Decentralization Processes in Russian Federation: The Case of Health Care Administration.

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Preface

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Abstract

Interest in decentralization reforms in public sector was quite common for both developed and developing countries in the period after 1990. Russia was one of the countries that decided to decentralize its health care administration, but many authors, describing this particular reform, argue that its implementation was not done in a quality manner and they blame decentralization processes for the problems connected with addressing “collective health needs”. One of these problems is the issue connected with the inequalities in health care provision between various regions and districts in Russian Federation.

This paper, basing on the theoretical assumptions on the influence of socio-economic, political and administrative forces on the process of decentralization reform, aims to find out which of these forces could possibly lead to the creation and reinforcement of the inequalities in health care provision between six Russian regions (Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk) between 1995 and 2008, and therefore to identify which factors should the reformers pay attention to in the framework of decentralization (or recentralization) in Russian health care administration. On the basis of the analysis that had been conducted, this paper describes the influence of the changes in Gross Regional Product and the degree of decentralization, which were chosen as independent variables, on the level of equity in six Russian regions and provides with the recommendations concerning the following investigations of the topic.

This study shows that that the degree of decentralization connected with such functions of health care administration as financing, provision, regulatory and steering on the regional level did not influence the inequalities in health care provision between six Russian regions. This paper has therefore proved the theoretical assumption on the indivisibility of political and administrative forces in the case of post-Soviet Russia, as the degree of decentralization of each of the variables in the given period was consistent for all the regions, the reform was implemented under the control of central powers (and the above mentioned functions of health care administration were not completely devolved to the regional authorities), and the changes were introduced simultaneously in all the regions of the country. The correlation between changes in Gross Regional Product and the inequalities in health care provision (defined in the study as the number of doctors per 10000) in six regions is negative – the highest Gross Regional Product corresponds to the least amount of doctors per capita. This study suggests involving more of socio-economic indicators (such as morbidity level and the amounts of salary
payouts for the doctors) in the future researches on the topic in order to find the precise explanation for these results.

**Key words:** decentralization in health care administration, Russian Federation, model of public management reform, Gross Regional Product (GRP), degree of decentralization, inequality in health care provision, post-Soviet reform.
# Table of Content

**Chapter 1. Introduction** ................................................................................................................. 8  
1.1. The background of the problem ................................................................................................. 8  
1.2. Research questions .................................................................................................................... 11  
1.3. Relevance of the research .......................................................................................................... 13  
1.4. Structure of the research .......................................................................................................... 14  

**Chapter 2. Theoretical framework** ............................................................................................... 16  
2.1. The theory of public management reform .................................................................................. 16  
2.2. Decentralization ....................................................................................................................... 19  
2.2.1. Definitions of the decentralization ....................................................................................... 19  
2.2.2. Main theoretical views on the processes of decentralization in public sector .................. 21  
2.3. Conclusions for the chapter ...................................................................................................... 24  

**Chapter 3. Research methodology** ............................................................................................... 26  
3.1. Research strategy and case study ............................................................................................ 26  
3.2. Data collection .......................................................................................................................... 32  
3.3. Analysis of the data .................................................................................................................... 35  
3.4. Conclusions for the chapter ...................................................................................................... 37  

**Chapter 4. Case study** ................................................................................................................ 38  
4.1. Examination of possible influential forces .............................................................................. 38  
4.1.1. Measuring the effects of socio-economic forces ................................................................. 39  
4.1.2. Measuring the effects of politico-administrative forces ..................................................... 41  
4.2. Measuring the dependent variable ............................................................................................ 50  
4.3. Finding the association between independent and dependent variables ........................... 53  
4.4. Conclusions for the chapter ...................................................................................................... 57  

**Chapter 5. Conclusions** ................................................................................................................ 58  

**References** .................................................................................................................................... 62  

**Appendices** .................................................................................................................................. 68
List of abbreviations

ANOVA – Analysis of Variance
FMHIF – Federal Mandatory Health Insurance Fund
FMOH – Federal Ministry of Health
FSMAHCSD - Federal Service of Monitoring in the Area of Health Care and Social Development
Goskomstat – Gosudarstvenniy Komitet po Statistike (State Committee of Statistics)
GRP – Gross Regional Product
IMF – International Monetary Fund
NPM – New Public Management
PMHI – Programmes of Mandatory Health Insurance
RMHIF – Regional Mandatory Health Insurance Fund
SNA – System of National Accounts
UK – United Kingdom of Great Britain and Northern Ireland
UN – United Nations

List of models

Model 1. Model of our inquiry…………………………………………………………………………………..13
Model 2. The model of public management reform by Pollitt and Bouckaert…………………………….17

List of figures

Figure 1. Natural logarithm of GRP in six regions, 1995-2008………………………………………………..39
Figure 2. Trend in the number of doctors per capita in six regions, 1995-2008……………………………..52

List of tables

Table 1. Template table of observation analysis of politico-administrative variables………………31
Table 2. Template table of observation for independent and dependent variables…………………..36
Table 3. The means of GRP in six regions, 1995-2008……………………………………………………..40
Table 4. The mean number of doctors per capita in six regions, 1995-2008……………………………..52
Table 5. Correlation between GRP and the number of doctors per 10000 inhabitants in six regions, 1995-2008……………………………………………………………………………………………………53

Table 6. The mean of financing decentralization in six regions, 1995-2008…………………55

Table 7. Analysis of variances (ANOVA) – financing decentralization and number of doctors per 10000 inhabitants in six regions, 1995-2008………………………………………………………………………………55

Table 8. The mean of regulatory decentralization in six regions, 1995-2008…………………55

Table 9. Analysis of variances (ANOVA) – regulatory decentralization and number of doctors per 10000 inhabitants in six regions, 1995-2008………………………………………………………………………………56

Table 10. The mean of provision decentralization in six regions, 1995-2008…………………56

Table 11. The mean of steering decentralization in six regions, 1995-2008…………………56

Table 12. Analysis of variances (ANOVA) – steering decentralization and number of doctors per 10000 inhabitants in six regions, 1995-2008………………………………………………………………………………57

List of appendices

Appendix 1. Selected Russian legislative documents and policy papers………………………….68

Appendix 2. Data collection ……………………………………………………………………………70
Chapter 1. Introduction

1.1. The background of the problem

Different researchers worldwide state that during the period starting from the second half of the last century till nowadays, in various developed and developing states as well, there was a popular trend to make progressive changes in the structure, administration and management of their health care systems in the direction of decentralization (Arrowsmith & Sisson, 2002; Bonilla-Chacin, Murrugarra & Temourov, 2005; Cheema & Rondinelli, 1983; Bossert, 1998). The changes introduced into health care systems in the end of the XX century connected with decentralization trends bore many similarities across different countries, though, of course, various important differences remain.

Towards the end of the 1980s and early 1990s, a lot of developed countries “were in the grip of a new management style that demanded, if not the privatization of public services, the imposition of market relationships and tighter managerial control through decentralization” (Arrowsmith & Sisson, 2002). Developing countries were keeping pace in their desire to make significant changes in their public sectors. The increasing interest in decentralization arose there as well because of the disillusionment with the results of centralized planning, implicit requirements for new ways of managing social development programs, difficulties in administration from the center and willingness to improve the efficiency and quality of services (Bossert, 1998). In general, both types of the countries were counting on decentralization to make their health provision more efficient and to bring this area closer to the people, but the results achieved by them were “utterly unequal” (Saltman, Bandauskaite, & Vrangbæk, 2007). In some of the countries researches revealed significant increase in efficiency of public service provision, while in other countries the provision of such services began to suffer from some imperfections.

The process of decentralization in health care provision in Russian Federation was outright connected with the collapse of the Soviet Union. Until the late 1980s, the management of the health care system in the Soviet Union was vertical, in other words it was completely centralized. The Soviet Federal Ministry of Health (FMOH) regulated, managed and allocated resources throughout the system via each of the republics' ministries, including the Russian FMOH (Chernichovsky, Ofer & Potapchik, 1996). The Soviet health care system was wholly financed from general government revenues and services were provided free to all citizens (Tompson, 2007). There was no distinction between financing and provision since all facilities
were publicly owned and all medical personnel were employed by the state (private practice did not exist prior to 1987). The Union Ministry of Health determined the budget and relied heavily on quantitative production norms such as numbers of facilities, practitioners, and hospital bed days of care.

Despite apparent strong control in health care provision, already in 1980’s researchers revealed some drawbacks of the Soviet health care system. Under planned economy, the health care was characterized by underfinancing and inefficient allocation of resources, overcentralized state regulation of medical services providers and inefficient use of resources, slow improvement of quality and lack of responsiveness to consumers (Shishkin, 1998). Despite a doubling in the number of hospital beds and doctors per capita between 1950s and 1980s, the quality of care seriously declined. Mortality rate increased from 7.3 per thousand in 1965 to 10.3 per thousand in 1980 (Schepin, Semenov & Sheiman, 1992).

Political changes in 1987 decentralized management of the health care system, with the republics assuming primary responsibility for managing the financing and delivery of care. Nevertheless, deviations from the Union-level spending plans were relatively small (Schieber, 1993). One year later – in 1988 - in the framework of the experiment that took place in 3 Russian regions (“oblast””) – Leningradskaya, Kemerovskaya and Kuybishevskaya – the new model of health care financing, which made provision for several changes in existed system (e.g. the usage of new standards, long-term planning of financing depending on the workload of the clinic, system of internal mutual payments between clinics and hospitals for diagnoses and treatment received by patients) was introduced. The main purposes of this innovation included decentralization of health care administration, involvement of the new financial flows and stimulation of new ideas (Babko & Orekhovsky, 2005). Since 1990 the new economic mechanism, which was tested during the experimental period, has been introduced in nine more regions of Russia (Shishkin, 1998).

When the Soviet Union dissolved in 1991, the republics received real power and control, along with taxing authority. And as republics received control over political, legal and regulatory structures, both the financing and provision of care have been correspondingly decentralized to the regional and local levels (Schieber, 1993). Since 1991 a new system of mandatory health insurance has been put into place in Russia, with the majority of health care funding financed by a payroll tax and channeled through territorial funds. The legal base for the reform was the law "On Health Insurance of the Citizens of the Russian Federation" adopted in June 1991, and amended in March 1993. In general this reform focused on creating a private sector (delivery and
insurance), restructuring the payment scheme, and decentralizing health care administration and ownership of facilities.

The vertical administrative system within the framework of the reform was eliminated and segmented into distinct federal, regional and municipal systems. In the course of differentiation processes, delimitation of powers and competencies between federal, regional and municipal authorities, by virtue of the political situation, “was defined hastily and imprecisely” (Shishkin, 1998). Many authors describing the health care reform in Russia argue that “while the rhetoric of health care administration reform persists, the reform itself falls short of its goals because the health care administrative system is being pressured to change without providing with the necessary background and support” (Duffy, 1997; Tillinghast & Tchernjavskii, 1996; Shishkin, 1998). Therefore they claim that for the health care sector, “such fast-track reforms involving decentralization and privatization of the health policy sector actually mitigate against attempts to create a healthy population because they erode mechanisms already in place and working, weaken coordinated efforts for improvement, and make it difficult for a transforming society to address collective health needs”.

According to many scholars, as it was mentioned below, the impact of the decentralization in the case of Russia’s health care financing administration was negative and these scholars argue that during the years that followed the collapse of the Soviet Union Russia needed and still needs continued strong state intervention in the health care sector, at least as a temporary measure to ease the transition. Among the negative consequences of the decentralization in health care finance they are mentioning inequality of resource allocation between the regions (which was leading to local funding gaps), failure to assure free medical services in some regions (as it is mentioned in the Constitution), lack of accountability, excessive bureaucracy and disintegration of health care financing system (Babko & Orekhovsky, 2005; Shishkin, 1998; Shishkin, Chernets & Chirikova, 2003; Tragakes & Lessof, 2003).

Russian Federation, following the 1993 Constitution, comprises 89 administrative units or regions, which are of different kinds and whilst constitutionally viewed as of ‘equal status’, in reality are not all alike. They are extremely diverse in terms of their economic resources, geographical size and population, climate and dependency on the federal government. Therefore the challenge which Russian Federation faced making a step towards decentralization is widely acknowledged (Danishevsky, Balabanova, McKee & Atkinson, 2006).
Following up on the studies mentioned above, we would like to find out to what extent the process of decentralization in Russian Federation was indeed accompanied by the creation and reinforcement of inequalities in the health service provision between various Russian regions, and to find out to what extent the decentralization reform indeed influenced these trends connected with inequalities. We are going to pay special attention to the factors that preceded and accompanied the process of the reform and aim to find out what role did these factors play in the creation and reinforcement of the inequalities between the regions.

