

European Education, vol. 40, no. 3, Fall 2008, pp. 27–48.
© 2008 M.E. Sharpe, Inc. All rights reserved.
ISSN 1056–4934/2008 \$9.50 + 0.00.
DOI 10.2753/EUE1056-4934400302

ARARAT L. OSIPIAN

Corruption and Coercion: University Autonomy Versus State Control

A substantial body of literature considers excessive corruption an indicator of a weak state (Almond & Coleman, 1960; Anechiarico & Jacobs, 1995; Johnston, 1986; White, 1996). However, the opposite may well be true. In nondemocratic societies, corruption—whether informally approved, imposed, or regulated by public authorities—is often an indicator of a vertical power rather than an indicator of a weak state. Corruption could be used on a systematic basis as a mechanism of direct and indirect administrative control and redistribution of wealth that operates on the state level and all the way down to local authorities and administrations of public and private institutions. Control and redistribution of wealth are then based on blackmail and selective justice. Informal approval of corrupt activities in exchange for loyalty and compliance with the regime is broadly practiced in many countries. Vertical and horizontal structures of corrupt control allow ruling regimes to sustain themselves and exercise coercive power over their constituents.

This article explores the interrelations between the state and higher education institutions based on corruption as a mechanism of administrative control. It presents definitions of corruption, describes the concept of corruption and

Ararat L. Osipian (ararat.osipian@vanderbilt.edu) is a Ph.D. candidate in the Department of Leadership, Policy, and Organizations at Peabody College of Education, Vanderbilt University. He holds a Ph.D. in political economy from Kharkov National University, Ukraine, and an M.A. in economics from Vanderbilt University. His research interests include corruption in higher education and inequalities in access to higher education in international perspective, the nexus of education and economic growth, modern welfare states, and the political economy of transition. This paper was presented at the Annual Meeting of the Comparative International Education Society (CIES) “Beyond Dichotomies,” Stanford University, Palo Alto, CA, March 2005.

coercion as mechanisms of administrative control, offers a simple model, and develops model extension that accounts for peer pressure in academia. Higher education as an industry and universities as institutions or entities have certain essential features uncommon to other industries and institutions. Hence, theoretical frameworks should be adjusted to capture the specific features of higher education. Universities encompass the academic elite of society, set the agenda for education (including political and ideological aspects), direct students, and represent a substantial voting body of the population. University autonomy, financial independence, and accountability are used to investigate corrupt higher education institutions in nondemocratic regimes. In this article, the relations between the state and universities in nondemocratic regimes are analyzed using the case of higher education systems in the countries of the former Soviet Union, with a special focus on the Russian Federation and Ukraine. This region was chosen because of the rich and dynamic change experienced in the environments of higher education systems and political structures of the countries in postsocialist transition.

The nature and scope of corruption in higher education

Corruption in higher education has existed since the emergence of first medieval universities in the early Middle Ages (Osipian, 2007b). When the first institutions of higher learning emerged in medieval Europe, there were no nation-states and social institutions in our contemporary understanding. Medieval universities did not play a significant role in social life, and the state did not pay much attention to politicization of these institutions. Vagueness of the social role and functions of the early European universities and their loose relations with the states are certainly not a characteristic of the Russian university system. The university system in the Russian Empire was developed under a different scenario. From the beginning, the state was the sole initiator, promoter, financier, controller, and benefactor of the university system. Therefore, the university system in Russia has been traditionally centralized. Flynn describes the position of the state authorities in relation to control over universities:

Tsar Nicolas I meant clearly to answer the university question by blocking the university's ability to promote change. He wanted the universities to serve the common good by supporting the autocratic Russia he had inherited from Peter the Great and his successors. This proved difficult, perhaps impossible, even in the short run. It was difficult even to find new rectors, unless the government was willing to pass over the men obviously best qualified for the posts. Thus, the rectors appointed were the same men previously elected. (1998, p. 19)

