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Dissertations for Sale: Corruption in Russia's Doctoral Education

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Dissertations for Sale: Corruption in Russia's Doctoral Education [1]

Doctorates have long attracted attention of those aspiring to scholarship and research, but also those seeking verbal distinctions and a documented knowledge. Doctoral degrees are considered as signs of a high level expertise and authority in a given filed. The growing number of dissertation defenses does not necessarily translate into a higher quality of dissertations or qualifications of newly produced doctorates. Such a trend may in part be a result of the growing corruption in higher education, including doctoral education. This paper addresses the issue of "dissertations for sale" in Russia and focuses on possible solutions for this problem. It studies the supply side of the dissertations market.

Key words: corruption, dissertation, doctoral degrees, higher education, Russia

JEL Codes: I23, I28, P36, P37

Introduction

Russian doctorates, especially those in mathematics and sciences, have long been considered some of the most prestigious in the world. This high level of reputation was retained by their quality and low level of corruption that existed in the system of doctoral education. The situation has changed drastically over the last two decades, and according to some evidence continues to deteriorate. Not only is international recognition of Russian doctorates now problematic, but recognition of doctoral degrees domestically, i.e. within the centralized national system, also becomes an issue. The cost of corruption in doctoral education reaches far beyond credential evaluation and recognition of the degrees. It makes the national economy less effective and efficient and undermines trust and social cohesion in the nation.

Corruption in higher education has long been neglected as an area of research, and hence, there is little surprise that corruption in doctoral education was not addressed by scholars. One reason for this might be that the relative scarcity of prosecuted cases has made corruption in conferring doctorates seen like a minority problem in the nation's higher education, not significant enough from the researchers' standpoint to be paid much attention. However, the growing "dissertations for sale" business urges to address this issue. This study addresses issues related to the quality of Russian doctorates and the different forms of abuse that may be found in the system of conferring doctoral degrees. This paper offers a brief description of the doctoral education in Russia. A special emphasis in the analysis is made on the high level of centralization of the system, including the changing role of VAK. It presents a description of corruption in doctoral education with the major focus on the "dissertations for sale" business. The illicit nature of the business implies high transaction costs. The discussion section offers some insights to the magnitude of the problem, and its impact on the society. The genesis of the

dissertations for sale business is supplemented by the idea of creation of parallel structures and personal incentives that drive the demand on dissertations and fake doctorates up.

The system of doctoral education

It is worth saying few words about the system of graduate education in Russia. The existing system of doctoral degrees is inherited from the Soviet system, which, in turn, is a direct descendant of the German educational system. Until recently, priority of technical sciences and rigid hierarchical structures of academic institutions remained intact. However, with the beginning of market reforms, social sciences began to occupy a larger share of doctoral education sector. Still, the institutional rigidity, along with the old mechanisms of operation, does not allow for major changes. Old educational cadres, including members of the Russian Academy of Sciences (RAN) [2], are so far quite successful in preventing any major shifts that would threaten their stability, "immortal" status, and the monopoly on truth in the last instance, and they are unlikely to give up their positions voluntarily. The Highest Attestation Commission of the Ministry of Education and Science of the Russian Federation (VAK) [3] regulates the system of doctoral education and controls quality of doctoral dissertations. Doctoral programs are hosted by universities and research institutes, and dissertations are defended in Specialized Academic Boards, later renamed in Dissertation Boards.

Russian higher education continues to maintain the two-tier system of doctoral degrees, similar to that in most other European countries. The first level doctoral degree is Candidate Sciences (CSc) [4], and the higher doctoral degree is Doctor Sciences (DSc) [5]. The CSc degree is somewhat similar to European PhDs, but differs drastically from North American PhDs, in part because of the lack of formal coursework required in doctoral programs. The DSc degree in

Russia is somewhat similar to German Habilitation. Holders of CSc degree normally serve as associate professors while DSc retain positions of full professors, provided, of course, that they teach in higher education institutions (HEIs). Similar two tier systems of doctorates and academic positions exist in France, Italy, Spain, and other European nations. The discussion about which one is better, CSc or PhD, arises every time the Bologna process is mentioned. Such discussions, however, miss the key point, i.e. the quality of doctoral programs and the skills of those who hold doctoral degrees.

In Russia, in 2005, there were thirty five thousand dissertations defended, including thirty thousand for the degree of CSc and five thousand for the degree of DSc. For the period of 1993 to 2005, the number of the CSc dissertations approved by VAK, including the fields of military sciences, medical sciences, agriculture, humanities, social sciences, natural sciences, and engineering, grew from 15679 to 30116. The number of CSc dissertations in social sciences and humanities increased for this period from 4362 to 15981, i.e. almost quadrupled (*Newsru.com*, 5 July, 2007). The Head of the Department of Information Technology at the Russian State Library (RGB) [6], Alexandr Visly, said that in 2005 alone the library received thirty one thousand dissertations (Simakin, 2006). This is an all time record. In 2002, there were only twenty seven thousand dissertations received by the library. For comparison, in the US in 2004, there were forty thousand PhD degrees conferred by accredited doctoral programs (Nerad, 2004). The high numbers of doctoral defenses in Russia look somewhat suspicious if one is to take into consideration continuously declining state funding of science and education and a lack of interest from the industry.