1.2. Research questions

The necessity of carrying out the health care provision reform was stated in Russian governmental documents more than once and attempts to improve the existing health care system were made by the political leaders in different periods. It is widely acknowledged that the reforms, which were carried out right after the collapse of the Soviet Union, have not achieved the intended results (Shishkin, 2006). Various authors and actors are emphasizing different problematic consequences of the these reforms, but practically all of them agree that the changes that happened in last decades have not only failed to improve the quality of health care provision but even worsened the situation in Russian Federation (Babko & Orekhovsky, 2005; Shishkin, 1998; Shishkin, Chernets & Chirikova, 2003; Tragakes & Lessof, 2003). A significant number of them blame the decentralization, which occurred after the collapse of the Soviet Union for these unfavorable results. They claim that this process have led to the disintegration of health care administration and financing system and have resulted in growing inequalities between various regions.

Initially the process of decentralization in Russian health care was supposed to improve the financing system of this sector and to adjust the provision of health services for the needs of concrete regions. According to the analysis of the political strategy, which was conducted under the auspices of the European Community, “decentralization was a necessary supposition for the modernization of welfare system in Russia” (Danishevsky, Balabanova, McKee & Gutkovskaya, 2001). Russian Federation as the largest county in the world, demands the management of a high quality on the local and regional levels more than any other country and the process of decentralization in health care which followed the collapse of the Soviet Union was exactly in the nick of time.

All this raises the question - why the process that was meant to “cure” the existing health provision, led to the “illnesses” of a larger scale? As there are many factors (Kimenyi &
Meagher, 2004; Cheema & Rondinelli, 1983), which should be considered in order to find the
answer for this question, we identified the main groups of them on which we would like to focus,
and our main research question that we pose in this paper sounds in the following manner:
Which socio-economic, political and administrative factors have led during the process of
decentralization in Russian health care in 1995-2008 to the creation of inequalities in the
health services provision between Russian regions (Moscow oblast’, Ivanovo oblast’, Tver’
oblast’, Chelyabinsk oblast’, Leningrad oblast’ and Samara oblast’)?

To answer the main research question, it is of an importance to provide a description of
the changes, which happened to be in Russian Federation, and specifically in the regions, which
we are going to choose for examination, concerning different levels and angles of the reform in
health care organizational system. Therefore the first sub-question is going to be formulated in
the following manner: Which socio-economic, political and administrative changes occurred in
regions Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara between 1995 and 2008?

The next sub-question is aimed to provide us with the picture of the changes in Russian
health care provision connected with creation of inequalities between different regions. For
answering the main research question it is important to learn – what was the extent to which the
regions started to be unequal in terms of health care services and what they were exactly unequal
in. Therefore the last specific question is formulated as following: To what extent did
inequalities in health service provision change in regions Moscow, Ivanovo, Tver’,
Chelyabinsk, Leningrad and Samara between 1995 and 2008?

To find the connection between the changes, occurred in the framework of
decentralization reform in Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara
between 1995 and 2008 and the inequalities that emerged between these regions, we are
formulating the last specific question: How were socio-economic, political and administrative
factors related to inequalities in health care provision in regions Moscow, Ivanovo, Tver’,
Chelyabinsk, Leningrad and Samara between 1995 and 2008?

As a next step we would like to represent the graphical model of our inquiry, where the
numbers correspond to the sub-questions that we have proposed. According to this model, in the
framework of the first question (number 1) the independent variables, which might have an
influence on the dependent variable (number 2), are being examined. As an answer for the
second question (number 2) we are going to focus on the examination of the dependent variable
– inequalities between the regions. And as a third step (number 3) we will find out if the trends connected with independent variable are related to the changes in dependent variable. We will return to the more precise description of this model in the theoretical and methodological chapter.

Model 1. Model of our inquiry.

1.3. Relevance of the research

The scientific problem of reforms in health care provision which include the decentralization is widely covered in the works of various authors worldwide (Arrowsmith & Sisson, 2002; Besley & Coate, 2003; Bonilla-Chacin, Murrugarra & Temouro, 2005; Bossert, 1998; Creese, 1994; Healy & McKee, 1997; Saltman, Bandauskaite & Vrangbæk, 2007; Smith, 1997). Russian case is also extensively studied by the number of authors, such as - Babko & Orekhovsky (2005); Balabanova, Falkingham & McKee (2003); Chernichovsky, Ofer & Potapchik (1996); Chernichovsky, Barnum & Potapchik (1996); Danishevsky, Balabanova, Mckee & Atkinson (2006); Schepin, Semenov & Sheiman (1992); Schieber (1993); Twigg (1998); Tulchinsky & Varavikova (1996); Tillinghast & Tchernjavskii (1996) and many others. But even though the number of researches that deal with the decentralization of health care administration (and Russian health care administration in particular) is relatively high, these studies are mostly placing an emphasis on the economic decentralization and do not go very deep in the aspects of policies, social structure or administrative issues.

In this research we are going to pay a specific attention to the administrative and political aspects of the reform in Russian health care on the level of Russian regions. As the topic of
decentralization in health care is very complex, we decided not to cover every possible aspect of the Russian case, but rather concentrate on particular issues - creation of inequalities between the regions, which are (as it is claimed by some scholars) caused by the decentralization reform. We are not going to include the level of municipalities in our analysis, but rather concentrate on more detailed examination of the regional level, in order to find out if the trends connected with the inequalities between the regions are connected with the processes occurring on the level of the regions as well. It will lead to the more explicit recognition of the problem, which was being mentioned not once by different scholars (Shishkin, Zaborovskaya & Chernets, 2005; Shishkin, 2000).

Also in this work we are going to cover a rather long period of time – from 1995 till 2008, therefore it will allow us to provide the readers with a more cohesive picture of changes, connected with the decentralization of health care administration, as most of the researches on the topic cover relatively shorter periods of time.

One more feature, which is distinguishing our paper among the existing ones on the topic of decentralization in Russian health care administration, is that we are focusing on the single possible effect of decentralization – creation of inequalities between regions. In most of the scientific works researches are speaking about the consequences of decentralization in general, not aiming on finding the reasons of the concrete ones on concrete levels of the country (inequalities between the regions for instance). In general, the number of the works, where the inequalities between Russian regions are precisely described is relatively small (e.g. the works of Chernichovsky, Kirsanova, Potapchik & Sosenskaya (1998); Duganov (2007); Shishkin, Zaborovskaya & Chernets (2005); Saltman, Bandauskaite & Vrangbæk (2007)), therefore our research is aimed at the contribution to this topic.

1.4. Structure of the research

The logic of the rest of our paper is developed as follows. The second chapter provides with the theoretical background for answering the research questions. Here we are discussing the scientific literature, which is relevant for the topic and which examines the definitions and the main aspects of the examined concepts. The first part of the theory that is going to be discussed in this chapter is the model of public management reform that will help us to examine the process of decentralization reform in Russian health care. As the main concept that we are dealing with is decentralization – as a next step we are going to analyze the literature on the definitions and typology of decentralization cases and the main theoretical views on the topic.
The third chapter is devoted for the discussion of the research methodology and research design. Here we are going to specify the strategy of our research, designate the timeframe of the research and provide the reasoning for it, describe the process of data collection and the methods of its analysis.

The fourth chapter contains the results of empirical analysis and its logic is developed as follows. We will start our analysis with providing the answers on the specific research questions basing on the theoretical assumptions, discussed in the second chapter. Therefore we will try to build the picture of the changes that happened in Russian regions within the framework of health care decentralization. Answering the sub-questions of our research will serve as a basis for finding the answer on the main question posed in this thesis. This chapter ends with the discussion of the factors, which could lead to the creation of inequalities between Russian regions during the process of decentralization in health care administration.

The fifth concluding chapter will present the main findings of the research. Here we are also going to give some recommendations concerning the factors, which should be considered in possible further reforms of health care provision in Russian Federation.
Chapter 2. Theoretical framework.

Researchers worldwide speak about the decentralization tendencies all over the world that sooner or later dominated the political course of reforms in their health care sectors (Arrowsmith & Sisson, 2002; Bonilla-Chacin, Murrugarra & Temourov, 2005; Cheema & Rondinelli, 1983; Bossert, 1998). They are connecting it to the different reasons: the impact of public management reforms in general, growing influence of globalization, difficult economic situation and other. The topic of decentralization in public sector, and in health care in particular, is widely covered in scientific literature. Nevertheless, in scientific literature we can find different arguments pro and against decentralization processes in public sector. In this part of the research we are going to cover the issues of defining decentralization, describe the types of decentralization, which are presented in scientific literature and talk about the process of decentralization reform. This chapter is going to serve as a basis for the further study and formulating the methodology chapter. The logic of the chapter is developed as follows.

With the reference to our first specific research question which is related to the changes in political, socio-economic and administrative organization, it is important to dissociate and describe the process of the decentralization reform. We are going to base the answer for this specific question on the model of public management reform, which is precisely describing the interrelations of the different levels of reform implementation, describes the algorithm of introducing changes into public sector and pays specific attention to several influential forces (socio-economic, administrative and political). As the strategy of the reform that we are dealing with is decentralization it is also very important to define the concept of decentralization and to describe the types of decentralization, as this concept has a big variety of interpretations in scientific literature (Dubois & Fattore, 2009). The chapter ends concluding implications for the methodological part of the research.

2.1. The theory of public management reform

The first theoretical tool that we are going to use in this research is the model of public management reform by Pollitt and Bouckaert (2004) (presented below), which is going to help us in the description of decentralization reform that happened in Russian health care and identifying the main dimensions on which we will focus in our work. Pollitt and Bouckaert (2004) designed it as a universal model for the description of the reform mechanisms in public sector. This model will help us to dissociate and describe the process of decentralization reform in the administration of Russian health care financing concerning different forces that are having influence on it. In this model the influence of different factors on the reform process is divided
into 3 groups: socio-economic forces, political system and administrative system, which is exactly corresponding to the formulation of our first specific research question.

Model 2. The model of public management reform by Pollitt and Bouckaert (2004).\(^1\)

The central part of the model of Pollitt and Bouckaert (2004), which is presented above, is the process of elite decision-making. The initiative of the most of reforms in centralized states according to the authors is going in the direction from top to down. But in the same time that initiative is also influenced by different forces and systems of the state, which can work in both driving and restraining change. First in this model we can observe the influence of socio-economic forces, such as global economic forces, sociodemographic change and the cluster of socio-economic policies which is influenced by first two. On another side political system also has a strong influence on the decision-making process. Here we can mention new management ideas, pressure from citizens and party political ideas, which are formed under the influence of first two. The third force influencing the decision-making is the administrative system, which in the same time works under the direction of elite, consists of three dependent steps: content of

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reform package, implementation process and the results achieved. The goal of reform, meaning
the results achieved, is affecting the strategy of reform.

Decentralization is being mentioned by the authors of the model as one of the dimensions
of organizational trajectories, which is rather often being chosen by the heads of the decision-
making processes as a mean of making possible more responsive and speedy public services, and
attuning the provision of these services to local and/or individual needs. This model has been
already applied before to the examination of the cases involving decentralization, such as for
instance comparative studies of NPM reforms in Finland and the UK, which discovered that
administrative decentralization was more preferred in UK whereas in Finland the form of
political decentralization was dominant (Kurunmaki, Lapsley & Melia, 2003).

Even though Pollitt and Bouckaert (2004) were not testing their model on Eastern Europe
or Asia, we assume that due to its universality and applicability to the cases of decentralization it
might be useful in investigating the process of decentralization reform in Russia and discovering
the nature of the implementation process and the forces, which had an influence on it. But we
strongly believe that if we want our research to benefit from this model, we need to make an
important adjustment to it. We strongly believe that in the case of studying the process of reform
in post-Soviet Russia, political and administrative forces should be united in a one cohesive
group of forces for the reasons that follow.

