



Economics of corruption in doctoral education: The dissertations market

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ABSTRACT

This paper addresses the issue of “dissertations for sale” in Russia. The tasks of this anthropological study include establishing the problem of corruption in doctoral education, identification of the dissertations suppliers, study of the specific services they offer, analysis of their prices on different services, and generalizations of findings in the context of the educational system. All of these tasks address the supply side of the dissertations market. This paper identifies a total of 169 firms that offer dissertations for sale in Russia. It concludes that the cost of the dissertations market extends far beyond its monetary expression. Fake doctorates undermine the credibility of real, earned doctorates, and erode the gold standard of quality in research and scholarship.

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1. Introduction

This paper is a typical study of a consumer market. What is unusual is the kind of market under investigation: the consumer market of “dissertations for sale.” The phenomenon of “dissertations for sale” in this case does not mean the delivery of dissertations for a fee to readers. Rather “dissertations for sale” denotes custom-made scholarly works written by ghost writers for those aspiring to receive a doctorate by purchasing a dissertation instead of writing one. Dissertations market transactions are clearly cases of educational corruption. While the problem may be persistent, and even growing in some nations, there are no published studies of the dissertations market

in the scholarly literature. There are a few reports in the media and brief comments by academics about the problem of corruption in the conferral of doctoral degrees, but no systemic research is available for readers.

This study focuses on Russia to investigate the issue of corruption in doctoral education. Russian doctorates, especially those in mathematics and science, have long been considered some of the most prestigious in the world. This may no longer be true. Media reports highlight the possibilities of acquiring doctorates, including the purchase of a ready dissertation. The demand for doctorates is driven by the aspirations of some individuals to feature a doctoral degree on their resumes for reasons of professional appointment or promotion, pride or merely as evidence of intellectual strength. The demand for doctorates among the public creates the dissertations market. This paper presents the first systematic investigation undertaken into the issue of dissertations for sale.

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1.1. Problem of corruption in higher and doctoral education

According to some media reports, in Russia in 2003 parents have paid 26.5 billion rubles in bribes for their children's education (Newsru.com, June 24, 2004). This sum, around one billion dollars, is a rather wild and speculative estimate of what is known as the black market in Russian higher education. While the quantitative estimates of the total volume of corruption in the higher education sector in Russia are dubious, the fact of corruption and its large scale and scope are by now obvious. Higher education corruption in Russia is described generously in the works of Osipian (2007, 2008a, 2008b, 2008c, 2009a, 2009b, 2009c, 2009d, 2010a, 2010b, 2010c).

Media sources report that doctoral education is no exception in terms of corruption in education. According to one guess, in Russia, every year 10,000 dissertations are written for money (Newsru.com, March 24, 2006). This number represents almost a third of all the dissertations defended in Russia annually. Simakin (2006) calls these holders of doctoral degrees “doctors of the invisible front.” Yurevitch (2006) addresses them as degree-holding aliens, outsiders to science and scholarship. Other epithets include “institutionalization of fraud” and “semi-fake sciences” (Yurevitch, 2005a, 2005b). Doctoral degrees are popular among Russian politicians. More than half of all the members of the State Duma, Russia's main legislative body, hold doctoral degrees. Klusmann (2007) calls the Duma a Parliament filled with intellectual giants with dubious doctoral degrees. Other politicians and bureaucrats also want doctoral degrees for prestige and a sense of affiliation with the scholarly community. The media reports that many state bureaucrats and parliamentarians lost sleep over their academic laurels (Krasilova, 2006). Even Russian Prime Minister and former President, Vladimir Putin, was accused by an American scholar of plagiarizing his PhD dissertation (Allen-Mills, 2008). Russian media followed Western media in voicing such accusations, speculating that this may result in a massive check of all the dissertations defended by Russian public officials (Newsru.com, March 27, 2006).

Numerous accusations of corruption in doctoral education urge the authorities and the academic community to respond to the challenge of corruption. Russia has launched a system to detect plagiarism in academic works. Starting in 2008, all higher education institution (HEI) subscribers to the services of the Antiplagiat program are able to trace dissertations deposited in the Russian State Library for plagiarism (Antiplagiat.ru, 2008). The Russian state agency that awards doctoral degrees, The Highest Attestation Commission under the Ministry of Education and Science (VAK), is subscribed to this service as well.¹ The Chief Academic Secretary of the VAK, Feliks Shamhalov, states that changes are coming to the system of attestation, including licensing and quality control (Rossijskaja

gazeta, March 21, 2008). He calls for the VAK's own quality control department to be organized for this “factory of knowledge.” The VAK has been introducing strict measures for those seeking doctoral degrees (Newsru.com, June 30, 2006). Dissertations and auto-referates² of scholars will have to pass the obligatory check for plagiarism (Newsru.com, July 5, 2007). The effectiveness of the program, especially regarding dissertations, remains unclear. The authorities are also fighting fake academies that duplicate state institutions and award academic merits for professional achievements and life experience (Morezov, 2008). Research into the black market of educational services with its supply and demand will help to fill the information gap.