There is a strong belief among scholars that such a phenomenal increase in the number of defended dissertations, especially in social sciences, can be attributed, at least in part, to the so-

called phenomenon of dissertations for sale. The Head of the company "Nezavisimye analiticheskie sistemy," [7] Pavel Lobanov, says that the number of dissertations for sale will likely increase. The company specializes on consulting for doctoral students. According to Lobanov, "Competition continues to grow. There are more players coming to the market. Everyone think that this is easy money." (Simakin, 2006) Despite the growing problem, Russian scholars avoid writing on issues of education corruption, and prefer to focus on curriculum, finance, and administration (Beliakov, Lugachyov, & Markov, 1998).

There are three issues to be considered along the lines of doctorates for sale problem. They include the dissertation, the holder of a doctorate, and the diploma itself. According to the standards set for dissertations, a dissertation represents a piece of original research that makes a substantial contribution to the existing body of knowledge in a particular field. This is characteristic of a CSc degree. A dissertation submitted for a DSc degree is intended to be at a level high enough to resolve a significant theoretical problem in the field and have a practical application. A DSc dissertation is expected to be not just a substantial contribution, but to fill an existing gap in the body of special knowledge. A holder of a doctorate is a person who, presumably, wrote a dissertation and defended it before the Dissertation Board. The diploma of CSc or DSc is issued by the state agency VAK and identifies the holder of the degree, the field, the discipline, and the University where the dissertation was defended. Corruption in doctoral education emerges within these three parts of the doctoral education. First, not all dissertations represent a significant contribution to the field. Some are plagiarized and hence do not represent original research. Second, not all of the dissertations are prepared by candidates. Some are written by professionals for sale. This makes some degree holders people without scholarly merit. Finally, diplomas for doctoral degrees may be forged.

The problem of corruption in doctoral education

The definition of corruption in education includes the abuse of authority for material gain and is broadly defined as the abuse or misuse of public office or public trust for personal or private gain (Anechiarico and Jacobs, 1995). According to Petrov and Temple (2004), corruption implies illegality. Corruption in higher education may be defined as a system of informal relations established to regulate unsanctioned access to material and nonmaterial assets through abuse of the office of public or corporate trust (Osipian, 2007a, p. 315). Education corruption in Russia is widespread and attempts to fight it appear to be unsuccessful (Osipian, 2008a). Corruption in higher education is by no means an exclusively Russian phenomenon, but can be found in other former Soviet republics (Osipian, 2007b, 2009a; Round & Rodgers, 2009) and throughout the world (Hallak & Poisson, 2007; Osipian 2008e, 2008f). While the problem of corruption in education is obvious, the methodology of studying it remains undeveloped. Some methodological aspects of investigating corruption in higher education are offered in Osipian (2007a, 2008c, 2009d), but more have to be offered by the scholars in the future.

Corruption in doctoral education is somewhat distinct from corruption in higher education in general, and differs significantly from corruption in state bureaucracies as it is commonly perceived. First, the doctorate is the highest level of formal education that can be achieved. Obtaining doctoral education represents a transfer of an individual's activities from training to the creation of new knowledge. Holders of doctorates are considered as most qualified specialists, authorities, experts in their respective fields. Their knowledge and writing is often overly narrow, specific, and of higher quality than is currently demanded in the societal production. Second, high moral and ethical standards are expected from holders of doctoral

degrees. Doctors, most of whom teach in academia and conduct research, uphold the spirit of intellectual integrity. Third, doctors educate students in HEIs, including training of new doctorates. They also observe standards of academic integrity, set standards of academic conduct, and prevent student misconduct. Thus, doctors are expected not only to follow the rules of academic integrity, but they are also expected to develop and maintain the culture of high academic and ethical standards among their students. While the Russian government tries to reduce corruption in the entrance to higher education institutions by implementing the standardized testing (Osipian, 2009b), the perspectives of fighting corruption in doctoral education are not clear.

The media in Russia reports that there is a growing concern within the academic community that dissertations are bought by people who do not belong with the academy (Yurevitch, 2005a, 2005b). According to some estimates, twenty to thirty percent of all the defended dissertations are those written for money by specialists for clients (Simakin, 2006). High demand for scholarly degrees in the social sciences and humanities, including economics, jurisprudence, finance, political sciences, history, and sociology, lead to the emergence of the business of preparing dissertations for money. By now this is a well-developed business. In 2006, the Head of the Highest Attestation Commission, Academician of the Russian Academy of Sciences, Mikhail Kirpichnikov, called for criminal responsibility for those participating in this business. Specifically, he wanted to prosecute people who write dissertations for others. The phenomenon of dissertations for sale is not uniquely Russian, but can be found in other former Soviet republics, from Ukraine to Uzbekistan (Podolyan, 2006; Antonovich & Merezhko, 2007; Klepko, 2006; Taksanov, 2003). Indeed, the "feed from the service" way of living in academia can be found throughout Eurasia (Osipian, 2009c).