In post communist Russia regime relations were sometimes dominant over the political
community and ordered government – “dominated by a section of the Russian bureaucracy that
had matured for reform, its ideological programme came from liberal-westernizers, while
fragmented democratic movements acted largely as auxiliaries” (Sakwa, 1997). In other words,
while trying to implement such “democratic” type of the reform as decentralization,
administration within the country largely depended on the politicians in power and was at times
strictly accountable to them. It was not only the issue connected with personal leadership that
was distinguishing for Russian politico-administrative system. Because of the fact that these
leaders were able to control many sectors of political system in Russian Federation, it resulted in
the formation of specific institutional mechanisms, with the help of which these leaders could
influence regional situations (Grzejszak, 2000). Scholars even state that often the level of
innovativeness of the region depended on the finick of the regional leaders towards the
administration of the region.
In Soviet system there was no differentiation between the state and local (e.g. regional) administration, and the heritage of this system still persists (Matsuzato, 1998). Russian administrative sector is still far behind its Western analogues in the level of its development and independence from the political sector. Therefore in testing the model of Pollitt and Bouckaert (2004) in our case we would like to argue that political and administrative forces should be examined as inseparable (as you can see from the model of our inquiry, under the number 1). In our case, as we want to trace how the provision of public services was planned to be transformed from completely centralized to decentralized in the country, which “regime system is thus an archaic (and transitional, however long the 'transition' might last) political form, even if its functions might well be modernizing and forward-looking” (Sakwa, 1997). That is why we need to make such changes in the initial model in order to achieve the results, which will better reflect the realities of post communist country.

Concluding this section we should say, that the model of Pollitt and Bouckaert (2004) model helped us in formulating the main dimensions of the influential factors, on which we are going to focus in examining the reform of Russian health care administration. According to this model we identified two dimensions – socio-economic forces and administrative forces, which are being combined in our case with political. According to these dimensions, we are going to provide in the chapter devoted for the methodology with the definitions of variables that will be used for measuring the relevance of socio-economic and politico-administrative factors in the case of decentralization reform in Russian health care.

2.2. Decentralization

In this section we are going to focus on the definitions and the basic theoretical assumptions about decentralization. As we deal with such organizational trajectory of the reform, we consider it necessary to examine this phenomenon more carefully in order to precisely conceptualize it for the purposes of our research.

2.2.1. Definitions of the decentralization

Decentralization has been one of the core concepts in the field of public administration for decades and its definitions and typologies have flourished a lot. The concept was most actively debated in the context of such important historical periods as the years right after World War II, the period following the collapse of the Soviet Union and the boom of the NPM reforms (Dubois & Fattore, 2009). There is not uniform definition of decentralization, but mostly the existing definitions share some common points and can be classified and grouped in some
particular way. The typology of decentralization cases by Dubois and Fattore (2009) represents their analysis of the decentralization concept and provides with a scientific approach to the topic of the definitions of decentralization in the literature.

“While frequently left undefined (Pollitt, 2005), decentralization has also been assigned many different meanings (Reichard & Borgonovi, 2007), varying across countries (Steffensen & Trollegaard, 2000; Pollitt, 2005), languages (Ouedraogo, 2003), general contexts (Conyers, 1984), fields of research, and specific scholars and studies”.

(Dubois & Fattore, 2009)

Dubois and Fattore (2009) are classifying the definitions of decentralization, which they have found in literature concerning three main groups depending on the particular distinguishing elements: dynamics, content and receiving entity.

The first group of definitions of decentralization, which was distinguished according to the element of dynamics presented in it, divides the definitions in two dimensions – static and dynamic. The first dimension comprises such definitions that qualify decentralization as a particular “range”, “degree” or “extent”; therefore they present decentralization as a specific state of things or a situation. The second dimension rather sees decentralization as a “process”, for example as in one of the definitions, mentioned by the authors: “…the process of spreading out of formal authority from a smaller to a larger number of actors” (Ongaro, 2006).

The second classified group of definitions, built around the element of actual content, is dividing the definitions according five main dimensions: power, formal authority, responsibility, functions and resources. Authors state that these terms are overlapping and also that the division between the meanings of authority is clearly traced from various definitions of decentralization – some authors are meaning by this term the legitimate power, some - more informal means. The same situation can be observed concerning the term of power. Anyhow, the definitions are placing the emphasis in different ways, depending on which dimension is being stressed by its author. For example, Pollitt et al. say that decentralization: “…involves the spreading out of formal authority from a smaller to a larger number of actors”. Or as McGinn & Street (1986) argue: “…a process of transferring or “devolving” power and authority from large to small units of governance”. In the same fashion decentralization is often being defined in terms of responsibilities, functions and resources that are being decentralized. For example: “The transfer of formal responsibility and power to make decisions…” (Vrangbæk, 2007) or “the process of delegating power and responsibility concerning the distribution and the use of resources…” (Zajda, 2004).
The last group of definitions in this classification is connected with receiving entity. It is characterizing decentralization from the position of the entities, which are receiving the power (or authority, responsibilities etc.) due to decentralization processes. Here authors speak about five main dimensions found in the definitions, according to which the transfer of power is happening in behalf of: sub-national governments, larger number, periphery, autonomous entity or it is a vicinity to individual. This diversity in definitions is explained by the fact that different authors emphasize different aims of decentralization. Some of them speak about the changes, happening on the same level of administration, which include the transfer of responsibilities, for example, to sub-national governments. Others speak about the decentralization which involves the transfer of powers to autonomous (non-governmental) organization and especially noteworthy is the group of definitions, which is emphasizing the democratic character of this process – the shift in power, which brings the rights to participate in governing closer to the individuals, for example: “... shifting as much power as is compatible with the national interest to provincial levels of government and from provinces to the municipalities” (Roche, 1973).

In our opinion, the most appropriate for our research definition of decentralization, which looks at the decentralization from the position of public administration and management and is going to serve as an operational definition for our research, was given by Rondinelli (1986): “Transfer of responsibility for planning, management, resource-raising and allocation, and other functions from the central government and its agencies to field units of central government ministries or agencies, subordinate units or levels of government, semi-autonomic public authorities or corporations, or nongovernmental or voluntary organizations”. This definition is the most neutral in respect of underlined values and comprises several dimensions, described by Dubois & Fattore (2009) at the same time.

2.2.2. Main theoretical views on the processes of decentralization in public sector

The basic points about the advantages and disadvantages, the scope, the degree and other aspects of decentralization are laid in a number of theoretical assumptions discussed by scholars. Depending on how they define decentralization, they are emphasizing in their concepts different sides and dimensions of decentralization policies. In this specific chapter we are going to speak about 3 approaches to the concept of decentralization which are being the most popular in scientific literature – theories of political, administrative and fiscal decentralization (Schneider, 2003). The scholars, who are discussing these concepts, are pointing out both arguments for and

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against decentralization policies and we are going to discuss the crucial points from both perspectives in order to provide with a more comprehensive picture of each of them.

From the political point of view, the advocates of decentralization policies are numerous. They take a look on these policies mostly from the perspective of participation and assume that political decentralization is bringing power closer to the public and individuals and it is often associated with pluralistic and representative governing (Heller, 2001; Manor, 1995). The adherents of this point of view assume that if the power will be decentralized and more citizen participation will be assured – the more relevant for the local situation will be the decisions made by such government. Political approach to decentralization sees in this process the step towards better and more democratic governance.

On the other hand, arguments may also be put forward against political decentralization. The basic idea behind the centralization thesis is the classic theme of Thomas Hobbes in describing the need of a Leviathan. Nowadays some scholars still talk about the necessity of an external Leviathan (Carruthers & Stoner, 1981). Decentralization is sometimes said to be a threat to the principle of equality before the law in equal circumstances. It is argued that education standards, social security and taxes should be the same in every community. Another drawback of political decentralization, which is mentioned in scientific literature, is the reduced legitimacy because of lower turnouts at local elections and negatively perceived alterations in local government (Vries de, 2000). One more concern about the necessity of decentralization is the possible fragmentation and reinforcement of local divisions (Treisman, 1998).

Another category – administrative theories on decentralization – raises the questions about redistribution of authority, responsibility and financial resources for providing public services among different levels of government. For example, as it was mentioned above, decentralization by Rondinelli et al. (1986) is described as transfer of responsibilities for planning, management, and the raising and allocation of resources from the central government and its agencies to field units of the central government, semi-autonomous public authorities, regional authorities, or non-governmental, private or voluntary organization.

In the majority of studies on the topic of administrative decentralization, scholars are categorizing this process in three terms: deconcentration, delegation and devolution and each of them have its particular characteristics. These categories can be viewed in a framework of a continuum of administrative autonomy and this framework can be used for measuring the degree of decentralization (Cheema & Rondinelli, 1983). Deconcentration involves the least amount of
autonomy, delegation slightly more, and devolution the most. Deconcentration implies the dispersion of responsibilities from central government to sub national governments (it does not significantly change the autonomy of the entity that receives the authority). Delegation transfers policy responsibility to sub national governments that are not controlled by the central government but remain accountable to it. Finally, under devolution process, the central government allows sub national government to exercise power and control over the transferred policy (Schneider, 2003).

The main arguments against the administrative decentralization are following. First of all, it is argued that small communities are sometimes unable or unequipped to handle some complex problems, which they were assigned to solve after decentralization. In other words there is a lack of capacity of local government (Vries de, 2000). The next potential drawback of decentralization is the increasing risk of corruption because of the proximity of officials and politicians to clients and contractors. And one more possible inconvenience caused by administrative decentralization are the increasing costs for government, caused by raising number of elected representatives and other administrative staff (Oxhorn, Tulehin & Selee, 2004).

Very often decentralization is being connected with the questions of economic character and the number of theories, which are concerned with fiscal decentralization, is growing fast. Fiscal federalism theories dealing with decentralization focus on maximizing social welfare, which is portrayed as a combination of economic stability, allocative efficiency, and distributive equity (Schneider, 2003). The famous decentralization theorem of Oates (1972) is the example of classical theoretical assumptions about fiscal decentralization. It considers decentralization to be preferable when it comes to choosing the way to improve the provision and distribution of public goods. In its framework the decentralization of pure allocation functions is based on the assumptions that there are no interregional spillovers and that central policies are constrained to be uniform across the country (Oates, 1972). The drawback with a decentralized system is that local governments will neglect benefits going to other districts and thus local public goods will be underprovided in the presence of spillovers. The drawback with a centralized system is that it produces a ‘one size fits all’ outcome that does not reflect local needs. The arguments against fiscal decentralization also include possible lack of financial resources at the local level and reduced room for maneuver for national government in managing the economy (Shah, 1999).

We would like to admit that both types of arguments – for or against decentralization – may have some validity in concrete situations and that the theoretical background for the concept
of decentralization is very rich in classifications, proposed by the scholars. The way researcher is approaching decentralization largely depends on the aims of his investigation, and therefore in our case we want to pay specific attention to the aspects of decentralization we are focusing on and to choose the variables appropriate for the purpose of the research.

It is possible to connect each of the approaches to decentralization, discussed in this section, with the dimensions that we have defined in the section devoted for the model of public management reform. We can apply the characteristics of these approaches and theoretical views on them to political, administrative and socio-economic forces, which have an influence of the process of decentralization reform. Namely theories on political decentralization correspond to the political forces; administrative approach is suitable for describing and examining administrative forces; and the fiscal approach is suitable for investigating the influence of socio-economic factors. Therefore in the next chapter, which is devoted for the methodology of our research, we are going to use these approaches for choosing the variables that will help us to answer the proposed research questions. The pros and cons for each of these approaches will represent therefore the positive or negative effect of political, administrative and socio-economic forces. The theoretical assumptions about the effects of decentralization will be therefore tested empirically in the framework of case study. We will make use of them in explaining possible effects of socio-economic and politico-administrative forces according to the results we will achieve.