The Soviet system of higher education inherited some of the essential features of its predecessor—the university system of the Russian Empire. Weak university self-governance was counterbalanced by strong state control. As Coleman states: “The Soviet Union has built up a single monolithic educational system under omnipresent party control with heavy inputs of political indoctrination at all levels” (1965, p. 226). The problem of corruption in higher education persisted throughout the Soviet period and was openly acknowledged by the Soviet state officials. For example, the Soviet leader Nikita Khrushchev addressed the problem of corruption, including corruption in higher education, in his speeches by stating “Bribes are given for selling off state resources, for granting permits for apartments, for allotting plots of land, for granting pensions, for admission to higher educational establishments, and even for the awarding of diplomas” (Staats, 1972, p. 43).

Since the collapse of the Soviet Union, separation of powers between universities and the state has not been considered an option by the political regime of Russia, and the government has continued to develop new mechanisms of control. One of the recently planned higher education reforms includes introduction of new admission policies based on the results of the standardized computer-graded examination (i.e., the Unified State Examination [EGE], which would allow the state to interfere in the sphere of interest of the university faculty and administration in determining state-funded higher education placements.¹ Presently, faculty members in higher education institutions make decisions concerning the selection of prospective students and decisions about higher education admissions. However, if decentralized higher education entrance procedures are abolished and the standardized examination became the main mechanism of determining higher education admissions, higher education faculty and administrators will likely lose control over admission outcomes and, by extension, over their illegal income from admission processes. Since higher education faculty and administrators are interested in defending their monopoly over state-funded higher education admissions, it is not surprising that they strongly opposed the proposed reform. Most likely, higher education faculty and administrators will preserve a certain level of discretion over the admissions as well as illegal benefits derived from such discretionary power in exchange for the loyalty and compliance with the state authorities.

The problem of corruption in the former Soviet Union is reflected in a number of research studies. For instance, a poll developed by the Ukrainian Institute for Social Research showed that 78 percent of the respondents believed that all or most government officials have accepted bribes (Woronowycz, 2003). In addition, more than 80 percent of the respondents stated that corruption was prevalent within the judicial branch of government, and 71

percent reported they believed that most government officials were tied to the mafia or private family business relations. Moreover, many Ukrainians are inclined to accept bribery as a normal part of everyday life (*ibid.*, 2003). Solomon and Foglesong (2001) note that the number of reported corruption incidents in Ukraine more than doubled between 1990 and 1998 to 2,449, and these incidents led to 1,641 convictions.

Numerous surveys in the Russian Federation reveal similar corrupt situations. In 2001, entrepreneurs paid approximately US\$33.5 billion to officials, slightly less than the total revenue of the federal budget in that year (Popov, 2005). This figure does not include bribes that consumers pay for access to healthcare services, social services, and educational services or ordinary bribes to traffic police paid on a daily basis. More than half of all Russians had to pay a bribe at least once in their lives, while 19 percent report doing so quite often. Most often, Russians pay bribes for medical services (51 percent of the respondents), traffic violations (31 percent), and educational services (20 percent) (Newsru, 2006). In 1999, James Leach, chairman of the United States House Banking Committee, conducted a study of the most corrupt regimes, including the Philippines under Marcos, Zaire under Mobutu, and Indonesia under Suharto. Each of these very corrupt regimes was outdone by the "pervasiveness of politically tolerated corruption" in postcommunist Russia (Leach, 1999; Shleifer & Treisman, 2003, p. 27).

According to the Transparency International Corruption Perceptions Barometer (2007), only 13 percent of the world population believe that the education sector in their country is not at all corrupt, while 16 percent perceive that it is extremely corrupt. In the Russian Federation and Ukraine, 15 percent of households admitted to paying bribes in educational institutions at least once during the past twelve months. This figure indicates a very high level of corruption in the education sector of these countries, which is at par with India (14 percent), the Philippines (16 percent), and Moldova (17 percent). Additionally, this figure is much higher than that of Western Europe, where corruption perception varies between 0 percent and 3 percent and that of the United States, where corruption perception is 2 percent. However, the figure from the Russian Federation and Ukraine is less than that of Cameron, where 47 percent of households admitted to paying bribes in the education sector (Transparency International, 2007).