Existence of the black market for dissertations is not a secret. It may be a part of the market of corrupt educational services that according to some estimates totaled around \$1 billion in 2003 and likely grew significantly over the last six years (*Newsru.com*, 24 June, 2004). News reports about dissertation fraud are accompanied by on-line advertisements of different dissertation writing services and dissertations for sale. The new impulse to discuss the credibility of degrees and dissertations was generated after Russian media picked up the information of the Western media, including The Times and The Sunday Times, about possible plagiarism in the dissertation of the Russian President, Vladimir Putin (*Newsru.com*, 27 March, 2006). The issue was inflated by Russian and foreign media, paid unprecedented attention and discussed for several months (*Newsru.com*, 11 July, 2006). Putin defended his CSc in Economics dissertation titled "The Strategic Planning of Regional Resources under the Formation of Market Relations" at the Saint Petersburg Mining Institute in 1997 (Allen-Mills, 2008). In his officially distributed biography, Putin only mentions that he holds a CSc degree in Economics, without the date, the university, or the title of his dissertation [8].

The issue of existing links between state politicians and universities in the former Soviet republics is addressed in Osipian (2008d). Political graft and education corruption often go hand in hand. This form of collusion perpetuates illicit activities in academia and anticipates benefits for politicians extracted not in monetary form, but in form of academic distinctions, loyalty, compliance, and control. Universities award doctoral degrees to politicians as a sign of respect, often in exchange for patronage, lobbying, and financial support. Within universities, corrupt hierarchies form in order to benefit from corruption in an organized manner. Corrupt organizational hierarchies in higher education in Russia are presented in Osipian (2007c, 2009f,

2009g). Such hierarchies allow maximizing the illicit benefits while minimizing otherwise high transaction costs of corrupt dealings.

With the continuing decline in state funding, universities increase their revenues by charging tuition. In contrast to HEIs, most research institutes, once generously funded by the state, generate little income. In this sense, universities are in an advantageous position in respect to research institutes. Nevertheless, research institutes preserve the right to host doctoral programs, hold dissertation defenses, and produce doctorates. The "doctorates for sale" scheme helps research institutes to survive financially. Sale of academic degrees, including doctorates, for the reason of mere financial survival is an old tradition that can be traced all the way back to medieval universities (Compayre, 1893). This scheme, be it in universities or research institutes, often implies bribery and other explicit forms of corruption, including kickbacks, gifts, gratuities, collusion, and fraud. The scholars entrusted by society and authorized by the state to award doctoral degrees defraud the state and abuse public trust by awarding doctorates without merit, producing dissertations for sale, or simply not participating and controlling the set process of doctoral education. This intentional deception of the society equates to fraud.

The fashion of holding doctoral degrees among bureaucrats, public officials, politicians, and businessmen leads to a continuous increase in the demand for the doctorates for sale, when hired scholars write dissertations and help with all the required documents and procedures before and after the defense. While the dissertations might be good, the degree-holders are but forgeries. Doctoral degrees have become popular among Russian politicians, including high rank bureaucrats and members of the Duma [9]. According to media reports, many state bureaucrats and the parliamentarians lost sleep over their academic laurels (Krasilova, 2006). Of 450 members of the Russian Parliament, 228 hold doctoral degrees, including 143 CSc and 85 DSc

degrees (Osipian, 2008b). Foreign media sarcastically calls Russian MP's intellectual giants (Klussmann, 2007). The Russian Parliament is also distinguished by the number of billionaires among its members and is referred to as the richest parliament in the world (Brown, 2008). In Russia, the media links the problem of dissertations for sale with public officials who hold doctoral degrees (*Newsru.com*, 24 March, 2006). The President of Chechnya, Ramzan Kadyrov, is often targeted by the media in an attempt to discredit his doctoral degree in economics and other titles and decorations (*Newsru.com*, 25 June, 2006). Some of the decorations are not even listed on Kadyrov's official website [10]. An attempt to distinguish oneself from the masses drives the demand for doctoral degrees and other verbal and documented distinctions. In Russia, it is now in fashion to buy decorations, including state and public orders and other distinctions (Bely, 2008). Since state awards are not easily accessible, public organizations are established to offer public decorations for sale [11]. Some of the academies that sell out academic awards and decorations get out of business closed by the government (Morozov, 2008).

The shadow sector in education is a worldwide phenomenon (Baker, et al., 2001). Preparation of dissertations by specialists for customers, often referred to as consulting, but de facto "dissertations for sale" is also a part of the shadow sector and has its own economic rules. While the presence of corruption in awarding doctorates is obvious, the size of bribes paid and costs of different accompanying services remain unclear. Some estimates, however, may be found in the media. Price of the papers necessary for publication before the defense is \$150. Full bibliography for the dissertation will cost around \$300. The cost of experimental or analytical part varies from \$300 to \$1000, depending on the level of complexity. The prices are presented as of 2006 (Simakin, 2006). Some reports say that the prices are higher than those perceived by the public and that doctorates, especially DSc degrees, cannot be bought for few thousand dollars.

DSc can go as high as \$50,000, depending on the discipline and the university where it is conferred. German media *Spiegel* reports that "depending on the quality and the field, the price of one of these quickie degrees can run anywhere from €3,000-35,000 (\$4,452-51,937)" (Klussmann, 2007). But German system of doctorates may itself be corrupt, with dissertations available for sale (Vitzthum, 2008a, 2008b; *Newsru.com*, 13 March, 2007). Paying for doctoral dissertations may be a part of a new post-Soviet culture, when everything is for sale. Starting from the massive privatization of state enterprises, the country has now reached the point when doctoral degrees are also for sale.