2.3. Conclusions for the chapter

In this sub-chapter we would like to summarize our findings concerning the theoretical background for this research. After getting acquainted with the model of public management reform of Pollitt and Bouckaert (2004), we found it to be a very useful tool for examining and describing the reform processes and the forces, which may have an influence during the implementation of various changes in public sector. This model allows us to use the forces, mentioned in it, as a basis for formulating the main dimensions, on which we are going to focus in examining the reform of Russian health care administration. But as we are dealing with a post communist country (and model of Pollitt and Bouckaert was not initially designed for the country with such history), we decided to introduce some changes to the model of reform and to combine political and administrative forces. Therefore the variables that will help us in the measurement of the influence of political, socio-economic and administrative factors will be derived from two dimensions – socio-economic and politico-administrative.
The next group of theories that we have discussed is connected with decentralization, its definitions and approaches to this concept. After the observation of the theoretical assumptions on the concept of decentralization, we can conclude that the topic of decentralization reform has a variety of reflections in scientific literature and the way decentralization is being conceptualized largely depends on the idea behind research and the purpose of it. In our opinion, the most appropriate for our research definition of decentralization, which looks at the decentralization from the position of public administration and management and is going to serve as an operational definition for our research, was given by Rondinelli (1986): “Transfer of responsibility for planning, management, resource-raising and –allocation, and other functions from the central government and its agencies to field units of central government ministries or agencies, subordinate units or levels of government, semi-autonomic public authorities or corporations, or nongovernmental or voluntary organizations”. This definition is the most neutral in respect of underlined values and comprises several dimensions of the typology, described by Dubois & Fattore (2009) at the same time.

After discussing the definitions of decentralization we spoke about 3 main approaches to the concept of decentralization – theories of political, administrative and fiscal decentralization (Schneider, 2003). These theories are providing with the possible negative and positive effects of each type of decentralization. We decided to connect these three approaches to the dimensions that we have formulated according to the model of public management reform. Theories on political decentralization can help us in examining political forces; administrative approach is going to serve as a basis for describing and examining administrative forces; and the fiscal approach is suitable for investigating the influence of socio-economic factors. As we are combining political and administrative forces, we are going to measure them with the help of common independent variables.

As the aim of our research is to find out which factors have led to the creation of inequalities between the regions, we are going to pay specific attention on the possible negative effects of each type of decentralization with regard to the results we will achieve. Politico-administrative and socio-economic dimensions are going to provide us with the independent variables, whereas inequalities are going to be treated as a dependent variable. In our research we are questioning – are decentralized units indeed more vulnerable in equity issues or not? Therefore we will try to trace to what extent the trends connected with independent variables are indeed leading to the reinforcement of dependent variable.
Chapter 3. Research methodology

Social research aims to find patterns of regularity in social life and its main purposes in order to complete this task are exploration, description and explanation (Babbie, 2007). Social affairs in general do exhibit a high degree of regularity that research can reveal and theory can explain. Our particular research is going to combine two of the main purposes – descriptive and explanatory, because in order to trace the factors, which were influential during the process of decentralization we need first to provide a description of what were the main processes, connected with this reform and the creation of inequalities, and second – we should try to find the causal explanations for the correlation of the reform aspects and the inequalities evolved between the regions.

3.1. Research strategy and case study

Our research is going to be the one of unobtrusive type (Babbie, 2007), as we are going to study the processes, which happened some years ago and not going to have any influence on them. We are going to follow the strategy of observation method, combining it with content and secondary analysis. In this section we are going to operationalize the steps of our inquiry, which are mentioned in the Table 1, and to identify the variables that are going to help us in measuring the effects of the factors, which could lead to the creation of inequalities between the regions Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara between 1995 and 2008. Also we are going to define here the dependent variable, which will serve for the measurement of inequalities that arose between the regions, mentioned above. But first we would like to stop on the topic of case selection and time framework, in order to explain why we chose these particular regions as the units of our analysis and why the period of time that we estimated is defined as it is.

Case selection

The strategy of our research implies the usage of samples, which are going to serve as units of analysis. In the framework of our strategy the process of sampling is corresponding with the purposive (or judgmental) type, which belongs to the group of nonprobability sampling techniques. The main characteristic of this type of sampling is the fact, that the units, which are going to be examined, are selected on the basis of the researcher’s judgment about their representativeness and usefulness and not chosen randomly (Babbie, 2007).
According to this logic we have chosen for the case study six Russian regions – three from the Central Federal district (Moskow oblast, Tver’ oblast and Ivanovo oblast), two from the neighboring districts – Leningrad oblast (Northwestern Federal district) and Samara oblast (Volga Federal district) and one from Urals district – Chelyabinsk oblast. This selection of the samples is predetermined by the initiative to trace the factors, which had a specific influence during the process of decentralization in health care, in the regions which are more or less close to each other geographically and environmentally, but at the same time some scholars state that there were revealed significant differences in the organization of health care provision and the fulfillment of the guarantees of provision with such services (Shishkin, 2010; Danishevsky, K., Balabanova, D., McKee, K., & Gutkovskaya, L., 2001).

We are going to limit ourselves with the region level and are not going to go deeper to the level of local municipalities. Our aim will be to check if the decentralization (or recentralization) from federal to regional level had some impact on the changes connected with the inequalities between regions or the process of decentralization on these levels did not cause any problems connected with equity.

**Time framework**

As we are aimed to understand causal processes that occurred over the exact period of time we chose time series analysis as a time framework for our research (Babbie, 2007). The chosen timeframe for the research is being limited between 1995 and 2008. Initially we wanted to have a more extended timeframe, and to define as a starting point the year 1988, when the first attempts of reforming health care financing mechanisms were made. These experiments predetermined the beginning of bigger changes and reforms towards the decentralization of health care system and therefore we wanted to include this period in our analysis. But unfortunately the lack of official data for the period before 1995 forced us to limit the timeframe to the extent mentioned above.

Moreover we faced some difficulties in obtaining the data for some specific years, included in our time framework – especially for the period between 1996 and 1999 was very difficult for Russian economy, as it was the period when the financial crisis was imminent and finally the financial situation leaded to the economic contraction of 1998. After speaking with one of the representatives on the staff of Russian famous legislative and data portal – Garant – we got to know that the data for these years has been poorly classified and that the access to it is forbidden for individual study purposes. Therefore the time framework of our analysis is
corresponding to the interrupted time series and we have imputed the missing data by linear extrapolating trends within regions.

**Research strategy**

As it was mentioned in the theoretical chapter, we decided to conform to the model of Pollitt and Bouckaert, enhancing it according to the specificity of our particular study, in defining the main dimensions of our study – socio-economical and politico-administrative forces. These dimensions, as it was mentioned in the theoretical chapter, also partly correspond to the three approaches to the concept of decentralization, which are being the most popular in scientific literature – theories of political, administrative and fiscal decentralization (Schneider, 2003). With regard to the core characteristics of decentralization the main question was always whether decentralized units are primarily political, administrative or fiscal entities (Saltman, Bandauskaite, & Vrangbæk, 2007). We are going to identify the independent variables, which will help us in our particular the study, basing on the dimensions, which we have chosen in the previous chapter, and according to the knowledge of the specificity of different types of decentralization.

As it was stated by some of the scholars that were investigating the processes of decentralization – any approach to study such type of the reform in health care sector can only capture the part of the whole, because the topic is too huge to cover every aspect of health system (Saltman, Bandauskaite, & Vrangbæk, 2007). Therefore in our study we are going to be guided in the process of choosing the independent variables by our own explicit recognition of the problem.

**Socio-economic forces**

The effects of socio-economic forces in our research are going to be indicated with the help of the natural log of Gross Regional Product (GRP) in each of the regions - Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara - between 1995 and 2008. Gross product for a region is conceptually the same indicator as the national estimates of gross domestic product. It is representing the value of all goods produced for final sale in a certain period and originates from a particular geographic region such as a metropolitan area, state or nation. Gross product is defined as the market value of all output minus the value of intermediate production expenses. Alternatively, this measure can be computed as the sum of payments to labor, capital and other factors applied in the area under examination (Gilmer, 1995).
Since 1991, the Russian official statistical service, Goskomstat, has initiated measures to improve the statistical data system at macroeconomic level in accordance with SNA standards. Since then not only Russian authorities, but also the UN, IMF, World Bank and other international institutions use the Russian GRP for analysis and monitoring, and publish it in their reports. Therefore we consider GRP to be an approved variable for the measurement of changes in the socio-economic situation in the regions. GRP is being measured in a local currency and consequently our findings will be presented in rubles (Ponomarenko, 1998).

**Politico - Administrative forces**

As we have connected two types of the forces under the framework of one dimension, our aim in choosing the variables for measuring the influence of this dimension was to find the ones that will reflect possible local changes in the style of governance (did the tight relations between politicians in power and regional administration change and did regions receive more autonomy or not). Institutional arrangements in the country are the subjects that are changing over time based on political and administrative decisions. Institutional structures assign specific responsibilities and set boundaries for decision-making. Therefore for us it is relevant to analyze developments in political and administrative authority structures including the degree of decentralization in order to get the right idea of the arena for the health system actors and the functioning of the system (Saltman, Bandauskaite, & Vrangbæk, 2007).

Assuming that some things could change in regional administration of health care services after the collapse of the Soviet Union and therefore lead to different results of reform in different regions, we decided that we should find out – if and to what extent the level of decision making and its execution faced some changes on the level of Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara regions between 1995 and 2008, in other words what was the degree of decentralization. As it was stated by the scholars that investigated the processes of decentralization in health care, decentralized intergovernmental structure does not itself necessarily imply actual decentralization of decision-making responsibility. Therefore we need to take into account the functions and responsibilities allocated to sub-national level and to investigate the consequent lines of accountability (Saltman, Bandauskaite, & Vrangbæk, 2007).

A number of scholars have addressed the issue of how to measure the degree of decentralization. In our case we are going to conform in choosing the variables and suitable indicators with the public administration approach, which was first introduced by Rondinelli and Cheema for evaluating broad processes of decentralization in developing countries (Rondinelli
and Cheema, 1983). This approach corresponds to the ideas provided by the theories on administrative decentralization. As it was mentioned in the chapter devoted for theoretical framework, in the majority of studies on the topic of administrative decentralization scholars are categorizing this process in three terms: deconcentration, delegation and devolution. In public administration approach a central issue has been to define the appropriate levels for decentralizing functions, responsibility and authority within these three categories (there is also an additional – privatization category, which we are going to exclude from our analysis, as it is not presented in the majority of works, which are serving as a theoretical framework for our thesis).

In our analysis we are going to find out if the process of decentralization in chosen regions faced a transition from one form of administrative decentralization to another with regard to different functions. These functions are going to include financing, regulatory, provision and steering. Under financing we are going to check if the regions have right to raise health care funds. Under regulatory functions we will check if the regions possessed the right for planning activities. Provision functions in our case will be studied in connection with ownership of medical facilities. Steering refers to the right of monitoring in health care sector and is functioning through a variety of different coordination mechanisms (rules, regulation, contracts, agreements, monitoring and sanctioning).

We are going to check if in the defined time framework Moscow, Ivanovo, Tver’, Leningrad, Chelyabinsk and Samara regions received or lost some of responsibilities connected with these functions. We assume that the changes connected with the degree of decentralization may resemble, as the initiative of the reform was brought according to the “top-down” model. Each type of decentralization of responsibilities from federal to regional level will be worth 1, 2 or 3 points (deconcentration, delegation and devolution accordingly). If the region was not having responsibilities connected with specific function initially or lost it due to recentralization it will be worth 0 points. The role of indicators for these variables is devoted to the statements in the legislative and normative documents of the regions, where the redistribution of responsibilities from one level of authority to another is reflected. More precisely the coding that we have used is described in the section devoted for the data collection, which follows. The sample of the observation for the politico-administrative variables is presented below (Table 1).
### Characteristic of dependent variable

A major concern with respect to the appropriate roles for national and local governments is the maintenance of equity between districts under systems that are extensively decentralized. Many studies have found decentralization increases inequalities in distribution of and access to health care. Even if financing were to be distributed equitably, local decision-makers may choose to use resources in a way which could increase or decrease inequity in access to care. Inequalities between areas may also result from different capacities to use resources efficiently (Saltman, Bandauskaite, & Vrangbæk, 2007).

Inequalities in health services provision between the regions of Moscow, Ivanovo, Tver', Chelyabinsk, Leningrad and Samara between 1995 and 2008 are going to be measured with the help of the number of qualified doctors per 10 000 people in each region. This is just the one way of measuring the inequalities from the variety of possible variables, but we decided to choose it, because in our opinion it reflects the possibility of citizens to receive qualified medical help outwardly. Other possible variables may have in our opinion different drawbacks, for example, the number of bedspaces in the region (which is a quite popular measure used in various statistics), does not necessarily measure the availability of professional service, in the framework of which the treatment for the patient will imply occupying this bedspace.