A 2005 study on corruption in education in the Russian Federation (Satarov, 2006) revealed that parents' readiness to pay bribes in schools declined from 76 percent in 2001 to 61 percent in 2005, while the demand for bribes from schoolteachers and administrators increased. In addition, the likelihood of being subjected to any kind of extortion increased from 13 percent in 2001 to 41 percent in 2005. In higher education, the percentage of parents and

students who were willing to bribe the faculty declined insignificantly from 67 percent in 2001 to 63 percent in 2005. At the same time, the risk of facing the necessity to bribe a college instructor or administrator increased from 36 percent to 52 percent (Satarov, 2006). The data from a 2003 Ukrainian survey (Shaw, 2005) of 1,588 freshmen and sophomores in twelve cities throughout the country revealed that “56 percent of students bribed to enter their educational establishment, 22 percent bribed to pass exams, 18 percent bribed for credit, and 5 percent bribed on term papers. Over 35 percent believed their educational establishment was “very corrupt” or “rather corrupt” while 48 percent of students viewed teachers that accept bribes as “corrupt,” “criminal,” or as “bribe-takers.” Finally, 27 percent of students bribed on their final exams during secondary school (Shaw 2005, p. 6).

Hallak and Poisson (2002, 2007) present an exhaustive list of the ways in which corruption manifests in the education sector. Types of corruption in higher education in the former Soviet Union include bribery in admissions and grading, unauthorized private tutoring, embezzlement, fraud, nepotism, clientelism, patronage, cronyism, favoritism, kickbacks, cheating, plagiarism, research misconduct, ethics and sexual misconduct, bypass of criteria, ghost instructors, breach of contract, provision of false information, abuse of public property, monopolization in academic publishing and distribution of textbooks, misallocation of public resources, and gross waste. Furthermore, Heyneman, Anderson, and Nuraliyeva (2008) point out that the large-scale corruption in higher education is a serious obstacle for the integration into the Bologna process, including mutual recognition of academic credentials and degrees within the European educational space.

Defining corruption in higher education

While the problem of corruption in higher education has been well documented, defining corruption remains a challenge. Waite and Allen characterize the difficulty: “Definitions of corruption are problematic. Agreed-on definitions are rare, and definitions of corruption run the gamut from being too narrow and thus applicable to only limited, rare, well-defined cases” (2003, p. 282). Furthermore, lack of actual data on the cost of education corruption as opposed to corruption perceptions poses a significant obstacle in studying this phenomenon (Weidman & Enkhjargal, 2008).

Education corruption includes the abuse of authority for material gain (Anechiarico & Jacobs, 1995) and is broadly defined as the abuse or misuse of public office or public trust for personal or private gain. The terms “abuse” and “misuse,” “public office” and “public trust,” and “personal gain” and “private gain,” are often used interchangeably. Heyneman adds that “because

education is an important public good, its professional standards include more than just material goods; hence the definition of education corruption includes the abuse of authority for personal as well as material gain" (2004, p. 638). Some of the definitions of corruption take a political-economic perspective, including rent-seeking behavior (Buchanan, et al., 1980; Klitgaard, 1986; Krueger, 1974; McChesney, 1997), the rise of state bureaucracies (Weber, 1978; Wilson, 1975), and cross-national characteristics (Treisman, 2000). Nye's definition is most cited in political science literature:

Corruption is behavior that deviates from the normal duties of a public role because of private-regarding (family, close private clique), pecuniary, or status gains, or violates rules against the exercise of certain types of private-regarding influence. This includes such behavior as bribery (use of reward to pervert the judgment of a person in a position of trust); nepotism (bestowal of patronage by reasons of ascriptive relationship rather than merit); and misappropriation (illegal appropriation of public resources for private-regarding use). (1967, p. 419)