The culture of plagiarism, cheating, and forgeries is widespread in Russia. Masters theses and term papers can be bought on-line or custom-prepared for the clients, and so can doctoral dissertations. Academic corruption is not an exception. The Ministry of Economic Development confirms that half of all the goods in Russia are forgeries or counterfeited products. The Assistant to the Head of the Ministry Economic Development, Yuri Liubimov, who leads the department against piracy, says that in order to understand the attraction of Russians to forgeries and counterfeiting, one has to know about the importance of kitsch and showing off in the society: "It is like French term *faire montrer*. It is better to look like, than to be. It is very oriental" (*Newsru.com*, 11 July, 2006). Russians' rush for doctoral degrees is similar to that of French new rich hunting for titles of nobility (Riggs, 1986).

The state control over the centralized system of doctoral education gives up under the pressure of market forces. The outdated system can no longer resist the market demand for fake doctorates. In earlier days, VAK was effective in processing documents for doctoral degrees and controlling the quality of dissertations for the entire USSR, while now it can not serve even Russia. In the Soviet times, VAK had 220 specialists plus staff members and was in fact a state

committee. The building it occupied had twelve thousand square meters of office space. In 2007, there are only 44 specialists left in VAK, but the number of dissertations that goes through VAK is now higher than it was in the Soviet times, in 1980s. VAK now has to process around thirty thousand CSc dissertations and four thousand DSc dissertations each year. In addition to dissertations, VAK also considers around twelve thousand applications for academic ranks of Associate Professor [Docent] and Professor. The office space has been reduced almost tenfold, down to less than one and a half thousand square meters. Chief Academic Secretary of VAK, Feliks Shamhalov, complains about the lack of funding, personnel, and premises, and states that "Members of Expert Boards, highly respected people, and, as the norm, old people, have to write conclusions, fitting themselves somewhere in a hallway. Sorry for a dark comparison, but even on a cemetery one receives more space..." (Rossijskaja gazeta, 21 March, 2008). Shamhalov states that changes are coming to the system of attestation, including tighter quality control and better staffed commissions (Newsru.com, 30 June, 2006). VAK can hardly cope with the growing flow of dissertations. This overload serves poorly the need for quality control [12].

According to the results obtained by the Institute of Psychology of RAN, 84 percent of scholars consider the practice of awarding doctorates to people very distant from research and scholarship as negative, 7 percent are indifferent, 8 percent have special opinions in this regard and 1 percent find it difficult to answer. Some respondents think that if a person funds a research that goes into his/her dissertation, then this practice is acceptable, because at least there is some funding for research, no matter who does it. The sense of passion for research and scholarship remain strong in Russian academic community, but it does not prevent the practice of dissertations for sale. The survey shows that scholars emphasize administrative methods in curbing such a practice, including more power and resources to VAK, tighter control over the

Dissertation Boards [13], higher level of legal responsibility and such. At the same time, there are voices that demand focusing on the quality of the dissertation itself, on expertise over authorship, and a restriction for candidates based on the number of years spent in research and teaching. Forensic expertise is also mentioned by the respondents. Overall, 78 percent of the respondents think that the academic community should stop the practice of awarding doctorates without merit, 6 percent think that there is no such need, and 16 percent do not have a particular view on this problem (Yurevitch, 2006).

Kirpichnikov said that from now on dissertations and their abbreviated versions or autoreferates will be checked for plagiarism with the help of the newly introduced on-line system "Antiplagiat.VAK." He was discussing corruption in the system of conferring doctoral degrees at the round-table discussion titled "Antiplagiat.VAK – innovations against pseudo-dissertations." Kirpichnikov says that around three percent of all the dissertations fail the defense (Newsru.com, 5 July, 2007). This amounts to one thousand dissertations a year. By failures, he apparently means that the dissertations did not pass the VAK and did not receive its approval. VAK intends to use the "Antiplagiat.VAK" program to fight plagiarism in dissertations (Antiplagiat.ru, 23 October, 2008). The Chairman of the Board of Directors of the private company "Anti-Plagiat," Igor Karpachev, confirms that the system "Antiplagiat.VAK" can use over eight million on-line sources to find possible plagiarism and that thanks to the system, the "prestige of scholarship in Russia will increase." (Newsru.com, 17 June, 2002) The name of the program can be translated as Anti-plagiarism for the Higher Attestation Commission. The internet service AntiPlagiat.Ru, maintained by the company, is said to be used successfully by several Russian HEIs. This internet service was launched in 2006 and is the first service of such kind, launched in Russia. College instructors use the service to check students' term papers for plagiarism.

Only one percent of all the dismissed dissertations are dismissed by VAK for plagiarism. This constitutes ten dissertations a year. In light of this, it becomes unclear why so much weight is given to the system that is supposed to spot plagiarism in the dissertations. On the one hand, VAK may become more successful in sorting out plagiarized texts from the original ones. On the other hand, it is possible that VAK intended to implement the system because of the favorable relations with the private company that offers the service. The older dissertations will not be checked through the system because there is not enough funding available to do that.