In the times of Soviet Union there was a state system of allocation of the graduates of medical institutions for positions in different regions of the country, which was aimed at eliminating of inequalities between cities and villages. Nowadays there is no such system and therefore this variable allows us to check how well the regions deal with the provision of healthcare professionals and therefore assure qualified medical help to the citizens.
3.2. Data collection

Given the specifics of the topic of our inquiry and the strategy of research, the data for this paper is going to be limited to the secondary sources. Among these artifacts are the constitution of Russian Federation, national and sub-national laws and other legislative documents on the provision and organization of health care, legislation on the topic of local governance organization, existing statistics relevant for the topic and other documents, which we are going to name and describe more precisely diving them to specific groups. These groups are: statistical (in other words – quantitative) data and qualitative data.

Quantitative (statistical) data

This type of data is going to be needed in order to find the significance of GRP and the number of qualified doctors per capita for each region. The relevant data of this type will be collected from the following official sources:

GRP:

1. Statistical database on Russian economy of the National Research University – Higher School of Economics;

Number of doctors per capita:

1. Statistical database on Russian economy of the National Research University – Higher School of Economics;

Qualitative data

Qualitative data is essential for the examination of our second group of independent variables related to the degree of decentralization – financing, regulatory, provision and steering functions. Aiming to find the data describing these variables in the legislative documents we will pay attention to specific words, which we will associate with each of these variables and which will help to indicate the changes connected with them. We are going to use the following coding for each of the variables:
1) “Financing”: we will indicate the changes connected with this variable by tracing in the legislative documents the information connected with the “raise of health care funds”. In Russian language this process is usually mentioned as “accumulation of financial resources” (“аккумулировать финансовые ресурсы”). The lowest level of decentralization – deconcentration (numerical code – 1) is given when the actor, responsible for the raising of health care funds in the region is being the representative of central government in the region. The next level of decentralization of financing – delegation (numerical code – 2) is given when the responsibilities for fund raising are transferred to the semi-autonomous public regional authorities (they have the right to raise health care funds, but it is stated that they are accountable to the central government). The highest level of administrative decentralization – devolution (numerical code – 3) is given when the regional government can fully exercise its power and control over the raising of health care funds. The numerical code 0 can be given if the raising of health care funds is not included in the responsibilities of regional authorities at all.

2) “Regulatory”: with regard to this variable we will search in the legislative documents for the documented transfer of responsibilities to the regional (or from the regional) level connected with “planning activities”, “programmes”. Planning activities will be understood according to the following definition: “A process what appraises the overall health needs of a geographic area or population and determines how these needs can be met in the most effective manner through the allocation of existing and anticipated future resources” (Thomas, 2003). So these activities include the establishment of specific “programmes” (“программы”), emphasizing the importance of the specific type of health care, the struggle with the specific type of disease, or planning the provision of health services. Therefore we will code the degree of decentralization for this variable in a following way – deconcentration (numerical code 1) is given when the programme for the region is representing by itself the analogue of federal programme and conforming to the federal standards; delegation (numerical code 2) is given when the region may launch specific regional programmes, but the national programmes are still obligatory to implement as well; devolution (numerical code 3) is given when the region is fully responsible for launching specific health care programmes and planning within its boundaries; numerical code 0 is given when the planning for the region is made on the different than regional level.
3) “Provision”: with regard to this variable we will examine the documents concerning the following verbal indicators - “ownership of medical facilities”, “subordination” (“собственность”). Here the degree of decentralization is going to be coded in a following manner: deconcentration (numerical code 1) is given when the ownership of facilities belongs to the representative of central government in the region; delegation (code 2) is given when regional authorities are sharing the ownership with the centre; devolution (numerical code 3) is devoted for the situation when the regions have rights of owning the medical facilities and are fully responsible for them. Numerical code 0 is given when the right for ownership of medical facilities belongs to the level different than regional.

4) “Steering”: with regard to this variable we are going to examine the documents concerning such verbal indicator as the “monitoring of the quality” in health care sector of the regions, in other words the control of the compliance of health care with the standards of quality. We have faced some difficulties in interpreting the term of “monitoring” into Russian language. Usually as the equivalent of this word Russian legislature uses the word “control”, which is having a bit different overtone. The term “monitoring” has appeared in Russian normative lexis quite recently to replace the word “control”, which is occasionally being interpreted as the echo of communistic times. As we are dealing with the period till 2008 we are going to use the words “control of the quality” (“контроль за качеством”) as a main verbal indicator for this variable as its main meaning – assessment of the compliance of health care with the standards of quality remains the same. The coding is going to be the following: deconcentration (numerical code 1) – the rights of monitoring belong to the representative of the central government in the region; delegation (numerical code 2) – these rights belong to the regional authorities, but they are accountable for this processes before central government or use federal standards; devolution (numerical code 3) – the right of monitoring in health sector belong solely to the regional authorities, which use their own standards. Numerical code 0 is given when the rights of the monitoring of health care services’ accordance to the quality standards do not belong to the regional level.

Qualitative data for the research will be obtained from:

1. Legislative documents of national and sub-national (Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara regions’) issue concerning the decentralization in health care;
2. Various policy documents on the reorganization of health care system;
3. Historical data on the reform in Russian health care;
4. Also special attention will be paid to such secondary data as the researches on the inequalities between the regions in the provision of health care services.

To make a next step in our research we are going to elaborate the process of data collection according to the independent and dependent variables respectively. This will help us to specify the tasks and provide a basis for further analysis of the data. Within this process we identified the main theoretical background relevant for each of the variables and the quantitative and qualitative data that will explain them. The results of this process can be found in Appendix 2.

3.3. Analysis of the data

Within this sub-chapter the focus is placed on the methodological tools, which are used for the analysis of the collected data with respect to the proposed research questions. As a first step of our inquiry according to the tasks provided by the first specific research question we are going to make use of the method of content analysis, in the framework of which we will examine particular social artifacts and find out the relevance of independent variables for our case study. As a next step, an inquiry on the relevance of dependent variable is conducted. In order to answer the main research question we will need to appeal to the method of correlation analysis to find the relations between independent and dependent variables. Correlation analysis is going to be conducted with the help of the table presented below; on its basis we will make the graphics that will reflect the development of each variable (independent and dependent) over time. We will trace if there are specific trends connected with independent variables which accompany the trends of dependent variable.

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3 The list of the main documents used in the research in presented in Appendix 1.
As a next step we are going to describe the process of analysis according to the proposed specific and main research questions.

1) *Which socio-economic, political and administrative changes occurred in regions Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara between 1995 and 2008?*

   In order to answer this specific question we are going to conduct content analysis of the relevant documents elaborating it according to the specified variables. This part of analysis corresponds to number 1 in the model of the steps of our inquiry. Within this part we are going to trace the relevance of the independent variables of each of the two dimensions that were defined earlier and measure these variables. The measurement of the GRP will be done by taking its natural log. The graphs will represent the results. The measurement of the degree of decentralization will be done with the help of the analysis of variance (ANOVA). Degree of decentralization consists of several variables, which are given numerical coding from 0 to 3 (meaning that the absence of decentralization in favor of regions is given the lowest score – 0, and 1, 2 and 3 points correspond accordingly to deconcentration, delegation and devolution types of decentralization).

2) *To what extent did inequalities in health service provision change in regions Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara between 1995 and 2008?*

   In order to answer this sub-question we are going to conduct a secondary analysis of existing quantitative data on the topic. Measuring the dependent variable (the second step in the model of our inquiry), which is defined as the number of doctors per capita (per 10 000 people), is going to help us in discovering the main trends in the regions connected with inequalities in

<table>
<thead>
<tr>
<th>Region/Year</th>
<th>GRP</th>
<th>Degree of decentralization</th>
<th>Number of doctors per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moscow - 1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moscow - 1996</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Moscow - …</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ivanovo – 1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ivanovo - …</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Template table of observation for independent and dependent variables.
health care provision. This measurement will be done with the help of the graphics, which represent the linear trends in the regions.

3) How were socio-economic, political and administrative factors related to inequalities in health care provision in regions Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara between 1995 and 2008?

In this part of analysis we will calculate the correlation between independent variables and the inequalities between the regions as a dependent variable. This will help us to find out which changes in the value of independent variables are associated with changes in dependent variable.

Therefore the answer on our main research question (Which socio-economic, political and administrative factors have led during the process of decentralization in Russian health care in 1995-2008 to the creation of inequalities in the health services provision between Russian regions (Moscow oblast’, Ivanovo oblast’, Tver’ oblast’, Chelyabinsk oblast’, Leningrad oblast’ and Samara oblast’)?) is going to be based on the correlation analysis of the data found on different regions during the process of content analysis, which was conducted with respect to sub-research questions.

3.4. Conclusions for the chapter

In this chapter we discussed the strategy of our research and defined the methodological approach that we are going to use in order to answer the research questions. The proposed timeframe of our study is defined as a period from 1995 till 2008 and using the purposive strategy of sampling we selected six regions, which will be studied in the framework of the research.

Also in this part of the thesis we have defined the strategy of the data collection, selected the main data sources and explained the proposed approach to its analysis. As a main strategy of our inquiry we have chosen the logic of observation methods and decided to combine it with the methods of content and secondary analysis. The answer for the main research question will be based on the correlation analysis of the means, obtained in the framework of answering the sub-questions of the research.
Chapter 4. Case study

This chapter is devoted for the empirical analysis of the changes in socio-economic and politico-administrative factors in six Russian regions – Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk – which occurred during the period from 1995 till 2008, and the changes connected with the inequalities in health care provision between these regions in a chosen time framework. In this chapter the answers for our three sub-questions are being provided.

Aiming to answer our first sub-research question we are going to make several steps in our analysis. First we will present in graph the results of taking a natural logarithm of GRP for Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk within the chosen time framework. And as a next step for answering the first sub-question, we will conduct the analysis of variance (ANOVA) of the politico-administrative variables – degree of decentralization of the four chosen functions of health care administration: financing, regulatory, provision and steering.

The answer for the second sub-question will be based on finding the linear trends for six regions between 1995 and 2008 connected with the number of doctors per capita. Here we are aiming to find out what was the extent to which the chosen regions were unequal concerning the provision with the qualified specialists.

Next, we are conducting the correlation analysis, in order to find out if there are the changes in independent variables, which could be associated with the changes in the inequalities between the regions. And finally we formulate our conclusions concerning the factors which should be taken into account in order to prevent the creation of inequalities between the regions concerning health care provision.

4.1. Examination of possible influential forces

In this part of the chapter we will trace the changes in independent variables and find out what were the main trends connected with the socio-economic and politico-administrative reforms on the level of six Russian regions – Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk between 1995 and 2008.
4.1.1. Measuring the effects of socio-economic forces

GRP

Within this section we are going to provide the results of our measurement concerning the variable, which we have chosen aiming to trace the changes connected with the socio-economic forces. The measurement was done by taking the natural log or GRP in Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk in the period from 1995 till 2008. The data for this measurement was obtained from Statistical database on Russian economy of the National Research University – Higher School of Economics\(^4\) and Federal State Statistic Service of Russian Federation\(^5\) and we have imputed the missing data by linear extrapolating trends within regions. The results of our measurement are presented in the graphic (Figure 1).

![Trend in GRP in different Russian Regions, 1995-2008](image)

**Figure 1. Natural logarithm of GRP in six regions, 1995-2008.**

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\(^4\) [http://www.hse.ru/](http://www.hse.ru/)

According to the Figure 1, we can observe that the difference between the regions was practically the same during all the period, which is being studied - GRP in each region was exhibiting exponential growth during the period from 1995 till 2008.

The highest GRP belongs to Moscow region and even though this region is separated from the city of Moscow (as it is a city with federal status), we can see that geographical proximity to the capital is having its influence – industrial output of the region is on the second place after the city of Moscow. Close to the results of Moscow region are the trends in GRP in Samara and Chelyabinsk regions. Historically these regions were also on the top of industrial hierarchy: Samara region is famous for its mechanical engineering (and especially automotive industry) and metalworking production sectors; Chelyabinsk region is the undisputed leader in iron industry.

The lowest GRP is being observed in Ivanovo region. Even though this region in situated in the Central district, not far from Moscow region and the most significant industry of Ivanovo – rag trade – is being an integral part of Russian economy (32, 8 % - the highest amount in Russian Federation), we can observe that the GRP trend is lagging behind the performance of other regions that we have examined. A bit higher is the result for Tver’ region and Leningrad region shows fairly average results of natural log for GRP. Both of these regions are having quite developed industry sectors and their economical situation is above average.