1.2. Concept and logic of inquiry

Media reports and expert commentaries point to the presence of corruption in doctoral education and the conferral of doctoral degrees based on criteria other than scholarly accomplishment. The existing system, established by the state, formally does not allow such non-scholarly criteria. Simply put, acquiring a doctorate in ways not defined in the system is criminal. Accordingly, direct evidence for corruption in doctoral education can only come from prosecutions and court decisions. However, indirect evidence may be found as well. It is no secret that the scientific achievements of the post-Soviet period are not on par with those of the Soviet era. Funding for R&D activities declines steadily and so does the number of personnel involved in research. At the same time the number of conferred doctorates increases significantly year by year. One reason for that may be that the student population in Russia has increased rapidly, requiring more doctoral degree holding faculty in HEIs. This accreditation requirement is set by the state. Those seeking prestige, reputation, promotions, high rank jobs, and public office also represent a demand for doctorates. However, an increase in demand for doctorates, which is now undeniable, does not necessarily translate into a need to write and defend one's own dissertation. Instead, many choose to turn to professionals in their quest for a doctorate.

The demand for doctoral degrees produces a demand for dissertations and other accompanying services. Dissertations become means rather than ends in this game, available for purchase from highly skilled and yet underpaid faculty and researchers, who ghostwrite dissertations in order to supplement their legal income. The whole system of doctorates is monopolized by the state, and thus there are no alternatives for those, such as bureaucrats, businessmen, academically weak faculty, and other groups, who constitute the demand for the degrees. On the other hand, there are numerous loopholes in the system that allow circumventing some rules and regulations, when the society in general is corrupt, doctoral education cannot be an oasis.

¹ Vysshaya attestatsionnaya komissiya (VAK), The Highest Attestation Commission of the Ministry of Education and Science of the Russian Federation, <http://vak.ed.gov.ru/>.

² Auto-referate [avtoreferat] is an abbreviated version of the candidate's dissertation written according to set standards.

2. Methodology

The goal of this paper is to investigate corruption in doctoral education. The few studies that exist on education corruption normally research the demand side. Such a trend is explained by the fact that these studies are based on surveys and interviews conducted with potential customers, i.e. students. Due to the illicit nature of the activity and lack of any reliable data, this paper presents a narrative anthropological study of the supply side of the dissertations market. The tasks of this study are set according to the goal and the means available. They include establishing the problem of corruption in doctoral education, identification of dissertations suppliers, study of the specific services they offer, analysis of their prices on different services, and generalizations of findings in the context of the educational system. All of these tasks address the supply side of the dissertations market.

We conducted a study of the “dissertations for sale” market in Russia by identifying providers of the service, types of services offered, and prices. We excluded individuals that offer similar services, focusing only on firms. We studied their services through their websites and on-line advertisements. We have identified a total of 169 firms located in Russia that offer dissertations for sale. In this anthropological study, 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 qualify a candidate for a doctorate. Also, all of these other products may be bought on-line or ordered custom made. Dissertations are a much more specific product and the dissertations market is quite unique.

2.1. Descriptive statistics and analysis

The data presents prices of CSc dissertations, DSc dissertations, journal articles and their publication, monographs, auto-referates of the dissertation, reviews of the dissertation, and essays required to enter the doctoral program.³ These prices are calculated as average, maximum, minimum, median, and mode or single most frequently met prices. In addition, we calculated maximum average and minimum average prices for the following reason. All service providers indicate minimum or base prices. Sometimes providers indicate prices in a certain range, but even in such a case the entire range means base prices rather than minimum and maximum prices. Accordingly, we calculate averages for such ranges and then recalculate minimum and maximum prices. Descriptive statistics of prices on the services offered on the dissertations market in Russia in 2009 are presented in Table 1.

Unlike in the US and Canada, in the Russian system of doctoral education rigorous coursework, comprised of foreign languages, philosophy, and psychology of education, continues for only around one year. This system is typical of European doctoral programs. Accordingly, the dissertation is the major requirement in completion of the doctoral program, as it was true in the Soviet system. The emphasis on the dissertation as the major requirement for the doctorate and the lack of coursework make the phenomenon of dissertations for sale in Russia especially interesting.