University autonomy may be needed to replace weakening state control. Meritocracy and high social prestige of academic profession and university degrees slowly weakens. This indicates the process of erosion of values, common for the transition society overall. Forgeries will eventually be annihilated by their overwhelming number. If the situation will develop in an unregulated, unorganized way, the university degree will become absurdist. Nevertheless, the process of debasement of the old system creates a ground for the new, three-tier system of academic degrees, including Baccalaureate, Magisterium, and PhDs. In the new system, a doctoral degree will serve as an indicator of the holder's ability to perform independent scholarly research and teaching. Reputation of each degree and degree holder will be based on his/her academic merits and reputation of the granting university. Competitive labor market will place accents on values of academic degrees and human capital." (Osipian 2009e, p. 105)

Plagiarizing a dissertation or ordering one from the experts are not the only ways to acquire a doctorate. There is no need to go through the hurdles of writing and defending a dissertation or buying one from the experts in the field. There are fake doctoral diplomas for sale with the option of placing the information in all the necessary databases and files. Finally, there

are doctoral diplomas from non-existent HEIs. These two forms of abusing the system of conferring doctoral degrees in Russia are similar to US forgeries and diploma mills, when one can buy a "genuine" Stanford PhD for \$200, or order a full set of educational certificates from a notorious diploma mill (Anderson, 1992).

Methodology and findings

We conduct a study of the "dissertations for sale" market in Russia by identifying providers of the service, prices and types of services. By investigating the providers, we target the supply side of the dissertations market. We excluded individuals that offer similar services, focusing only of firms. In this research, we only focus on dissertations as the product in demand. We do not focus on term papers, course papers, final papers, diplomas, etc. They may be acquired in order to advance to a doctorate, but they themselves do not make a candidate qualify for a doctorate. Also, all of these products may be bought on-line or ordered custom made throughout the former Soviet republics and many other countries, including the US and the UK. Dissertations are much more specific product and the dissertations market is quite unique. We have identified a total of 169 firms located in Russia that offer dissertations for sale. Most of the firms-providers of dissertations for sale, prepared by the ghost writers on order, advertise exclusively in Russian language, but some advertisements are dubbed in English.

The number of firms is impressive and points to the open access for those wishing to acquire and defend a dissertation. All of these firms advertise on-line and most of them emphasize confidentiality for their clients. As follows from their contact information and office addresses, their head offices are located in Moscow, St. Petersburg, Kiev, Kharkov, Minsk, Almaty, and few other cities, which are major educational centers in the former Soviet Union.

These firms hire university faculty and researchers with doctoral degrees for ghost writing of dissertations and other academic works, including publications and accompanying documents for VAK. Firms openly advertise their services and most advanced ones name their product as scientific research. They are legally registered and pay taxes.

The "dissertations for sale" is a buyer's market. There are almost two hundred providers and virtually no such advertisements as "will buy a dissertation." Prices for the Candidate Sciences dissertations vary from \$900 to \$16000. Prices for the Doctor Sciences dissertations are much higher, going from \$4000 to \$25000. These are starting prices. Final prices with complete package of services can go much higher. The average starting price for a Candidate Sciences dissertation is around \$4000, while for the Doctor Sciences it is \$10000. Prices in Moscow are 1.5 times higher than in other cities [14]. Descriptive statistics of prices on the services offered on the dissertations market in Russia in 2009 are presented in Table 1.

/Table 1 here/

In addition to dissertations, publications, and documentation, friendly Dissertation Boards are needed for successful defense of those with low academic abilities. Expenses for pushing the dissertation through the hurdles of academic bureaucracy may well exceed the cost of the dissertation itself. For instance, the consulting company "Robotron" offers a dissertation itself for \$2000 or a full package "all inclusive" for \$6100. This means that the "bureaucracy" costs at least twice as much as the dissertation itself. High transaction costs of the dissertation defense may be lowered if a candidate has political or administrative power or is in possession of other means of economic and non-economic influence. Politicians can reduce these transaction costs

by exercising their influence over academics in "friendly" Dissertation Boards. The system of doctoral education in Russia is centralized and controlled by the state. We conclude that decentralization, university autonomy, and more reliance on reputation may be needed in order to curb corruption in doctoral education.

In an attempt to attract customers, dissertation-providers use feedback messages, and some of them are clearly fake. The doubtful nature of the feedback comes out of inconsistencies that may be found throughout. Advertisements sometimes contain grammatical and stylistic errors [15]. There are also some anecdotal cases. For instance, the address of the dissertation provider "Zdal" lists Metro station "Marksistskaja" [Marxist], Bol'shaja Kommunisticheskaja street [Big Communist street]. One may wonder if the dissertations for sale business fits Marxist ideology, or does it bring the future era of Communism a little closer?

Every service provider emphasizes that the announced prices are not final but approximate. Final prices depend heavily on the specifics. Some providers offer discounts, including for those who bring in new customers. Some service providers use identical price lists [16]. Apparently, those are simply different gates to the same service structure that consists of operators, dispatchers or middlemen and the ghost writers. In one case, one web-site leads to another website [17]. They hire same ghost writers. Ghost writers receive orders and fulfill them. It does not matter for ghost writers, from which company they receive the order. This type of organizational structure complicates the possibility of competition between the service providers. Few service providers openly say that they are just middlemen performing the dispatcher function. They receive an order and then place it, i.e. send it to appropriate ghost writers. The writers then respond with their bids. Whoever offers a best deal in terms of timeline, quality and price, receives the order to write dissertation. Firms also offer blacklists of similar providers,

apparently in an attempt to eliminate competitors [18]. One provider describes dishonest behavior in the dissertations for sale business, including the unrealistic prices of \$1000 per dissertation. This provider offers dissertations at the starting price of \$2300 [19].