Sayed and Bruce (1998) and Waite and Allen (2003) present a broader social approach to defining corruption. In particular, they distinguish between formal (legal) and social approaches, the latter allowing for broader moral considerations to be applied when examining corrupt and noncorrupt acts. Importantly, some of the corrupt acts in education are not subject to prosecution but are still considered inappropriate, unethical, or immoral. This approach is grounded in the nature of corruption and coercion that anticipates blackmail on the basis of the risk of accusation and administrative sanctions, public condemnation, or legal prosecution of a corrupt official by the state. For this purpose, corruption in higher education is 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). This definition points to the systemic character of education corruption, extends the realm of corruption in education to both public and private higher education institutions, and allows for research of corruption and its impact on access of, quality of, and equity in education.

The concept of corruption and coercion

The concept of corruption and coercion is based on the idea that some states might deliberately underpay their public employees, force them to get involved in corruption to supplement their income, and then collect evidence of wrongdoing, or so-called *kompromat*, to coerce them into compliance. These four steps (creation of a priori tough living conditions, involvement in corruption, collection of *kompromat*, and coercion) are well described in the

works of Darden (2001) and Karklins (2005). These corruption and coercion steps anticipate the corruption of the judicial process and misuse of auditing, investigatory, and oversight powers, and the media. While the ruling political regime that monopolizes the state condones corrupt activities and indulges the corruption of bureaucrats and other public servicemen, it also coerces them into compliance. Karklins addresses the issue of the usage of *kompro-mat* for political blackmail and coercion: "A politically damaging practice is to misuse investigative and judicial power to intimidate citizens and political rivals" (2005, p. 36). She refers to Rose-Ackerman (1994) in suggesting that "this is a concrete legacy of the Soviet-type systems where lawbreaking became a means of coercion in the sense that everybody was bound to break the law somehow to survive and then could be picked out for prosecution if needed" (Karklins, 2005, p. 36).

While the concept of corruption and coercion may at first appear irrational, it has deep roots and can be traced through history. Russian Tsar Ivan IV, Grozny (1530–84), also known as Ivan the Terrible, ignored the demands of public servicemen for salaries and suggested that they should collect benefits from the public. This relates to the de facto legalization of a "second salary" (i.e., benefits, collected by public-sector workers directly from the public or clientele). As follows from the Collection of Laws of the Russian Empire (1630), state servicemen were sworn not to embezzle from the state and not to accept bribes from the public (Pisar'kova, 2004). Milov (1998) asserts that in the era of Peter the Great, material conditions of Russian bureaucrats and state clerks were good. However, since 1723 they have deteriorated significantly. Small salaries did not cover even the cost of living and furthermore were never disbursed on time (Pososhkov, 1937). The chronic budget deficit was yet another reason for state servicemen to seek additional sources of income. They worked as horsemen, grooms, and gatekeepers. In 1727, salaries for lower-level state clerks were abolished altogether. The state servicemen were once again advised to "feed from the service" (Solov'ev, 1991, p. 89). According to Demidova (1987), the ruling regime was somewhat critical only about the direct extortion from the public but other forms of corruption, including gifts and gratuities, were allowed. Bribery in state offices was legalized de facto while the corrupt practices led to the development of the culture of legal nihilism. Poorly paid state clerks were susceptible to corruption, while well-paid high-ranked bureaucrats collected much bigger bribes than did their subordinates.

The policy of the state to corrupt its own institutions may occur when the state is captured by a group of individuals that constitute a ruling political regime (Solnick, 1998). Reflecting on the nature of corruption in the post-Soviet context, Karklins presents the following description of such a phenomenon:

“State capture is the systematic high-level corruption that establishes a hidden political regime at odds with the constitutional purpose of state institutions. Analysts note that the capturing may be done not only by private firms or narrow interest groups, but also by political leaders” (2005, p. 30). Similarly, Darden (2002) highlights the practice of state blackmail and the vulnerability of the assets accumulated by the public officials through illegal means. Shlapentokh (2003) reports that widespread corruption creates a parallel, semifeudal chain of command that competes with the official hierarchy. Finally, Payne (1975) describes the mechanism of subversion and corruption in national systems as well as in international politics using a historical perspective based on practices of dictatorial regimes.