The data on base prices shows that in Russia in 2009, the average price of a CSc dissertation was \$3632, while the maximum could be as high as \$16,000 and the minimum as low as \$900. Even the \$16,000 posted at a dissertations service web-site is not a final price and could go even higher. At the same time a \$900 dissertation looks suspiciously cheap and is definitely just an advertisement price to draw customers, rather than the real price of a dissertation. The median price for a dissertation is \$3000, and the single most frequently met price is \$2000. A DSc dissertation is a much more prestigious and complex work. Less than one out of five CSc holders defend DSc dissertations. The prices of DSc dissertations are much higher, therefore, with an average price of \$9718, a maximum of \$25,000 and a minimum of \$4000. The average price of a DSc dissertation is almost three times higher than that of a CSc dissertation. The most frequently met price on a DSc dissertation is \$10,000, i.e. five times higher than for a CSc dissertation. The median price of \$9500 is almost equal to the most frequently met price. As is the case with CSc dissertations, prices for DSc dissertations can go even higher than the posted maximum of \$25,000, since even this is a base price.

A dissertation alone is not sufficient to qualify for a doctoral degree. The additional requirements may also be paid for. Defense of the CSc dissertation may require at least one publication in a scholarly journal.⁴ DSc dissertation defense would follow 20 journal publications or more. The reason for such a rule is the need to make the results of each dissertation available to the public through scholarly publications. The dissertations market sets the prices on scholarly articles needed for the defense. In Russia, the base price offered by providers of dissertations for sale averages \$139, with a maximum of \$400 and a minimum of only \$40. The most frequently met price for a scholarly article is \$100.

Having a scholarly article (self-produced or paid for) does not guarantee its publication. In fact, personal connections or payments are often needed to publish the article in a journal approved by the VAK. Some journals charge publication fees, even per page published, which is indeed a good

³ The Candidate Science (CSc) degree [Kandidat Nauk] 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 Doctor Science (DSc) degree [Doktor Nauk] 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 HEIs.

⁴ See the requirements in: Paragraph 11. Postanovlenie Pravitel'stva RF ot 30 yanvarya 2002 g. #74 ob utverzhdenii Edinogo reestra uchenyh stepenej i uchenyh zvanij i Polozheniya o poryadke prisuzhdeniya uchenyh stepenej [Paragraph 11. The Order of The Government of the RF #74 of January 30, 2002. About the unified list of scientific degrees and academic ranks and the Charter about the requirements for scientific degrees]. The Highest Attestation Commission of the Ministry of Education and Science of the Russian Federation (VAK). Available at: <http://vak.ed.gov.ru/ru/docs/?id4=155&i4=3>. Accessed September 30, 2009.

Table 1

Descriptive statistics of prices on the services offered on the dissertations market in Russia in 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	16,000	25,000	400	800	34,000	1000	100	100
Minimum	900	4000	40	250	500	50	8	20
Median	3000	9500	100	350	2500	250	20	40
Mode	2000	10,000	100	350	8000	250	20	100
Max av	10,750	16,000	325	800	19,750	1000	100	100
Min av	900	4000	40	250	500	50	8	20

Source: calculated by the author.

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

business. These lucrative fees are collected legitimately with no informal payments involved. Other journals cannot charge fees due to their statute, and thus informal connections to the publisher may be needed to publish in these journals. These journals may receive informal payments. Dissertation service providers also offer the “publishing journal article” service. The base price for this service in Russia averages \$425, with a maximum of \$800 and a minimum of \$250. The most frequently met price is \$350. The VAK frequently revises its list of approved journals in order to assess journal quality. The practice of regular revisions, however, may add to uncertainties in the value of scholarly publications. It appears paradoxical that, in Russia, publishing an article in a scholarly journal costs on average three times more than writing an article. In addition to publishing, there is also some bureaucracy and paperwork required. For instance, a full transcription of the defense should be included along with the dissertation. The total costs of CSc and DSc degrees are comprised by the prices of all the scholarly works necessary in order to be awarded a doctorate. Calculations of the total costs of CSc and DSc scholarly work in Russia in 2009 are presented in Table 2.

The total cost of scholarly works for a Russian CSc degree, including the essay to enter the doctoral program, one journal article, its publication, auto-referate of the dissertation, and the dissertation itself, is a minimum of \$4597. This is calculated based on averages of minimum base prices. For the DSc degree, the total cost of scholarly works is \$25,849. This price includes at least one monograph. As one can see, the price of acquiring a DSc degree in Russia

is five times higher than the CSc degree. According to the rules set by the VAK, one may not acquire a DSc degree without first defending a CSc dissertation. This means that the total cost of a DSc degree, denoted in Table 2 as the grand total, will be \$30,446, i.e. the sum of the CSc degree and the DSc degree.

3. Discussion

The “doctorates for sale” phenomenon is by no means a new development in education. Historically, those pursuing doctoral degrees incurred a substantial cost, including informal payments and gifts (Compayre, 1893). Today, corruption in doctoral education remains a serious problem in Russia. As follows from on-line advertisements, experts in leading universities that host Dissertation Boards offer candidates help in finishing and polishing dissertations in exchange for informal payments. Some candidates are qualified in their respective areas of specialization, but lack the time and skills necessary to formulate their major scholarly statements and findings and put them into proper form and format. Also, the line between personal contribution to the field of knowledge and assistance in writing dissertations is not clearly demarcated.