Some service providers, which sell ready to go dissertations, share one website [20]. Some advertisements repeat each other, but not many. They either copy each other's texts, or represent same people. Some web-sites are not well-developed while others use all the latest technological and marketing achievements. Some dissertation-providers use brand names, such as MGU (abbreviation for Moscow State University), in their company name in order to attract clients. They also offer admission to MGU [21]. Image of Moscow State University is used by the dissertation-providers as well [22]. One of the dissertation providers even uses a vague and unclear Harvard University emblem "Veritas" [23]. Few service providers offer a short advertisement in English in order to reach out to foreign students [24].

Some companies offer links to websites where one can buy ready-to-use educational certificates and diplomas, while others specialize on dissertations only. These specialized companies are more likely to offer DSc dissertations, than are those that offer term papers, course papers, and diplomas. Such specialized "dissertations only" companies appear to be more knowledgeable in the process of dissertation preparation and defense. They offer all the accompanying services, including publications, auto-referate, etc. They are also less likely to name the price, instead pointing to the process of price negotiation and individualistic approach. Few are specialized on just one discipline, such as, for instance, medicine, pedagogical sciences, or jurisprudence [25]. Some service providers specialize on certain research methods that can be applied to many disciplines [26]. They do not offer complete dissertations but perform only

quantitative part of the dissertation. Some service providers offer dissertations in technical specialties only [27].

Service providers do not point to their connections in Dissertation Boards. They emphasize confidentiality. Apparently, they do not mention friendly Dissertation Boards because they do the work, but leave the bureaucratic and academic procedures to be done for the candidates themselves. Dissertation itself costs \$3500 and "the bureaucracy" costs additional \$3500, doubling the price. The bureaucracy includes selection of the discipline and dissertation board, avtoreferat, journal articles and their publication, all other documents for the Board [28]. It does not include, however, friendly Board, documents for VAK, and fee for the doctoral program. Transaction costs are at least as high as the dissertation itself or even higher. "Robotron" offers a dissertation for \$2000 or full package 'all inclusive" for \$6100 [29]. This means that the "bureaucracy" costs twice as much as the dissertation itself and intended to cover high transaction costs.

There is an impressive difference between "dissertation" and "dissertation for key" prices [30]. The latter are more than twice as expensive as the former. This differential in prices points to the importance of moving the dissertation through the dissertation board. The text itself appears to be cheaper than the accompanying services. In addition, "dissertation for key" does not necessarily mean a guarantee of a friendly dissertation board, dissertation advisor, personal connections in VAK, etc. "Pishem" list accompanying and helping to defend as a separate service, priced at \$3000. The dissertation itself starts from only \$1000. There are quite a few service providers that specialize on the ready dissertations for sale services [31]. Apparently, they perform a function of delivery of defended dissertations placed in the Russian State Library

(RGB) to those who orders them. The price of such a service is \$30. Other firms that produce dissertations also offer ready dissertations from RGB for \$30-\$50, depending on the firm.

"Vipdissertation" lists prices per page, including for dissertations. This is quite a strange approach in measuring and pricing quality. Prices are listed in Russian rubles. Sometimes prices on most of the services are listed in Russian rubles, but dissertations are priced in US dollars. "Infohelper" lists prices in Euro. At "Dissertime", prices on most of the services are listed in Russian rubles, but dissertations are priced in Euro.

The variety of service providers on the education market ranges from officially registered companies to advertisements on web-boards [32]. One of such boards contains 135 advertisements about term papers, course papers, and diplomas for sale [33]. Here is yet another web-board with over a hundred advertisements that offer term papers, course papers, and diplomas [34]. Advertisements promise individual approach, legally binding contract, and say that (they) are not just a mediator or internet [35]. Firms advertize on web-boards along with individual advertisements and offer links to their web-sites. Internet broadens the opportunities for sellers and buyers, but it also erodes personal communications and thus trust in suppliers.

It is natural that buyers are concerned with the quality of the product. The whole system is focused on reliability of service providers and development of trust between providers and consumers while minimizing transaction costs in this would be illegal business. Some of the dissertation providers may be quite popular. For instance, the site of "5diplom" is visited by up to 800 people a day [36]. "Sdal" offers statistics of their success since 1998. The provider claims a total of 7145 works, including dissertations, diplomas, course papers and term papers. 3462 were revised and successfully accepted, while 2856 were accepted without revision. 2088 "A"s and 3794 "B"s [37]. Can a potential client rely on these statistics?

Dissertations as a service are often hidden or prices on them are not announced. There may be few speculative explanations for that. This may be because the responsibility for fake dissertations is higher than for term papers and diplomas. May be because the number of term papers is enormous and out of control or may be because their quality is traditionally low and they are being routinely plagiarized since Soviet times. "DiplomService" explains the copyright and legal aspects of writing research works and representing them as your own, pointing to legal responsibility and criminal responsibility [38].

It is understood that providers offer dissertations written in Russian language. However "Student03" offers dissertations and other works in Russian, Ukrainian, and English [39]. "Diplom" offers delivery of dissertations from the West (US and Europe). The service costs around \$50 [40]. Translation from major European languages varies from \$1 to \$10 per page. In this way, a dissertation of 150 pages may cost as little as \$1500. Publications in journals cost \$10 per page, while publications in VAK-approved journals cost \$25 per page. One should keep in mind that in order to be admitted to the defense of CSc, one should have at least three articles published in VAK-approved journals. DSc dissertation requires at least 20 articles in VAK-approved journals.