In general the results are not showing any specific extremes as we can see from the results of standard deviation for the mean of GRP in six regions (Table 3). According to the Table 3, the most significant changes occurred in Moscow and Leningrad regions and the least in Ivanovo region.

<table>
<thead>
<tr>
<th>Region</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelyabinsk</td>
<td>11,9</td>
<td>14</td>
<td>1,1</td>
</tr>
<tr>
<td>Ivanovo</td>
<td>10,0</td>
<td>14</td>
<td>0,9</td>
</tr>
<tr>
<td>Leningrad</td>
<td>11,2</td>
<td>14</td>
<td>1,2</td>
</tr>
<tr>
<td>Moscow</td>
<td>12,5</td>
<td>14</td>
<td>1,2</td>
</tr>
<tr>
<td>Samara</td>
<td>12,1</td>
<td>14</td>
<td>1,0</td>
</tr>
<tr>
<td>Tver</td>
<td>10,7</td>
<td>14</td>
<td>1,0</td>
</tr>
<tr>
<td>Total</td>
<td>11,4</td>
<td>84</td>
<td>1,3</td>
</tr>
</tbody>
</table>

Table 3. The means of GRP in six regions, 1995-2008.

Concluding this section, we would like to state that according to the measurement of the socio-economic variable, all of the six regions are exhibiting exponential growth in the mean of GRP during the period from 1995 till 2008 and the results of standard deviation are not differing explicitly.

4.1.2. Measuring the effects of political and administrative forces

Firstly, in this section we will first describe the process of analysis of the legislative documents, which we have conducted. Next we will discuss our findings concerning each of the variables – financing, regulatory, provision and steering functions.

Analysis of the documents

The development of the brand new Russian legislative base for the health care sector began in the late 1980’s when the reformers, who came to the power in the state, liquidated the vertical administrative relations as they existed in the health care sector and stimulated the decentralization processes. In this section we will provide the analysis of the legislative documents of different levels (federal and regional), in which’s framework we measured the effects of the politico-administrative independent variables in the period from 1995 till 2008.

Legislative documents, which are forming the legal base of Russian health care in the period, which is being studied, can be in general divided into several groups (Putilo, 2002):

1) The first level of Russian health care legislation is the federal “Principles of the health care legislation of Russian federation”, issued in 1993 and amended several times is later years7. In the “principles” it is stated that the legislation of Russian health care comprises both legislative and subordinate acts of federal and regional issue. Acts of the local government are not mentioned in the “principles” as an independent source, but a lot of documents in the period from 2003 till 2008 connected with health care sector were being issued on this level as it is not contradicting the federal law № 131 “On common principles of organization of local government in Russian Federation” (2003)8.

2) The second level is composed by the legislative documents of federal level, which are regulating specific areas of health care. Compliance with the norms, included in these

documents, is obligatory on the whole territory of Russian Federation. Therefore regional laws, which are sometimes duplicating the main ideas of the federal laws, are mostly just specifying these ideas according to the regional practice of law enforcement. In exclusive competence of Russian Federation are such issues connected with health care as the usage of narcotic drugs and establishment of the bases of federal politics and federal programmes in the area of social development.

3) The third level is composed by the regional legislative documents concerning health care. The constitution of Russian Federation of 1993 provides the regions with legislative initiative in the areas of joint competence and out of the competence of Russian Federation. Regional laws on the regulation of health care sector can be subdivided into several groups according to their subjects and methods of legal regulation:

- General laws: mostly their subject is common with the “Principles of the health care legislation in Russian Federation”;
- Laws, which are complementing federal laws and have their analogue on the federal level;
- Laws, which are complementing federal laws, but not having analogue on the federal level;
- And the special group of laws is composed by the documents about the area of social protection of the parties of health care relationships.

The situation with the legislative documents connected with the area of health care in the regions is very different. Some of the regions did not have any legislative documents on health care prior to 2001 and even later (Putilo, 2002). In the absence of specific laws on the topic of health care on the regional level, the regulation of this area on the regional level was carried out in accordance with federal laws and statutes of the regions. In general, as it is stated by the scholars investigating Russian health care legislature, the fact that most of the issues of regional health care are regulated by federal laws is not a drawback of Russian legislative base. As for our case it has its specific meaning, which follows.

Examining the laws, that are regulating the functions of regional health care authorities, we have found that the level of decentralization of every chosen function (brought by the federal legislative initiatives) was initially the same in all of the cases. The only differences can be traced in the activity of regional authorities in issuing legislative documents that are specifying

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the legal regulation of these issues on the regional levels and regional programmes. Some regions took a more serious approach for the legislative activity and some continued going with the flow and being regulated mostly by the federal laws. That means that the degree of decentralization in the period, which is being studied, was consistent for all the regions. All the changes concerning the degree of decentralization of the functions that served as independent variables were happening in all of the six regions simultaneously, according to the federal initiative. The changes in the legislative base of regional health care concerning these variables were made only for the specification of the legal regulation.

In the following sections we are going to provide an analysis of each of the variables and to describe the distribution of the responsibilities concerning each of them, which was justified by the legislative documents in the period between 1995 and 2008.

**Financing**

The basic issues connected with financing of the health sector in Russian Federation are entrenched in such federal laws as “Principles of the health care legislation of Russian federation” (1993), “On health insurance of the citizens of Russian Federation”¹⁰ (1991) and the “Programme of state guaranties for the provision of free medical care for the citizens of Russian federation”¹¹ (each year, beginning from 1998). According to the “Programme of state guaranties” every region of Russian federation is obliged to issue the regional version yearly and to implement it.

As we have operationalized this variable as an ability of the regional authorities to raise funds for the regional health care provision, we were analyzing the documents aiming to find at what level this kind of responsibility was performed.

We have found that in the “Principles of the health care legislation of Russian federation” (1993) it was stated that the sources for health care financing are:

- The means of the budget of Russian Federation, budgets of the republics in its structure, and the budgets of local Congresses of People’s Deputies;
- The means of state and social organizations (unions), enterprises and other economic entities;


Personal means of citizens;
Voluntary and charitable contributions;
Security yields;
Bank loans (and loans from other creditors);
And other sources not forbidden by the law of Russian Federation and the republics in its structure.

The independent health care funds and the funds of medical insurance, according to the law, are being formed from these sources; therefore the financial resources of state and local health care systems and the financial resources of the state system of compulsory health insurance are being formed on the basis of these sources as well. In the next section we will describe more precisely how exactly the responsibilities for raising health care funds were organized in the framework of the reform.

The implementation of decentralization reform with connection to the financing of health care and raising funds for the needs of the sector is largely connected with the federal law "On health insurance of the citizens of Russian Federation" (1991), according to which in 1993 Russian authorities implemented a new structure to the system of Russian health care – the Federal Mandatory Health Insurance Fund (FMHIF). At the same time in 86 from 89 constituents of Russian Federation regional departments of the Fund were established (RMHIFs). Therefore the decentralization of previously centralized funding was implemented, with the majority of health care funding financed by a payroll tax and channeled through territorial funds.

The new system faced several changes and transformations, which we will describe in course. The payroll taxed after the enforcement of the law were fixed as following – 0.2 % were going to the FMHIF and 3.4% - to each of the RMHIFs. RMHIF was raising the funds and contracting health insurance companies, which were in their turn receiving money from the RMHIF and paying to the hospitals and other medical facilities. Each RMHIF could have several departments, depending on the size of the region. The financing of medical facilities from the behalf of insurance companies was carried out according to the Programmes of Mandatory Health Insurance (PMHI). In spite of changes in the method of health care revenue generation, the functional outcome of such policies was that the regional government still relied on the center concerning some supplies (e.g. vaccines and medications), therefore the financing of the sectors could not be provided solely by the insurance funds and therefore be the responsibility of only regional level. So we can conclude that on this stage of reform the degree of
decentralization corresponded to the delegation type – regional fund raising had a semi-autonomous nature, it was still dependent in some critical situations on the central level.

In practice such changes did not make the system of health care financing more comprehensible and more suitable for the needs of the region, but only made it more complex and slow. Instead of old system of financing – “taxation – budget – medical facilities” there was established a system “raising funds at the RMHIFs – distribution between the departments of RMHIF, allocation of some part to the FMHIF – insurance companies – medical facilities”. Therefore, the situation has lead to different problems, such as shortage of funds coming in the end to the medical facilities, danger of the inflation (as insurance companies had their accounts in investment banks) and the enforcement of bureaucratization (as the work force of health care financing organizations faced a great increase).

After facing these problems the next step of the reform was the decrease in financing of insurance companies by the shift to financing according to the estimates of actual charges. According to this change RMHIF was transferring finances to the insurance companies only for the actual need and the rest was transferred straight to the medical facilities. It allowed to cut the expenses for the bureaucracy, speed up the processes of transferring financial means to the medical facilities and to have more control of insurance companies’ expenditures. In 1999 the new federal law “On the principles of mandatory social insurance”\(^\text{12}\), which was comprising the norms for the health insurance as well, took effect. According to this law, the right to provide with mandatory health insurance was not longer belonging to commercial organizations. Therefore insurance companies became just one of the formal parts of the mandatory health insurance, stopped to be commercial insurance organizations and a part of fund raising mechanism. Nevertheless, regions still possessed the right to raise funds for health care with the help of RMHIFs.

As a next step the departments of RMHIFs lost their responsibilities as well with the enforcement of the new Tax Code\(^\text{13}\) (2001) – the functions of “raising and accumulating of funds” were transferred from the RMHIFs and their departments to State Inspections of Taxation and Revenue and Federal Treasury and the situation remained the following till 2008. Therefore the degree of decentralization in the favor of regional administration at this stage corresponds to 0.

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We can conclude that the shift to the decentralized model of financing in Russian Federation was not successful and the return to budgeting system of financing took its place. The problems, which became sharp after the introduction of decentralized model, did not allow raising funds of the regional level, and made the central government to favor the model of financing that bordered with the old one that was in force before the changes of 1991.

**Regulatory**

According to the “Principles of the health care legislation of Russian federation” (1993), constituents of Russian Federation are responsible for realizing the federal programmes concerning the development of health care and have right to adopt regional programmes in the area of health care development, disease prevention, health care provision, medical education of the citizenry and other issues connected with health care sector. Regional health programmes connected with the area of health care were issued in a lot of constituents of Russian Federation. These programmes allow to bring under regulation some specific for the region measures and to provide these measures with additional resources for their implementation.

State and municipal medical facilities and other medical organizations are taking part in implementing territorial programmes in accordance to the legislative base of Russian Federation in the area of health care and compulsory health insurance, budgetary legislations and government decree “On development and financing of implementation of the tasks concerning the assurance of the state guaranties for the provision of free medical care for the citizens of Russian federation and control of its realization”14 (2003) and also in accordance to the legislative acts of regional issue and other regulatory legal acts.

After having analyzed different kinds of health care programmes of both federal and regional levels, we want to pay specific attention to the “Programme of state guaranties for the provision of free medical care for the citizens of Russian federation”, which was issued on the federal level each year beginning from 1998, and implied the issue of its yearly regional analogues. The reason for emphasizing this programme is the issues of the decentralization degree connected with it. Other types of programmes issued on the federal level did not necessarily involve the issue of their regional analogues, and with the introduction of the “Programme of state guaranties for the provision of free medical care for the citizens of Russian federation and control of its realization”.

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federation”, each of the regions started to use the federal standards in planning activities connected with this programme.

“Programme of state guaranties for the provision of free medical care for the citizens of Russian federation” includes the list of medical services, which are provided free of charge, the basic programme of Mandatory Health Insurance and standards of health care financing per capita, which are assuring the provision of guaranteed amounts of health care services. The standards of health care, which are serving as a base for this programme, are applied on all the levels of health expenditure formulations (budgets of all levels and the budgets of mandatory health insurance companies). The programmes formed on the regional level (on the basis of the federal one and the methodology recommendations on the development and economical assessment of such programmes) can imply provision of the additional amounts of health care services at the expenses of the constituents of Russian Federation.