Experts also offer to write a dissertation for a candidate from scratch. A more advanced version of this service is called “dissertations for key,”⁵ when the candidate is not expected to make any effort in obtaining the doctorate. In fact, in some instances there are anecdotal cases when a candidate was not able to recall the exact formulation of the dissertation’s title even during the defense. This is an especially explicit indication of corruption, since in the Russian system a lot of attention is paid to the wording of the dissertation’s title, and titles go through formal approval and re-approval. Dissertations for key are advertised as new, original, custom made works. The full package includes a whole range of services, from selection of the dissertation topic to the approval of the defended dissertation in the VAK.

The case of Putin’s dissertation points to yet another possible form of abuse (Newsru.com, March 27, 2006). Experts offer to write the dissertation for a client and then can decide to plagiarize certain parts of it in order to save time, reduce the cost of production, and produce a cheaper

Table 2

The total costs of CSc and DSc scholarly work in Russia in 2009, average prices, USD.

Scholarly work	CSc	DSc
Essay to enter the doctoral program	56	–
Dissertation	3632	9718
Journal article	139	139
Journal articles total	$139 \times 1 = 139$	$139 \times 20 = 2780$
Publishing journal article	425	425
Publishing journal articles total	$425 \times 1 = 425$	$425 \times 20 = 8500$
Monograph	–	4596
Auto-referate of the dissertation	345	345
Total	4597	25,849
Grand total	–	30,446

Source: calculated by the author.

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

⁵ Ready to go, “all included” services.

product. Such a practice may represent a significant modification of the concept of dissertation for key, when not only does the candidate lack merit, but also even the dissertation itself is below a set standard. Such a development implies a well-organized mechanism of conferring degrees to candidates who lack merit and whose dissertations are below doctoral-level.

The additional salary earned by those with CSc and DSc degrees above those with specialist degrees is not very significant. According to the Order of the Government of the Russian Federation #712 of November 23, 2006, "On supplemental compensation to holders of Doctoral degrees," the supplement is \$100 per month for faculty members and any other employees of state enterprises who hold CSc degrees and \$250 per month for those who hold DSc degrees.⁶ If a salary of a college faculty member with a CSc degree is around \$500 month, then the supplemental \$100 constitutes only 20%. For faculty with DScs degree, this supplement is around 25% of the salary. However, the differential in salaries between those with CSc and DSc degrees and those with specialist degrees becomes significant when it comes to state bureaucrats and civil servants. Bureaucrats with CSc degrees receive a monthly supplement of \$455, while those with DSc degrees receive \$758. This is a good supplement in a country with an average monthly salary of \$700. In addition to guaranteed monthly monetary rewards, doctoral degrees help state bureaucrats receive promotions and move up the career ladder. These monetary supplements are also taken into consideration when the retirement packages for state bureaucrats are calculated. Apparently, state bureaucrats have much higher monetary incentives to obtain doctoral degrees than do faculty members. Thus, having state bureaucrats interested in doctorates should come as no surprise.

Doctoral degrees help their holders advance to managerial positions in both private and public sectors. In Russia in 2009, the average salary of \$1100 for managerial positions was 1.7 times higher than that of a highest qualification specialist. The data on the average calculated salary of employees by professional group and level of education indicates that in the managerial cohort itself, those with terminal degrees earned 1.6 times higher salaries than those with college degrees (GKS, 2009). Earnings of the R&D specialists were higher than any other sector of the economy except oil and gas industry and financial services (RSE, 2010). Professionals with doctoral degrees are in demand not only for managerial positions. According to results of the 2010 survey, the number of vacancies for doctoral degree holders to fill faculty positions in colleges and universities was 4700, while in R&D institutes, 2600 (GKS, 2011).

We made an attempt to survey recent doctoral students in Russia, asking questions about their perceptions of how much others paid for dissertations and the ratio of final to initially quoted prices. Despite the sensitivity of the topic, a few conversations were productive; some prices

were named, and some stories about the "dissertations for sale" experiences of the respondents' acquaintances were reported. We included the results of conversations with graduate students and recent graduates with doctoral degrees that represent a variety of Russian regions. We intentionally sought data from different parts of Russia, including cities as distant as Yakutsk, Ulan-Ude, and Syktyvkar. In Yakutsk, the world's Pole of Cold and the capital of the Sakha Republic, a CSc dissertation was perceived to cost a client only \$1000 and a DSc dissertation \$1700. In Ulan-Ude, capital of the Buryat Republic, a city located between the Lake Baykal and the Mongolian border, a CSc dissertation is perceived to cost in a range from \$700 to \$1000, with a DSc dissertation ranging from \$1700 to \$2000.