Price policies are quite sophisticated but sometimes not very clear. For instance, in the same dissertation service provider firm, price of a dissertation starts from \$5000 and then the starting price is marked at \$7000 [41]. Such a difference may point to the fact that the actual prices are negotiated. This may be explained by the sophisticated nature of the product and the need for individual approach. One provider offers services of a paid dissertation advisor [42]. This service is intended to compensate for irresponsible dissertation advisors, which is now the common case in the doctoral education, and not only in the post-Soviet republics.

Some providers of dissertations for sale work internationally. They advance their offerings in Russia, Ukraine, Belarus, and Kazakhstan. "Student-works" offers help in Russia, Ukraine, Belarus, and Kazakhstan [43], while "Sigmahelp" works in Russia, Ukraine, and Belarus [44]. In both cases, prices on academic works are listed in national currencies. Prices on dissertations are listed in US dollars. Prices on all the services except dissertations vary depending on location. Unlike in Russia, in Ukraine the majority are private announcements posted on electronic billboards. The providers continue to hire ghost writers in Ukraine [45]. In Kazakhstan, openly advertised dissertation service providers are virtually non-existent, nor can they be found in tightly controlled Belarus. So-called "dissertations for key" service in Russia is quite rare [46].

The policy of checking dissertations for plagiarism in Russia, newly adopted by VAK, if proves effective, will drive prices for dissertations up and eventually require more creativity on the side of perpetrators. Under the classical understanding of economic theory, an increase in price of the product causes a decrease in the demand for this product. There are exceptions, including inferior goods [47] and Giffen goods [48]. Dissertations and doctoral degrees are neither inferior goods, nor are they Giffen goods. Doctoral degrees produced for sale are more akin to luxury goods accessible for those with monetary means and power. Hence, the price-demand causality may not pertain to the doctoral dissertations. Successful mechanisms for plagiarism detection will necessitate an increase in quality of dissertations, and, hence, the prices will increase. Once the quality of dissertations increases, the prestige of obtaining a doctorate increases as well. The prestige of doctoral degrees will be partially restored. As a result, the demand for doctoral degrees from the side of the clients may increase rather than decrease. In

accordance with the postulates of economics, the demand is understood not as the total number of clients, but the total sum of money they are able and willing to pay for dissertations.

Conclusion

A doctoral degree, guaranteed by the state, gives prestige to its holder. Traditionally, holders of doctoral degrees were employed by universities and research institutes. This is no longer the case. A new privileged class, including politicians, state bureaucrats, and businessmen, seeks verbal and documented distinctions. In order to satisfy the demand for doctoral degrees, dissertations are for sale. The "dissertations for sale" business in Russia is growing. Russian society pays a much higher price for the existence of fraudulent doctorates and dissertations for sale than do those buying doctoral degrees. Fake doctorates directly and indirectly reduce effectiveness and efficiency of the societal production and are detrimental not only to the education sector, but the society overall.

The rent-seeking behavior in the Russian society is perceived as a norm. Public officials, bureaucrats, and civil servants attempt to transform their access to material and non-material assets into personal benefits. Educators act in a similar manner. Rectors of state HEIs rent out public property, including academic and non-academic facilities and land, to businesses in which they often have a share. University professors sell doctorates by abusing their monopolized function of conferring doctoral degrees. The specifics of the doctoral education in the Russian Federation are such that doctoral students take only few formal courses. This is common in European countries. Professors do not have to teach doctoral courses, nor do they advise their doctoral students, even though they suppose to. In many instances, university professors, including members of the Dissertation Boards, simply let a dissertation through. The division of

functions emerges in order to maximize the total income obtained from illicit payments. The Board members let the dissertation through, while others write the dissertation and prepare the documents before and after the defense. The bottom line in the dissertations for sale issue and the broader issue of doctoral credentials comes down to two questions: 1) whether PhD holders are used in societal production, i.e. R&D and teaching; 2) whether dissertations are used in production, i.e. results of the dissertations are applied in production, as do products of R&D. At this point, it appears that the whole sector of scientific research and scholarship is spinning around the production of dissertations for their own sake. A doctoral degree performs a signaling function: it flags a high quality specialist able to perform certain functions in societal production. The whole issue is not the quality of bought and sold dissertations, since they do not really go into production, but the quality of degree holders. They do not deserve academic merits and their educational credentials do not represent real knowledge.

Decentralization and restructuring of the Russian Academy of Sciences (RAN) diminishes the role of the state. University autonomy may be needed to replace weakening state control. Meritocracy and high social prestige of doctorates slowly disappears. This indicates the process of erosion of values, common for the society overall. Forgeries will eventually be annihilated by their overwhelming number. Doctoral degree will become absurdist. The situation develops in an unregulated, unorganized way. A well-planned campaign focused on discrediting Soviet doctorates is unlikely. Nevertheless, the process of debasement of the old system creates a ground for the new, one tier system of doctorates, based on PhDs. In the new system, a doctoral degree will serve as an indicator of the holder's ability to perform independent scholarly research and teaching. Reputation of each degree and degree holder will be based on his/her academic merits and reputation of the granting university.