To conclude our findings on the degree of decentralization connected with such regulatory activities as planning, and more specifically – issue of regional programmes connected with health care, we should say that before the introduction of the “Programme of state guaranties for the provision of free medical care for the citizens of Russian federation” the situation conformed with the delegation type of decentralization. Regions were responsible for implementing the federal health care programmes, as well as they had a right to launch regional programmes according to the local needs and implement them. The introduction of the “Programme of state guaranties for the provision of free medical care for the citizens of Russian federation” brought some additional systematization to regional planning and obliged the regions to conform to the same standards in issuing the yearly regional analogues. Therefore we have classified this as a shift in the degree of regional planning decentralization to the type of deconcentration.

**Provision**

According to the “Principles of the health care legislation of Russian federation” (1993), Russian health care system is divided into state, municipal and private health care systems. State system includes medical facilities owned by Russian Federation and its constituents (e.g. regions). The biggest part of medical facilities belongs to the municipal system and is being owned consequently by the municipalities. In the following section we will describe the process of decentralization of the ownership of medical facilities, which took place in the post-Soviet Russia more precisely.
Enactment by Higher Council of Russian Federation № 3020-1\textsuperscript{15} on December 27, 1991 established the division of state ownership into federal ownership, ownership of subjects of federation and municipal ownership. This act defined the categories of assets which should be transferred into municipal ownership irrespective of who owned them or had them on their balance previously. They were:

1. housing and other buildings;
2. enterprises servicing housing and other social assets;
3. infrastructure objects, city transport and etc.

Another Enactment by President № 114-RP\textsuperscript{16} on March 18, 1992 established the procedures for the transfer of social and infrastructure assets, according to which municipal level property committee compiled the list of objects to be included into municipal ownership and higher level government confirmed the list. As for the social assets held by enterprises, enterprises never owned them during soviet time as all assets were state owned, but they kept assets on their balance sheet. With the start of mass privatization of the enterprises these assets should have been either privatized or transferred to municipality. Presidential Decree № 8\textsuperscript{17} on January 10, 1993 defined the list of objects which could be included into the list of privatized assets of the firm with the requirement of keeping their profile. These included social and cultural objects (health, education, culture and sports facilities) and consumer services (laundry, hairdressers etc.). At the same time Decree defined the list of assets that could not be privatized by firms:

1. Buildings occupied by trading, catering, consumer services establishments, organizations of social security for children, elderly and disabled
2. Daycare and summer children’s’ facilities
3. Regional transport and electricity infrastructure
4. Medical facilities servicing population of the city/region
5. Housing and related service facilities


All these assets were defined to be under federal state ownership and should have been transferred to municipal ownership. Therefore the ownership of medical facilities on the regional level was included into state health care system and it can be treated as a delegation type of decentralization, because the medical facilities on this level were co-owned by the federal and regional government.

Decentralization reform in connection with the ownership of medical facilities therefore had a greater impact on the local than regional level. The transfer of social assets to the level of municipalities in the framework of the reform was supposed to be done by the end of 1997 and indeed the majority of assets were transferred. Roughly 82% of medical services became municipal during 1993-1997, therefore at the starting point of our time framework, these processes connecter with the transfer of responsibilities were mostly completed. The variation between regions, and especially between municipalities, was, however, very large, as the share of municipalized assets could vary between 15% and 100% (Haapaaranta et al., 2003).

Concluding this section, we should say that the process of decentralization concerning ownership of medical facilities, did not affect the level of the regions as much as it has affected the lower level - level of municipalities. The reformers decided to make a significant shift in ownership bypassing the regional level, and transferring power to the hands of municipality.

**Steering**

According to the “Principles of the health care legislation of Russian federation” (1993), the establishment of health care quality standards and the monitoring of the conformity to these standards was one of the competences of Russian Federation. In 2004 according to the decree of the resident of Russian Federation № 314 (09.03.2004), the Ministry of Health Care of Russian federation was extinct, and the functions of monitoring in the area of health care were partly transferred to the newly established Federal Service of Monitoring in the Area of Health Care and Social Development (FSMAHCSD) and partly to the Federal Service of Monitoring in the Area of Consumer Rights and Human Wellbeing. FSMAHCSD is documented as one of the departments under the jurisdiction of the Ministry of Health Care and Social Development of Russian Federation, and it is performing its duty directly or through its territorial departments in collaboration with other federal executive bodies, executive bodies of the constituents of Russian Federation, local governmental bodies, public associations and other organizations. So we can

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conclude that in this period of time the degree of decentralization of the steering function in favor of the regions was corresponding to 0, as the right to monitor was belonging to the federal level.

With the enforcement of federal law № 258-ФЗ “On the introduction of changes in specific legislative acts of Russian federation with regard to the transfer of responsibilities” (2006) the responsibilities of monitoring the quality of health care (according to the federal standards) were shifted to the level of the constituencies of Russian Federation (except monitoring of the high-tech medical care and medical care provided within federal health care facilities). In other words regions were still accountable because they were obliged to use federal standards and were under control of FSMAHCS, but they received the rights of monitoring of the quality of health care provided on their level. Therefore we can define the degree of decentralization at the period after 2006 as delegation, because of the remaining accountability of the regions to the federal level in the questions of monitoring in health care sector.

**Conclusion for the section**

After having analyzed the legislative documents of federal and regional level concerning the redistribution of responsibilities connected with financing, regulatory, provision and steering functions we can conclude that the decentralization figures do not vary between the regions. Changes concerning the degree of decentralization were implemented in all the six regions – Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsks simultaneously and therefore cannot account for the differences in health care provision. Decentralization of the functions mentioned above on the level of the regions can thus affect only specific trends in health care provision but not cause significant differences between the regions.

**4.2. Measuring the dependent variable**

In this section, which is corresponding to the second step according to our model of inquiry, we are going to discuss the results of measuring the dependent variable, which is formulated as a number of doctors per capita (per 10 000) in Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk regions between 1995 and 2008. The data for this part of analysis was obtained from Statistical database on Russian economy of the National Research

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According to the results achieved, six regions that we have examined are rather unequal concerning the distribution of qualified doctors per capita. The highest mean for number of doctors per 10000 during all the examined period belongs to the regions – Ivanovo, Tver’, and Samara (a little bit lagging behind if to compare with the previous two). The lowest means for this variable are exhibited by Moscow and Leningrad regions. Chelyabinsk region exhibits rather average results.

These results are setting us think – why such developed regions as Moscow and Leningrad, which are in a geographic proximity to the cities with federal status – Moscow and St. Petersburg scored the least in our measurement? We want to assume that first of all it can be connected with the permanent inflow of habitancy to these regions as they are attracting by the variety of opportunities in career development and studies. Therefore the number of doctors being employed might not catch up with the growth of the population. There is one more possible reason of such results. According to the one of previous researches on the topic, Russian regions which are less provided with the doctors are paying them more, than the regions which are provided with more specialists (Kolosnitsina & Muschinkin, 2009). Therefore we can assume, that more advantaged regions, which are having more of budgeting resources to invest in health care sector (according to our measurement of GRP trends in the regions Moscow and Leningrad regions are having the highest results), are giving the main priority to the quality rather than quantity in organizing their health care provision. To check this assumption we would need to conduct an analysis of the payouts of the doctors’ salaries in the regions in comparison with other expenses in health care sector of the regions.

From the standard deviation of this variable (Table 4) we can conclude that the most significant changes in the number of doctors per 10000 inhabitants took place in Moscow region and the least in Ivanovo region. Moscow and Leningrad region in comparison with other regions are exhibiting the most significant growth, especially in the period from 2006 till 2008. Exactly at the same time we can observe some decrease in the number of doctors per capita in the regions, which comprised in the Central district together with Moscow region. Therefore we can assume that in this period the reallocation of specialists in favor of the more advantaged regions could occur.
Figure 2. Trend in the number of doctors per capita in six regions, 1995-2008.

<table>
<thead>
<tr>
<th>Region</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelyabinsk</td>
<td>39.6</td>
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<td>1.02</td>
</tr>
<tr>
<td>Ivanovo</td>
<td>51.7</td>
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<td>0.56</td>
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<td>Leningrad</td>
<td>31.4</td>
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<td>1.93</td>
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<td>Moscow</td>
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<td>2.38</td>
</tr>
<tr>
<td>Samara</td>
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<td>14</td>
<td>0.88</td>
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<tr>
<td>Tver</td>
<td>50.1</td>
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</tr>
<tr>
<td>Total</td>
<td>42.5</td>
<td>84</td>
<td>8.15</td>
</tr>
</tbody>
</table>

Table 4. The mean number of doctors per capita in six regions, 1995-2008.

Concluding this section we must say that the inequalities between the regions (Moscow, Ivanovo, Tver', Leningrad, Samara and Chelyabinsk) with regard to the provision of doctors per 10000 inhabitants were indeed present during the period from 1995 and 2008. The less number of doctors per capita is being observed in such advantageous regions as Moscow and Leningrad,
whereas the small regions Ivanovo and Tver’ are exhibiting the highest results. In the next section we are going to provide with our reflections on the correlation of these results and the results, obtained in the earlier steps of analysis concerning the independent variables.

**4.3. Finding the association between independent and dependent variables**

This part of our analysis corresponds to the third step of our inquiry, according to which we are going to answer the third sub-research question and to find out what is the correlation between the independent and dependent variables. This will allow us to make conclusions concerning the influence of socio-economic and politico-administrative factors on the creation and reinforcement of inequalities between six Russian regions between 1995 and 2008.

**Correlation between socio-economic forces and inequalities between the regions**

In order to find out if the trends in GRP in Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk had an influence on the changes connected with the inequalities in health care provision between the regions, which was calculated as a number of doctors per 10000 inhabitants, we have conducted the correlation analysis. The results of this analysis are presented in the Table 5.

<table>
<thead>
<tr>
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</thead>
<tbody>
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<td>-.239*.</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.029</td>
</tr>
<tr>
<td>N</td>
<td>84</td>
<td>84</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Doctors per 10000</th>
<th>loggrp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>-.239*</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.029</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>84</td>
<td>84</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5. Correlation between GRP and the number of doctors per 10000 inhabitants in six regions, 1995-2008

As we can observe from the Table 5, the correlation between GRP in six regions and the number of doctors per 10000 inhabitants is negative. This means that in the regions with a higher GRP we can observe fewer doctors per 10000 inhabitants. These findings are disproving the view, which exists among some scholars that the provision of health care services is more
advantageous in the regions that possess larger budgeting capacity (Kolosnitsina & Muschinkin, 2009).

It might well be the case, as we have mentioned before, that the richer regions are focusing on the quality of health care rather than the quantity of health service personnel, but it is not explaining why we can observe the rapid increase in the number of doctors per 10000 in Moscow and Leningrad regions in 2006-2008 then. We assume that to investigate the reasons for the negative correlation between GRP and the number of doctors per 10000 inhabitants we might also conclude an analysis of the level of morbidity in the regions. In the regions will higher GRP the level of morbidity might be lower and therefore the number of doctors needed for the effective health care services provision should be lower than in the regions with high morbidity as well. For instance some researches on the topic of inequalities of health care provision in Russia are providing with the results of correlation analysis, where the increase of health care financing per capita from the resources of regional budgets is associated with lower morbidity (Shishkin, Potapchik & Selezneva, 2009).

**Association between politico-administrative forces and inequalities between the regions**

In order to find the correlation between the degree of decentralization of financing, regulatory, provision and steering functions in favor of the regional administration and the inequalities between Moscow, Ivanovo, Tver*, Leningrad, Samara and Chelyabinsk regions between 1995 and 2008 we have conducted the analysis of variances. The results of the analysis will be presented for each of the functions separately.

- **Financing**

  From the analysis of variances for this variable (Tables 6 and 7) we can observe that even though the average number of doctors per 10000 is lower when the degree of decentralization of the financing function corresponds to delegation type (numerical code 2) compared to the periods when this function in not decentralized (numerical code 0), the difference is not that significant. Thus we can conclude that the decentralization of the fund raising function is not related to the changes in health care provision, defined as a number of doctors per 10000 inhabitants.
<table>
<thead>
<tr>
<th>financing</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,00</td>
<td>43,291667</td>
<td>48</td>
<td>8,045788</td>
</tr>
<tr>
<td>2,00</td>
<td>41,425000</td>
<td>36</td>
<td>8,2916955</td>
</tr>
<tr>
<td>Total</td>
<td>42,491667</td>
<td>84</td>
<td>8,1548449</td>
</tr>
</tbody>
</table>

Table 6. The mean of financing decentralization in six regions, 1995-2008

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors N doctors per 10000 financed</td>
<td>Between Groups (Combined)</td>
<td>71,680</td>
<td>1</td>
<td>71,680</td>
<td>1,079</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>5447,944</td>
<td>82</td>
<td>66,438</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5519,624</td>
<td>83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Analysis of variances (ANOVA) – financing decentralization and number of doctors per 10000 inhabitants in six regions, 1995-2008

- Regulatory

The analysis of variances for this variable (Table 8 and 9) shows not significant differences in standard deviation between the periods when this function was decentralized according to the deconcentration type and the period of time when the responsibilities concerning this function were delegated to the regional level. Therefore we can conclude that the degree of decentralization of the regulatory function in Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk regions between 1995 and 2008 did not affect the inequalities in the provision of health care services.

