation processes affected the views, work and outlook of senior academics and managers within universities?
 - 4.1.1. Does the funding of your university unit depend on the amount of profit it generates?
 - 4.1.2. How independent are you and other academics from the university management? And from the government?
 - 4.2. Do you try to become the best in your profession and work only with the best students? What kind of students and teachers do you want to see?
 - 4.2.1. KPIs for teachers in fundraising grants? Publications?
 - 4.2.2. Do you use timekeeping systems, performance indicators and other tools in your work?
 - 4.3. How do you assess your level of English?
 - 4.3.1. 4.3.1. How often do you need to use it in your work?
 - 4.4. How do you evaluate your interaction with academics from other universities (Russian and foreign)?
 - 4.4.1. Would you say that universities are now more likely to compete (for students, funding, positions in rankings) rather than collaborate? And in the past? And in the future?

Abbreviations

ARWU — Academic Ranking of World Universities

BRICS — Acronym coined to associate five major emerging economies:

Brazil, Russia, India, China, and South Africa

CIS — The Commonwealth of Independent States is a regional

intergovernmental organization of nine members, plus two founding non-member, post-Soviet republics in Eurasia.

CLAWS — The Constituent Likelihood Automatic Word-tagging System

is a program that performs part-of-speech tagging.

COVID — Coronavirus disease

DNA — Deoxyribonucleic acid

EN — English

ESG — European Higher Education Area

EU — European Union

FEFU — Far Eastern Federal University

GDP — Gross domestic product

HE — Higher Education

HEI — Higher Education Institution

HSE — Higher School of Economic

ICT — Information and Communications Technology

IKBFU — Immanuel Kant Baltic Federal University

IMF — International Monetary Fund

IT — Information Technology

ITMO — ITMO University

KAF — key admission figures

KFU — Kazan Federal University

KPI — key performance indicator

LETI — Saint-Petersburg Electrotechnical University ETU "LETI"

MEPHI — National Research Nuclear University MEPhI

(Moscow Engineering Physics Institute)

MIPT — Moscow Institute of Physics and Technology

(National Research University)

MISIS — The National University of Science and Technology

MIT — Massachusetts Institute of Technology

MOOC — Massive Open Online Courses

MS — Microsoft

MSU — Lomonosov Moscow State University

NPM — New Public Management

NRU — National Research Universities

NSU — Novosibirsk State University

OECD — Organisation for Economic Co-operation and Development

PPP — Purchasing Power Parity

PR — Public relations

PSAL — Program of Strategic Academic Leadership

QS — Quacquarelli Symonds University Rankings

RAEP — Russian Academic Excellence Project 5-100

RSFSR — Russian Soviet Federative Socialist Republic

RUDN — Peoples' Friendship University of Russia

SALP — Strategic Academic Leadership Programme

SIBFU — Siberian Federal University

SPBPU — Peter the Great St.Petersburg Polytechnic University

SPSU — Saint Petersburg State University

SPSW — Social Policy and Social Work

STEM — Science, technology, engineering, and mathematics

SUSU — South Ural State University

TACIS — Technical Assistance to the Commonwealth of Independent

States

THE — Times Higher Education World University Rankings

TPU — Tomsk Polytechnic University

TSU — National Research Tomsk State University

UK — United Kingdom

UNESCO — The United Nations Educational, Scientific and Cultural

Organization

URFU — Ural Federal University Named After the First President

of Russia B.N. Yeltsin

URL — Uniform Resource Locator

US — United States

USA — United States

USD — United States Dollar

USE — Unified State Exam

USSR — Union of Soviet Socialist Republics (Soviet Union)

UTMN — The University of Tyumen

WB — The World Bank

WTO — World Trade Organization

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