In Moscow, the prices named by the respondents varied from \$3000 to \$5000 for a CSc dissertation in Economics, while in the Western Siberian city of Syktyvkar, in the Komi Republic, a CSc dissertation in Economics was bought in exchange for a one bedroom apartment in that city. At that time the cost of a one bedroom apartment was approximately \$20,000. A respondent in Kursk, a regional center in Central Russia, named prices for a CSc dissertation in a range of \$5000 to \$7500. This respondent also mentioned different prices by field or discipline. The cheapest ones, around \$5000, were in Sociology and Pedagogical Sciences. A CSc dissertation in History would cost \$6500, while CSc dissertations in the "most marketable" disciplines, such as Economics and Jurisprudence, would cost \$7500 and up. Auto-referat, journal articles, and reviews would cost an additional \$1300. The Kursk respondent also mentioned a DSc dissertation for key costing as much as \$100,000.

It is hard to calculate from such scarce data what the average perceived prices for dissertations would be. Nevertheless, some comparisons between perceived prices and advertised prices can be made. Prices for a CSc dissertation, as perceived by respondents in Yakutsk and Ulan-Ude, are much lower than the calculated average advertised price of \$3632. In Moscow, the prices named by the respondents were closer to average, and in Kursk they were higher than average. The price of \$20,000, named in Syktyvkar, is higher than even the maximum price of \$16,000. Perceptions of prices for DSc dissertations among respondents in Yakutsk and Ulan-Ude, \$1700 to \$2000, are way below the minimum advertised price of \$4000. The perceived cost of a DSc dissertation for key of \$100,000, named by the respondent from Kursk, however, is much higher than the total cost of DSc scholarly work that we calculated based on information from the firms, \$25,849, presented in Table 2. However, if calculated based on the maximum prices, presented in Table 1, the total cost of DSc scholarly work, \$84,200, would come much closer to the perceived \$100,000. If one is to add \$16,000 for a CSc dissertation, which is necessary to advance to the DSc degree, then the total would be exactly \$100,000.

The question remains whether the issue of doctorates for sale is significant enough, or at least its immediate impact on the economy is significant enough, to warrant extensive research. To answer this question one has to present an estimate of the total market volume of the "dissertations for sale" segment of the larger corruption market in education. In Russia, in 2005, there were 35,000

⁶ Order of the Government of the Russian Federation #712 of November 23, 2006 "On supplemental compensation to holders of Doctoral degrees." Moscow: Government of the Russian Federation.

dissertations defended, including 30,000 for the degree of CSc and 5000 for the degree of DSc. For the period of 1993–2005, the annual number of the CSc dissertations grew from 15,679 to 30,116. The number of CSc dissertations in social sciences and humanities increased during this period from 4362 to 15,981 ([Newsru.com, July 5, 2007](#)). Social sciences, including first of all economics, are now quite popular. At the same time, the number of organizations that host CSc programs increased only slightly during the 1992–2007 period, from 1296 to 1490 ([Central Statistical Database, 2008](#)). The number of organizations that host DSc programs increased more significantly during the 1995–2007 period, from 384 to 579 ([Sokolin, 2008, p. 617](#)).

Simakin (2006) claims that almost a third of all the dissertations defended in Russia in the last few years were written for money. The continuous growth in dissertation defenses in Russia is attributed, at least in part, to the business of dissertations for sale, prepared by ghost writers. For comparison, there were 45,596 doctoral degrees awarded in the US in 2006, a slight rise from 42,437 in 1996 ([NSF, 2008](#)). It appears that the number of doctorates awarded annually in Russia is almost equal to that in the US, while the funding for research and graduate education in Russia fell dramatically over the last two decades.

If one is to accept hypothetically that one third of all the dissertations defended in Russia are written by ghost writers for pay, the total of CSc degrees purchased is 10,000, while the total of DSc degrees purchased is 2000. The minimum cost of CSc scholarly work, including the dissertation, is calculated at \$4597 (see [Table 2](#)). Thus, the total annual volume of the CSc dissertations market is at least \$45.97 million. Similar calculations for the DSc degrees market, at the minimum price of \$25,849 per dissertation and supplemental scholarly work, give us a total annual volume of at least \$51.698 million. Thus, the total volume of the dissertations market in Russia, the sum of the CSc and DSc dissertations market, is at least \$97.668 million. The actual volume of the dissertations market may be much higher. This sum seems not so large for a country with an annual GDP of \$1.61 trillion.⁷ In fact, it constitutes only 0.006% of the country's annual nominal GDP. The total sum of bribes paid by ordinary citizens to street level bureaucrats, including in education, healthcare, and traffic police, is estimated at over three billion USD. The total sum of money paid in bribes and kickbacks by businessmen to bureaucrats is ten times higher, amounting to 30 billion USD. By 2009, accounting for the rapid economic growth, rising cost of tuition, and the trend of steady increases in corrupt payments in education, the total shadow market in higher education may be around two billion nominal USD, and much higher if adjusted for purchasing power parity. The “dissertations for sale”

segment of the market may constitute only 5–10% of the entire shadow sector in Russian higher education. Nevertheless, it seems to be a stable segment of the corruption market.