Notes

- [1] This paper was presented at the Annual Meeting of the American Economic Association
- (AEA) in Atlanta, GA, in January 6, 2010.
- [2] Rossiyskaya Akademiya Nauk (RAN)
- [3] Vysshaya Attestatsionnaya Komissiya (VAK)
- [4] Kandidat Nauk
- [5] Doktor Nauk
- [6] Rossiyskaya Gosudarstvennaya Biblioteka
- [7] Independent Analytical Systems
- [8] The Government of the Russian Federation. Retrieved October 23, 2008, from

http://www.government.ru/content/rfgovernment/rfgovernmentchairman/

- [9] Russian Parliament
- [10] The President of Chechen Republic. Retrieved April 7, 2008, from

http://chechnya.gov.ru/page.php?r=2

[11] Sovet po obshestvennym nagradam. Prodazha ordenov [The Council for Public Decorations.

Sale of orders]. http://www.sovet.pkc.ru/

- [12] For details on VAK, see the official web-site http://vak.ed.gov.ru/
- [13] Dissertatsionny Sovet
- [14] Prices in Moscow are 1.5 times higher than in other cities. See, for instance, "Diplomtime":

http://diplomtime.ru/price.aspx; "Helpdissertation": www.helpdissertation.ru,

http://www.helpdissertation.ru/modules.php?name=Price

[15] See, for instance "DisZakaz", doi: http://www.dis-zakaz.ru/

- [16] See, for instance, pricelists of such service providers, as "Diplomovoz", "HomeWork", "Eduservice", and "Helpstudent"
- [17] See the link at "Vashdiplom" and "VseZa"
- [18] See, for instance, the following web-sites: http://www.educationservice.ru/blacklist.php; www.5ke.ru/; www.educationservice.ru
- [19] See the explanation of pricing policies at http://pro-nauch.ru/rukovod.htm
- [20] See, for instance, service providers of dissertations for sale Forstudent.msk.ru and HomeWork
- [21] See, for instance, the set of services offered at www.mgu-consulting.ru/
- [22] Image of Moscow State University may be found on the following sites of the dissertation-providers: http://www.helpstudent.ru/, http://www.dip-masters.ru/; analitikarodis.narod.ru, http://m-s-a.ru/u03.html
- [23] See dissertation provider "Referatna5"

www.stathelp.ru/

- [24] See, for instance, an advertisement in English at "Yourdissertation"
- [25] For example, see web-sites of the following providers: Medicine: http://meddissertaciya.ru; Pedagogical sciences: http://disser.biz/vip.htm; Law: http://pravo-edu.ru/content/view/16/42/ [26] See, for instance, offerings in statistics and other forms of quantitative analysis:
- [27] See, for instance, offerings by "Technoprestizh XXI vek", doi: http://lugin.ru/
- [28] See for instance "Aspirans" at http://aspirans.com/kandidatskaya-dissertatsiya-na-zakaz
- [29] See "Robotron" at http://robotron.ru/disser.html
- [30] See, for instance, prices by "Mosdiplom"
- [31] The "Vipdisser" service provider is a classical example of ready dissertations for sale

- [32] See for instance advertisement on the web-board at http://irr.ru/advert/13438385/
- [33] See http://irr.ru/jobs-education/education/students/
- [34] See http://rabotadoma.ru/cgi-bin/read.cgi?c=130&pg=4;
- http://www.ulitka.ru/links.shtml?cmd=default&parent=169&n=405
- [35] See advertisements on http://service.kupiprodai.com.ua/info843362.html
- [36] See the visitor count at http://www.5diplom.ru/hot_vac.php
- [37] See "Sdal" at http://www.sdal.ru/
- [38] See "Citatasokrata" at http://www.citatasokrata.ru/zakon.html
- [39] See "Student03" at http://www.student03.by.ru/
- [40] See "Diplom" at http://diplom.ws/index.htm
- [41] See pricing policies of "Pravo" at http://pravo-edu.ru/content/view/16/42/
- [42] See the offer at http://pro-nauch.ru/rukovod.htm
- [43] See the offer by "Student-works" at http://www.student-works.ru/price.php
- [44] See 'Sigmahelp' at http://www.sigmahelp.ru/
- [45] See http://www.osvita.kiev.ua/
- [46] Ready to go, "all included" services
- [47] Inferior good is a good that decreases in demand when consumer income rises, unlike normal goods, for which the opposite is true. Inferiority, in this sense, is an observable fact relating to affordability rather than a statement about the quality of the good. As a rule, too much of a good thing is easily achieved with such goods, and as more costly substitutes that offer more pleasure or at least variety become available, the use of the inferior goods diminishes.
- [48] Giffen good is a special type of inferior good. When the price of a Giffen Good increases, the demand for that good increases as well. This would have to be a good that is such a large

proportion of a person or market's consumption that the income effect of a price increase would produce, effectively, more demand on this good.

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Table 1

Descriptive statistics of prices on the services offered on the dissertations market in Russia, 2009

Price	CSc dissertation	DSc dissertation	Journal article	Publishing journal article	Monograph	Auto- referate of the dissertation	Review of the dissertation	Essay to enter the doctoral program
Average	3632	9718	139	425	4596	345	34	56
Maximum	16000	25000	400	800	34000	1000	100	100
Minimum	900	4000	40	250	500	50	8	20
Mode	2000	10000	100	350	8000	250	20	100
Max av	10750	16000	325	800	19750	1000	100	100
Min av	900	4000	40	250	500	50	8	20

All prices are in USD, calculated either directly or based on the exchange rate of \$1 per 30RUR Source: calculated by the author