<table>
<thead>
<tr>
<th>regulatory</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,00</td>
<td>42,920303</td>
<td>66</td>
<td>8,1650689</td>
</tr>
<tr>
<td>2,00</td>
<td>40,920000</td>
<td>18</td>
<td>8,1514806</td>
</tr>
<tr>
<td>Total</td>
<td>42,491667</td>
<td>84</td>
<td>8,1548449</td>
</tr>
</tbody>
</table>

Table 8. The mean of regulatory decentralization in six regions, 1995-2008
Table 9. Analysis of variances (ANOVA) – regulatory decentralization and number of doctors per 10000 inhabitants in six regions, 1995-2008

- **Provision**

The degree of decentralization of provision function in health care, which was defined as the ownership of medical facilities by the regional authorities, does not vary during the period which is being studied (according to the Table 6), and cannot therefore affect inequality if health care provision beforehand.

<table>
<thead>
<tr>
<th>provision</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>42.491667</td>
<td>84</td>
<td>8.1548449</td>
</tr>
<tr>
<td>Total</td>
<td>42.491667</td>
<td>84</td>
<td>8.1548449</td>
</tr>
</tbody>
</table>

Table 10. The mean of provision decentralization in six regions, 1995-2008

Consequently the analysis of variances (ANOVA) for this variable cannot be completed, because there are no changes in the degree of decentralization concerning provision function.

- **Steering**

The analysis of variances for this variable also shows not significant differences in standard deviation (Tables 11 and 12), and therefore changes in the degree of decentralization of the steering function also cannot be accounted for the changes in health care provision in Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk regions between 1995 and 2008.

<table>
<thead>
<tr>
<th>steering</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>.00</td>
<td>42.021212</td>
<td>66</td>
<td>8.3443858</td>
</tr>
<tr>
<td>2.00</td>
<td>44.216667</td>
<td>18</td>
<td>7.3787652</td>
</tr>
<tr>
<td>Total</td>
<td>42.491667</td>
<td>84</td>
<td>8.1548449</td>
</tr>
</tbody>
</table>

Table 11. The mean of steering decentralization in six regions, 1995-2008
ANOVA Table

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors N doctors per 10000 Between Groups (Combined)</td>
<td>68,169</td>
<td>1</td>
<td>68,169</td>
<td>1.025</td>
<td>.314</td>
</tr>
<tr>
<td>* steering Within Groups</td>
<td>5451,455</td>
<td>82</td>
<td>66,481</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5519,624</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12. Analysis of variances (ANOVA) – steering decentralization and number of doctors per 10000 inhabitants in six regions, 1995-2008

4.4. Conclusions for the chapter

According to the conducted analysis, socio-economical forces represented by GRP are negatively correlated with the dependent variable – inequalities in health care provision represented by the number of doctors per 10000 inhabitants. The higher the GRP – the lower is the number of doctors per capita in six Russian regions between 1995 and 2008. This leads us to the assumption that this correlation may be caused by such factors, as the morbidity level in the regions and the level of salary payouts. These factors might well be the reasons of the higher concentration of doctors in the regions with lesser GRP. Therefore in order to convincingly argue that the higher level of GRP leads to lower number of doctors per 10000 inhabitants we propose to include in the future researches on the topic of inequalities in health care provision the factors of salary payments and the factors connected with the state of health in the regions.

Based on our analysis we cannot convincingly show that decentralization processes are leading to creation and reinforcement of inequalities between the regions concerning health care provision. The emphasis placed on the regional level, small number of the units of analysis and the time framework of this research did not allow us to find association between the degree of decentralization and the inequalities in the provision of health care services.
Chapter 5. Conclusions

In this chapter we will provide our conclusions on the conducted research, moving from the research problem that we have formulated to the main results of our analysis, presenting the answers on the main and specific research questions. In the end of this chapter recommendations for the future research on the problem are being provided.

The interest in the decentralization reforms was quite common for both developed and developing countries in the period after 1990. In Russia the reform of health care decentralization began in the late 1980’s, when the republics assumed primary responsibility for managing the financing and delivery of care. When the Soviet Union dissolved in 1991, republics received control over political, legal and regulatory structures and both the financing and provision of care have been correspondingly decentralized to the regional and local levels (Schieber, 1993). Many authors, describing this reform, argue that the implementation of the reform was not done in a quality manner and they blame decentralization for the problems connected with addressing “collective health needs”.

In this research we aimed to find out to what extent the process of decentralization in Russian Federation was indeed accompanied by the creation and reinforcement of inequalities in the health service provision between various Russian regions, and to find out to what extent the decentralization reform on the regional level indeed influenced these trends connected with inequalities. As we assumed that there could be different factors influencing the trends in inequalities, the main research question was formulated as following: Which socio-economic, political and administrative factors have led during the process of decentralization in Russian health care in 1995-2008 to the creation of inequalities in the health services provision between Russian regions (Moscow oblast', Ivanovo oblast', Tver’ oblast', Chelyabinsk oblast', Leningrad oblast' and Samara oblast')?

The model of public management of Pollitt and Bouckaert (2004) was chosen as a base for investigating the forces, which may have influenced on the process of the reform. Knowing the specifics of post – Soviet Russia, which include the indivisibility of political control and the work of administration on-site, we have united political and administrative forces in a one cohesive group. Therefore the main dimensions of our research, which we were aiming to investigate, were formed as socio-economic and politico-administrative forces that were in force in the process of the reform. Guided by the theories on decentralization we have connected the
improved model of Pollitt and Bouckaert (2004) with the approaches to the decentralization cases.

In the framework of our analysis we have examined six units – Moscow, Ivanovo, Tver', Leningrad, Samara and Chelyabinsk regions within the time framework from 1995 till 2008. We have limited our research in this scope because our aim was to check the impact of decentralization (or recentralization) on the level of the regions, which are more or less close to each other geographically and environmentally, but at the same time some scholars stated that there were revealed significant differences in the organization of health care provision and the fulfillment of the guarantees of provision with such services (Shishkin, 2010; Danishevsky, K., Balabanova, D., McKee, K., & Gutkovskaya, L., 2001). The time framework was shaped by the availability of the data on the topic.

Socio-economic forces in our analysis were operationalized as GRP of each region per year during 1995-2008 and the measurement was done by taking the natural log of it. Politico-administrative forces were examined in accordance with the theories on administrative decentralization and were divided into four specific functions (financing, regulatory, provision and steering), which were measured as separate variables. The measurement was done by the analysis of variances (ANOVA) with the help of coding, based on three types of administrative decentralization – deconcentration, delegation and devolution. The dependent variable was operationalized in terms of the number of doctors per 10000 inhabitants as in our opinion it reflects the possibility of citizens to receive qualified medical help outwardly.

The measurement of GRP in the given period shows that all the regions were exhibiting the exponential growth of this variable and the difference between the regions remained practically the same during the entire time framework. The highest GRP is characteristic for the regions neighboring with the cities with federal status and having the high levels of industrial output – Moscow and Leningrad region. The lower level of GRP is exhibited accordingly by the regions with lower industrial outputs, such as Ivanovo. Therefore, if we would like to connect the socio-economic effects with the theories on decentralization (and in the case of socio-economic forces with the theories of fiscal decentralization), we can find out that our particular case of decentralization reform shows that the allocative efficiency was not depending solely of the effect of decentralization itself. The level of industrial output in the region makes it wealthier, and the only way to make regions equal concerning this indicator would be socialistic style of governance.
The analysis of politico-administrative variables, which was based on the examination of federal and regional legislative base, shows that the degree of decentralization of each of the variables in the given period was consistent for all the regions. This proves our theoretical assumption that political and administrative forces are indivisible in case of studying the reforms in post Soviet Russia. As we could observe, after examining the legislative base for the changes in Russian health care sector organization, reform was clearly fitting to the “top-down” model. In the framework of the decentralization of Russian health care sector all the changes were, first of all, implemented according to initiative of political leaders and, second of all, as we can observe the degree of decentralization on the regional level remained rather low, regions were still obliged to be accountable to some extent to the federal government. Changes concerning the degree of decentralization were implemented in all the six regions – Moscow, Ivanovo, Tver’, Leningrad, Samara and Chelyabinsk simultaneously and therefore cannot account for the differences in health care provision.

The measurement of the dependent variable shows that the differences between the regions in provision with the doctors per 10000 inhabitants are indeed present. The highest number of doctors is concentrated in the less wealthy regions, such as Ivanovo and Tver’, whereas the least amount of doctors is characteristic for Moscow and Leningrad regions. Therefore, as the correlation analysis shows, the correlation between GRP and the number of doctors per 10000 in six regions is negative – the highest GRP corresponds to the least amount of doctors per capita. Speaking about the association between politico-administrative variables and the dependent variable, we can conclude that no significant differences in the standard deviation were observed.

We assume that the negative correlation between socio-economic factors and the inequalities in health care provision can be explained with the involvement in the future researches of such factor as the morbidity level in the regions and the amount of salary payouts for the doctors involved in regional health care provision. Therefore we recommend involving more of the socio-economic variables in order to check the nature of the correlation observed in our research.

Concerning the investigation of the decentralization impact on the equity in health care provision, we conclude that based on our analysis we cannot convincingly show that decentralization processes are leading to creation and reinforcement of inequalities between the regions concerning health care provision. Therefore we cannot fully check the theories on political and administrative decentralization with regard to the pros and cons of decentralization.
in our particular case. The emphasis placed on the regional level, small number of the units of analysis and the time framework of this research did not allow us to find any association between the degree of decentralization and the inequalities in the provision of health care services. In the framework of our analysis we found out that the chosen functions were merely decentralized, and regions mostly remained accountable before the central power, which proves the theoretical assumption on the indivisibility of Russian political forces and administration.

For the sake of further findings concerning the topic of decentralization impact on the quality of health services provision we recommend to involve more units of analysis in the observation and expand the time framework of the research. Also we would recommend the shift in analysis to the level of municipalities as well, as at this level the more significant differences in the organization of health care administration might be revealed. As the ownership of health care facilities mostly belongs to the municipality level and therefore the actual provision of health care is mostly being carried out in the municipal facilities there might be other factors, which lead to the inequalities in the health care provision. For instance, inequalities between areas may also result from different capacities of municipal facilities to use resources efficiently. Local decision-makers may choose to use resources in a way which could increase or decrease inequity in access to care that is why the analysis of the actual distribution of resources on the level of municipalities may reveal the nature of the problem in a more explicit way.
References


Appendices

Appendix 1. Selected Russian legislative documents and policy papers


18) Various regional document being the analogues of the federal laws and policy documents
Appendix 2. Data collection

<table>
<thead>
<tr>
<th>Variables</th>
<th>Theoretical background</th>
<th>Quantitative data</th>
<th>Qualitative data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRP (millions rubles, current base price)</td>
<td>Model of public management reform</td>
<td>Statistical database on Russian economy of the National Research University – Higher School of Economics; Federal State Statistic Service of Russian Federation</td>
<td></td>
</tr>
<tr>
<td>Degree of decentralization:</td>
<td>- financing;</td>
<td>Model of public management reform; Theories on administrative decentralization</td>
<td>Legislative documents of national and sub-national (Moscow, Ivanovo, Tver’, Chelyabinsk, Leningrad and Samara) issue concerning the decentralization in health care; Various policy documents on the reorganization of health care system; Historical data on the reform in Russian health care; Researches on the inequalities between the regions in the provision of health care services.</td>
</tr>
<tr>
<td></td>
<td>- regulatory;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- provision;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- and steering functions. (0-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of qualified doctors per 10 000 inhabitants (individuals)</td>
<td>Statistical database on Russian economy of the National Research University – Higher School of Economics; Federal State Statistic Service of Russian Federation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>