This underestimates the level of harm that undeserved doctorates do or can potentially inflict on society or a specific segment of the national economy and governmental structure, which may be accounted in a few ways. First, politicians, bureaucrats, managers and other individuals in leadership positions with dubious doctorates occupy positions they do not deserve, effectively preventing capable individuals from occupying these positions, doing better jobs, and better serving society. Second, widespread nepotism in higher education leads to many teaching positions in universities being occupied by relatives of the administration. They acquire doctorates in corrupt ways in order to retain their bread-winning positions in academia. As a result, the quality of teaching is deteriorating, while more promising scholars are kept away from teaching and research. Third, those who bought their doctorates are eager to collect illicit benefits and spread the culture of corruption in organizations where they work, be it a university, a private firm, or a governmental institution. Finally, doctoral degrees have a signaling function, indicating an individual's expert status. Once doctoral degrees are available for purchase, this signaling function is distorted. Overall, the most significant cost of the dissertations for sale phenomenon is that it facilitates placing unqualified people in positions of responsibility, thereby lowering the total factor productivity in the national economy.

Predictions about the share of dissertations for sale in the total pool of defended dissertations necessarily remain speculative, as the case in Russia demonstrates. However, some important implications may be drawn, especially regarding quality control, authenticity of the product, and authorship of the product. There is only one year of formal coursework in the Russian system of doctoral education. Moreover, the content of coursework is standard for all fields, including philosophy, psychology of teaching, and at least one foreign language. Opportunities to defend a dissertation are not limited to full-time doctoral students in residence. Dissertations are also written and defended by doctoral students by correspondence. These students rarely see their advisors, as is often also the case with full-time doctoral students. As the pay for faculty dropped dramatically in the early 1990s, many de-facto abandoned their advising responsibilities, while being formally listed as dissertation advisors. In addition to full-time and correspondence doctoral students, individuals who are simply registered with the department as writing a dissertation can defend. As evidenced by the little formal coursework and lack of student–advisor contact, the system does not anticipate a strong academic safeguard for fraud. Aside from the weak formal requirements, many are susceptible to corruption, ready to commit fraud or to turn a blind eye on someone else's fraud in exchange for remuneration. In Russia, doctoral students are often left to their own devices. There is little control over who actually wrote the dissertation presented for the defense. There are attempts to check dissertations for plagiarism with the help of modern

⁷ Russian Federation country profile. Nominal GDP in 2008. World Development Indicators (WDI) database. The World Bank. Available at: <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,contentMDK:20535285~menuPK:1192694~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>.

software, but it does not safeguard against custom-made, ghostwritten dissertations. The key questions remain: Who wrote the dissertation? Is the dissertation of acceptable quality?

The Russian system of doctoral education features both administrative and scholarly safeguards. All defenses are open to the public, all dissertations are physically accessible to the public at least one month prior to the defense, all defenses are announced at least one month in advance, major results have to be published in scholarly journals prior to the defense, and all the documents are reviewed by the central state agency, the Highest Attestation Commission. There are numerous additional administrative safeguards in place. One may be appalled by the bureaucratic colossus of the Russian dissertational procedure, with all of its administrative requirements and timelines. More importantly, there is a significant outside scholarly control over the quality of the dissertation as it moves toward the defense. This control includes outside readers responsible for the quality of the dissertation to be admitted to the defense. All of this is documented and kept on record. The problem is not in the number and level of the administrative and scholarly safeguards, but in that this system itself is susceptible to corruption and apparently is a victim of illicit dealings.

Dissertation defenses are held in Dissertation Boards, i.e. special councils with fixed membership. These Boards consist of 20–25 leading scholars in the field representing different HEIs and research institutes, sometimes located in different cities. Not all the HEIs that host doctoral programs are allowed to host Dissertation Boards. Membership on the Board is highly prestigious and is approved by the Ministry of Education. However, the lack of time to serve on such Boards makes the system not as vigilant in reality as it appears structurally. Memberships are unpaid and many members work on a quid pro quo basis, voting for other members' candidates in an expectation that they will return the favor and vote for their candidates. The complexity of the system does not guarantee its soundness. Dissertation Boards become more bureaucratic structures than scholarly assemblies.