As such, the ruling regime is interested not only in the loyalty and compliance of its constituents but also in the sharing and profiteering. According to a study conducted by the Council of Europe in Georgia, “the police, the customs, and the courts, those very agencies responsible for fighting corruption, are most widely affected by it” (2005, p. 10). This phenomenon points to the problem of control of controllers, well described in political science literature and closely related to the principal-agent problem. For example, Lipsky (1979) raises the issue of control of the controllers as applied to the street-level bureaucrats and argues for professionalization as a possible solution to the problem of oversight. He states that “the argument for professionalization comes down simply to the realization that control of occupational groups must come from within the individual members of the group if it cannot be dictated from outside” (Lipsky, 1979, p. 201). He further argues that “If street-level bureaucrats cannot be restricted in everyday functioning, then self-monitoring must substitute for bureaucratic controls” (*ibid.*, p. 201). In other words, “the watchmen will watch themselves” (*ibid.*, p. 201).

Applying the concept of corruption and coercion to academia

Waite and Allen (2003) advance the idea of self-sustainability of corrupt regimes as applied to higher education administration and present hierarchies with the strong vertical axis of power and control. While a state is typically interested in corrupt universities, the ruling regime has to hold corruption in academia within the reasonable limits. This is necessary; otherwise, the overgrown corruption will threaten the very existence of the state and, hence, the ruling regime. Suppressed university autonomy and pseudo-accountability are often used by the state to impose its will on faculty and control the agenda of the universities. Liability and compliance of the university faculty and administrators is essential for the regime. Faculty members are first placed in conditions that encourage involvement in corrupt activities and

then indirectly blackmailed to comply. This mechanism of informal control occurs nationwide and exists on multiple levels. Along with the level of compliance, sharing (i.e., the level of redistribution of bribes and other benefits) is an indicator of the strength of the vertical axis of hierarchy.

Biswal (1999) lists some of the conditions that encourage involvement of educators in corrupt activities (e.g., low pay, insufficient monitoring, and lack of accountability). The issues involved with the unethical use of private tutoring, which is one of the forms of extortion, is addressed in works of Biswal (1999), Bray (2003), and Silova and Bray (2006). Describing education corruption in developing countries, Biswal notes that “both tutoring and corruption require citizens to pay money to receive a ‘free’ government service” (1999, p. 223). Similarly, Klitgaard (1988) regards illicit payments to public officials in developing nations as a part of their income. Similar conditions were prevalent in the higher education sectors of Russia and Ukraine in the 1990s, when college professors supplemented their declining legal income with bribes. This practice helped to retain faculty in teaching positions. At the same time, it helped the government to retain its control over universities despite the declining state funding.

In the Russian Federation, the issue of taxation and corruption in higher education are closely linked, creating conditions that encourage faculty members to get involved in corrupt activities. In particular, a flat income tax in the Russian Federation constitutes only 13 percent, one of the lowest income tax rates in the world. Yet people expect high-quality healthcare and education provided at the expense of the state. Such a low income tax rate and high public expectations of publicly available services could be explained in part by the high oil and gas revenues generated by the state. Tax evasion and fraud also influence the preference for keeping tax rates low. However, bribery in the public sector in such circumstances is unavoidable. Low salaries force educators to seek other means of financial survival. For example, Petrov and Temple (2004) highlight the difference in the patterns of corruption in universities in the Russian Federation and in Azerbaijan. Based on interview data, the authors assert that corruption among faculty members in the Russian Federation reflects an attempt to compensate for their material misery, while university professors in Azerbaijan monopolize the functions of selection and retention of students and extort bribes: “Corruption in the universities in Azerbaijan is almost universal: one of our informants remarked ironically that it would be ‘abnormal’ if a student did not engage in bribery at some point in her or his studies” (Petrov and Temple, 2004, p. 92).