A lack of sense of shared collective reputation, collegiality, and peer review brings to fore suspicions of misconduct. Ideally, doctoral committees are involved throughout the dissertation process, but there are no real safeguards and controls for this. The Russian system may benefit significantly from introducing more rigorous coursework in order to establish academic safeguards against fake doctorates. There is an obvious over-reliance on centralization and governmentally authorized and enforced control. The structure seems to stay intact, but the values have eroded and the content is eaten by the rust of corruption. At this point, university autonomy may be helpful, for it will assign values to doctorates in particular universities rather than to doctorates in general, obtained in one centralized system under the auspices of the state. Centralization and administrative control are insufficient for corruption prevention. The focus on collective reputations may be much more productive in quality assurance and reduction in the dissertations for sale market.

4. Conclusion

The total annual volume of the dissertations market in Russia is not significant as compared with the total estimated corruption payments in the country and the total GDP. Nevertheless, it would be irrational for society to ignore this problem, because it extends far beyond its immediate boundaries. Monetary estimates of the problem and the market segment itself are but the tip of an iceberg. The real price of doctorates for sale, i.e. the real cost to society, is much higher if one is to account for externalities. First, there are far reaching negative consequences for the education industry and society, including the erosion of social cohesion caused by corruption in higher education. Second, "doctorates for sale" is an organic part of the larger problem of corruption in higher education. Accordingly, efforts focused on the reduction of corruption in doctoral education become a natural part of the fight with corruption in the education sector as a whole. Third, there is no legitimate substitute for doctorates in modern educational systems. Thus, fake doctorates undermine the credibility of real, earned doctorates, and erode the gold standard of quality in research and scholarship.

References

- Allen-Mills, T. (2008). Putin accused of plagiarising his PhD thesis. *The Sunday Times*, October 23, 2008. <http://www.timesonline.co.uk/tol/news/world/article695235.ece>.
- Antiplagiat.ru (October 23, 2008). Starting October 17, 2008, all HEIs-subscribers to the services of Antiplagiat program will be able to trace dissertations deposited in the Russian State Library for plagiarism. *Antiplagiat.ru*. <http://www.antiplagiat.ru/>.
- Central Statistical Database (2008). Federal State Statistical Services of the Russian Federation. <http://www.gks.ru/dbscripts/Cbsd/DBInet.cgi>.
- Compayre, G. (1893). *Abelard and the Origin and Early History of Universities*. New York: Charles Scribner's Sons.
- GKS (2009). Average calculated salary of employees by category of personnel and professional group, October 2009. Gosudarstvennyj komitet statistiki RF (GKS). http://www.gks.ru/free_doc/2009/wages/oct2009/trud2009.htm.
- GKS (2011). Number of employees and demand for workforce by professional group, as of October 31, 2010. Gosudarstvennyj komitet statistiki RF (GKS). http://www.gks.ru/free_doc/2011/potrorg/potr10.htm.
- Klussmann, U. (2007). Duma's Dubious Degrees: The Russian Parliament Intellectual Giants. *Spiegel*, November 21, 2007. <http://www.spiegel.de/international/world/0,1518,518754,00.html>.
- Krasilova, N. (2006). Ostepenennye deputaty: Mnogim chinovnikam i parlamentariyam ne dajut pokoya nauchnye lavry [The MPs with the degrees: Many state bureaucrats and the parliamentarians lost sleep over their academic laurels]. *Novye Izvestiya*, June 30, 2006. <http://www.newizv.ru/news/2006-06-30/49279/>.
- Morozov, V. (2008). Gigantsky akademicheski bluff okonchen: Krah akademii siyayushchih ordenov [A gigantic academic bluff is over: Collapse of the Academy of shiny orders]. *Argumenty nedeli*, 40(October 2 (126)) <http://www.argumenti.ru/publications/8048>
- Newsru.com (July 5, 2007). Dissertatsii i avtoreferaty uchenyh budut proveriat' na plagiat v obiazatel'nom poriadke [Dissertations and autoreferates of the scholars will have to pass the obligatory check for plagiarism]. *Newsru.com*, July 5, 2007. http://www.newsru.com/russia/05jul2007/plagiat_print.html.
- Newsru.com (June 24, 2004). V Rossii v 2003 godu roditeli potratili 26,5 milliarda rublej na obrazovanie svoih detej [In Russia in 2003 parents have paid 26,5 billion rubles in bribes for their children's education]. *Newsru.com*, June 24, 2004. www.newsru.com/russia/24jun2004/vzytki.html.
- Newsru.com (June 30, 2006). VAK vvodit strogie mery dlia soiskatelei uchenyh stepenei [VAK introduces strict measures for those seeking doctoral degrees]. *Newsru.com*, June 30, 2006. <http://www.newsru.com/russia/30jun2006/vak.html>.

- Newsru.com (March 24, 2006). V RF ezhegodno 10 tysiach dissertatsij pishutsia za den'gi: U kogo iz chinovnikov est' uchenye stepeni. [In the RF, every year 10,000 dissertations are written for money (public officials who have academic degrees)]. *Newsru.com*, March 24, 2006. <http://www.newsru.com/russia/24mar2006/disserts.html>.
- Newsru.com (March 27, 2006). Amerikanskije uchenye obvinili Putina v plagiate. Eto mozhet povlech massovuju proverku dissertatsij rossijskikh chinovnikov [American scholars accused Putin in plagiarism. This can result in a massive check of all the dissertations defended by Russian public officials]. *Newsru.com*, March 27, 2006. <http://www.newsru.com/russia/27mar2006/disser.html>.
- NSF. (2008). *Doctoral degrees awarded, by major field group: 1966–2006. Survey of Earned Doctorates*. USA: National Science Foundation/Division of Science Resources Statistics. <http://nsf.gov/statistics/nsf08321/pdf/tab19.pdf>
- Osipian, A. (2007). Corruption in Higher Education: Conceptual Approaches and Measurement Techniques. *Research in Comparative and International Education*, 2(4), 313–332.
- Osipian, A. (2008a). Political Graft and Education Corruption in Ukraine: Compliance, Collusion, and Control. *Demokratizatsiya: The Journal of Post-Soviet Democratization*, 16(4), 323–344.
- Osipian, A. (2008b). Corruption in Higher Education: Does it Differ Across the Nations and Why? *Research in Comparative and International Education*, 3(4), 345–365.
- Osipian, A. (2008c). Corruption and Coercion: University Autonomy versus State Control. *European Education: Issues and Studies*, 40(3), 27–48.
- Osipian, A. (2009a). "Feed from the Service": Corruption and Coercion in the State—University Relations in Central Eurasia. *Research in Comparative and International Education*, 4(2), 182–203.
- Osipian, A. (2009b). Vouchers, Tests, Loans, Privatization: Will They Help Tackle Corruption in Russian Higher Education? *Prospects: Quarterly Review of Comparative Education*, 39(1), 47–67.
- Osipian, A. (2009c). Corruption and Reform in Higher Education in Ukraine. *Canadian and International Education Journal*, 38(2), 104–122.
- Osipian, A. (2009d). Corruption Hierarchies in Higher Education in the Former Soviet Bloc. *International Journal of Educational Development*, 29(3), 321–330.
- Osipian, A. (2010a). Le Bourgeois Gentilhomme: Political Corruption of Russian Doctorates. *Demokratizatsiya: The Journal of Post-Soviet Democratization*, 18(3), 260–280.
- Osipian, A. (2010b). Corruption in the Politicized University: Lessons for Ukraine's 2010 Presidential Elections. *Innovation: The European Journal of Social Science Research*, 23(2), 101–114.
- Osipian, A. (2010c). Corrupt Organizational Hierarchies in the Former Soviet Bloc. *Transition Studies Review*, 17(4), 822–836.
- Rossiiskaja gazeta (March 21, 2008). Fabrike znaniy – svoj OTK. V sisteme attestatsii griadut peremeny, utverzhdaet glavny ucheny sekretar' VAK, Feliks Shamhalov [Own quality control department for the factory of knowledge. Chief Academic Secretary of VAK, Feliks Shamhalov, states that changes are coming to the system of attestation]. Interview with the Senior Academic Secretary of VAK, Feliks Shamhalov. *Rossiiskaja gazeta*, federal issue 4618, March 21, 2008.
- RSE. (2010). *Average calculated nominal monthly salary of employees by type of economic activity. Rossiiskij statisticheskij ezhegodnik (RSE)*. Moscow: Rosstat. <http://www.gks.ru/bgd/regl/b10.13/lssWWW.exe/Stg/d1/06-09.htm>
- Simakin, D. (2006). Doktora nevidimogo fronta: Pochti tret' zashchishchennyh v poslednie gody dissertatsij napisana za den'gi [Doctors of invisible front: Almost third of all the dissertations defended in the last few years were written for money]. *Nezavisimaya gazeta*, March 24, 2006. http://www.ng.ru/inquiry/2006-03-24/1_doctors.html.
- Sokolin, V. (Ed.). (2008). *Rossiiskij statisticheskij ezhegodnik, 2008 [Russian Statistical Annual Review, 2008]*. Federal'naya sluzhba gosudarstvennoj statistiki RF. Moscow: RosStat.
- Yurevitch, A. (2005a). Insittutsionalizatsiya moshennichestva [Institutionalization of fraud]. *Nezavisimaya gazeta*, (November 11). Available from: <http://www.ng.ru/printed/62963>
- Yurevitch, A. (2005b). Polufal'shivaya nauka [Semi-fake science]. *Nezavisimaya gazeta*, (September 28) <http://www.ng.ru/printed/61747>
- Yurevitch, A. (2006). Ostepennyye chuzhaki [Degree-holding aliens]. *Nezavisimaya gazeta*, (January 25) <http://www.ng.ru/printed/64791>

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