A voluntary compliance of the students with the practice of gift giving and outright bribery in the universities no longer satisfies many faculty members. They are not willing to wait until a student or a group of students approach

them with the offer of a bribe in exchange for good grades. Instead they attempt to initiate this process in order to maximize their "second salary" (i.e., informal benefits obtained from corruption). Eventually, university faculty members become proactive rather than reactive and strive to maximize their benefits from corruption through extortion. Indeed, in some former Soviet republics simple acceptance of bribes offered by the students is being replaced by direct extortion.

The state policy that targets educators and other public servants in order to extract their loyalty and obedience to the regime unavoidably leads to opposition educators, including university faculty and administrators. This opposition of particular university faculty is based on the denial of corrupt practices and pressure from the ruling regime. In this case, academic integrity, high morale, and ethical standards must be considered. However, not all those in opposition to the ruling regime oppose corruption. Instead, many opposing educators may want the regime change in order to have even broader access to the benefits of corruption. Some university professors perceive the state as an unnecessary "supervisor" that looks over their shoulder and prevents them from collecting bribes from the students and enjoying the personal benefits of corruption at full capacity.

The model of corruption and coercion in higher education

The concept of corruption and coercion developed into a theory of administrative control as applied to state-university relations and is formalized in a simple model. This model reflects the behavior of university professors as related to the ruling political regime under the different conditions. The major parameters of the model include salary of the university faculty, benefits derived from corruption, and risks incurred due to participation in corrupt activities. The model also incorporates the concept of fair market salary. Fair market salary as a hypothetical category is assumed to be the earnings that faculty members would receive if there were a well-developed labor market and no corrupt activities in universities. It is assumed that initially the fair market salary of university professors is equal to the sum of their present salary and the material and nonmaterial benefits they derive from participation in corrupt activities. Since many of such corrupt activities presuppose a potential risk of punishment by the state, the risk has to be subtracted. In reality, the size of the bribe includes a so-called risk premium (i.e., each faculty member has to weigh the costs and benefits of each corrupt transaction).

Academic leaders, faculty members, and university administrators, whose present salary with bribes and without the risks involved equals the fair market

salary, are indifferent to the current political regime. This initial, potentially unstable, equilibrium is presented in equation (1):

$$fms = ps + b - r, \quad (1)$$

where fms is the fair market salary, ps is the present salary, b is the total sum of bribes and other benefits from corrupt activities, and r is the cumulative value for risks connected with corrupt activities. The fair market salary determines faculty members' behavior and shapes their perceptions about the current political regime. On the one hand, it exists hypothetically due to the absence of the well-developed labor market for faculty members in the higher education sector of the former Soviet Union and the labor market in the region in general. On the other hand, the fair market salary of university professors plays a role of quasi-opportunity costs of being involved in teaching and corrupt activities that accompany it. Academic leaders, faculty members, and university administrators whose fair market salary is higher than their present salary with bribes and without the risks involved are potentially in opposition to the current political regime. These faculty members are most likely to urge students not to support the regime, vote against the regime's candidates during the election campaigns, and participate in demonstrations and other forms of civil unrest. The Orange Revolution in Ukraine is a good example of such student activities. Professors in Kyiv and other cities urged students to take to the streets with hope for regime change that would result in more democratic reforms, less corruption, and better pay for educators. This situation is expressed in equation (2):

$$fms > ps + b - r \quad (2)$$

Academic leaders, faculty members, and university administrators whose fair market salary is lower than their present salary with bribes and without the risks involved support the current political regime. This situation is expressed in equation (3):

$$fms < ps + b - r \quad (3)$$

Similar systems of corrupt relations in academia can exist under different political regimes. Political regimes in the former Soviet Union are often personified. As long as the regime maintains continuity of the system of corrupt relations, the balance of powers (i.e., the number of academics "for" and "against" the regime) does not change. However, if other candidates for the state leadership promise better benefits for university faculty and administra-

tors, the supporters may be willing to overthrow the current political regime, along with those indifferent and in opposition to the regime. The promised benefits may be legal (e.g., an increase of existing salaries) and illegal (e.g., a larger indulgence for corrupt activities of university professors). Thus, a relative stability of the political regime and continuity of its leaders indicate that most university faculty along with other public workers, bureaucrats, and state administrators are either indifferent to the current political regime (as depicted in equation 1) or in support of the regime (as depicted in equation 3).

Every political regime aspires to sustain itself and prolong its existence. As such, the primary task of the current personified political regime is the creation and the maintenance of a system of corrupt relations in academia that maximizes present salaries and benefits derived from bribes, accounts for risks associated with corrupt activities in universities ($ps + b - r$), and minimizes the fair market salary (fms) of university faculty. Since any positive integer for r decreases the right side of equation 1, the task of the current political regime is to maximize $ps + b$ and minimize fms and r . The following equation would be the first condition for sustainability of the political regime based on corruption and coercion:

$$fms + r < ps + b$$

The model explains a number of puzzling realities. First, it illustrates why university faculty members continued working full-time during the 1990s despite the arrears of unpaid salaries that used to reach up to twelve months in the Russian Federation and Ukraine and even longer in Central Asia and the Caucasus. The state's informal approval of reasonable or "fair" corruption among university faculty means decreasing the risk of prosecution to zero. This helps the state to balance the equation, where the present salary of unpaid faculty members is equal to zero.

Second, the model explains, in part, why the average age for faculty members in the former Soviet Union is 55 in social sciences and 60 in technical sciences. Aging faculty members are least competitive on the newly emerging open labor market. Their fair market salary is quite low compared to their younger colleagues, who often trained in the post-Soviet era. The opportunity costs of being employed in academia are also much lower for older faculty members, many of whom are already retired. Hence, it is cheaper for the current political regime to maintain the equilibrium in equation 1 by employing older faculty members in universities. One of the implications of such a policy of double standards advanced by the state is that young faculty members have little opportunities to be employed in universities, even though state officials

formally encourage employment of young faculty in public higher education institutions. Additionally, the scarce state funds allotted for young scholars are often embezzled by the university administrators.

Third, the model provides a wider angle to view the issue of loyalty of university faculty to the current political regime. Specifically, it explains why the state approves de facto graft in academia in exchange for loyalty and compliance. Indeed, academic leaders and faculty members are very influential with the voters, including students and their parents. The ruling regime is interested in gaining support from as many university faculty members as possible. However, the regime is limited in its financial resources and, hence, has to use so-called administrative resources (e.g., bureaucratic pressure). It also uses noneconomic regulations, especially needed to control private higher education institutions, but these measures alone are not enough to secure sufficient support from the university faculty.

The state targets university rectors and other leading educators to gain the support of the majority of the faculty. In many instances, the state appoints leaders based on their loyalty to the regime. The fair market salary (fms) of these leaders is often low. By reducing the risk (r) to zero, the regime can count on the stable loyalty of the academic leaders with the relatively low present salary (ps) and benefits from corruption (b). It should be noted that the risk of prosecution is equal to zero ($r = 0$) only for those faculty members and university administrators who are loyal to the regime. The risk of punishment gives the regime not only loyalty but also the right to share the benefits of corruption. A certain kind of a social contract that anticipates collusion between the university and the state and among the faculty members is needed for the scheme of corruption and coercion to perpetuate.

Model extension: Peer pressure

Until now, the model of corruption and coercion addressed the way the state and the university build their relations (i.e., focusing on external relations of the university). However, the system of relations within the university is also important. The model of corruption and coercion, presented in the previous section, does not account for the social environment in universities and particular departments nor does it account for personal characteristics of university professors. Specifically, the model does not give consideration to such factors as the influence of the professor's colleagues, their interactions, and the professor's moral and ethical beliefs. When corruption in higher education institutions is commonplace, the non-corrupt behavior of particular professors is not welcomed by their colleagues. Referring to Miller, Grodeland, and Koshechkina (2001), Karklins asserts:

Yet when there is a widespread practice of bribe giving and bribe taking, people who do not participate can get into trouble. In a focus group in Sofia, a university lecturer had this to say about how bribes affect the grading of student exams: "I know the price is \$300, but I have not given any mark without examining the student. So I have become the black sheep among my fellow lecturers and they have become nasty toward me." (2005, p. 45)

As illustrated in this example, peer pressure may be an important factor in determining the behavior of university faculty. The environment in which corrupt activities take place as well as the faculty member's personal views on corruption may be denoted as social pressure. Social pressure can be incorporated into the initial model of corruption and coercion in conjunction with the faculty member's behavior using a numerical example. Social pressure includes peer pressure toward the professor and his/her moral considerations. It is assumed that in corrupt universities peer pressure works toward encouraging corruption. Increased peer pressure results in a higher probability for the professor to accept bribes and to comply with the demands of the current political regime. The professor's moral considerations, however, can work in the opposite direction. Contrary to peer pressure, the professor's morale negatively impacts his/her willingness to accept and/or extort bribes from students. Klitgaard offers the principal, agent, and client relationship model to study corruption and described the corrupt person as follows:

She also suffers what we might call the "moral cost" of being corrupt. This cost depends on her own ethical, cultural, and religious standards; it may depend on what her peers and colleagues are doing; and it may depend on how big a bribe she gets for how large a deviations from her responsibilities to the principal. For an unscrupulous person in a corrupt subculture, the moral cost of being corrupt may approach zero. (1988, p. 69)

Net benefit from accepting or extorting a bribe is a function of benefits of corruption, including bribe size, risk of being exposed and prosecuted, and social pressure from colleagues as well as personal ethics: $N = f(b, c, s)$. Hence:

$$N_i = b_i - (r_i \times e_i) + (p_i - m_i)$$

where i denotes a university faculty member, b is the economic benefit from being involved in corruption, r is the degree of punishment defined by law for a corrupt faculty member, e is the probability of being exposed, c is the total cost of being corrupt, p is peer pressure, m is faculty member's moral considerations, s is net social pressure, and N is net benefit from corruption.

If $N < 0$, the university faculty member will decide to reject a bribe offered

by a student. If $N > 0$, the university faculty member will decide to accept the bribe. Peer pressure is understood as pressure of corrupt colleagues toward corruption. Accordingly, the value of p is always positive. A university professor's moral standards are assumed to be against corruption; hence, m is negative. It would be reasonable to expect some faculty members to calculate their net benefit from being involved in corrupt activities and, if the net benefit value is positive, to act corruptly. Moreover, the shift from a reactive to a proactive mode of behavior encourages the faculty member to seek corrupt colleagues and develop the atmosphere of impunity for the sake of securing one's own position and maximize the informal benefits of corruption. A hypothetical numerical example of defining the university professor's decision of whether to accept a bribe is presented in Table 1. The decision to accept or reject a bribe is limited to bribery only for simplicity. In reality, it should be broadly interpreted as the decision of whether to engage in illicit activities.

Table 1 presents eight unique settings for a faculty member i with two peers ($i - 1$ and $i + 1$). The eight settings represent all possible variations of the three faculty members being honest or corrupt. Economic benefits from corruption for all faculty members are taken as constant and equal to two. The degree of punishment is taken as a constant as well and equals four. The probability of being exposed for the faculty member i , however, varies depending on the illicit behavior of his/her peers. Accordingly, the total cost of being involved in corrupt activities varies (e.g., values of zero, two, and four). Peer pressure on the faculty member i is strongest when both of his/her colleagues are corrupt. Net social pressure varies depending on the peer pressure and the faculty's personal moral considerations. As a result, net benefits from being involved in illicit behavior may be negative, positive, or equal to zero. Based on the calculated net benefits, the faculty member will make a decision of whether or not to engage in illicit activities.

The numerical simulation illustrates the high significance of peer pressure under the conditions of constant economic benefits from corruption and the degree of punishment for illicit behavior. If the net benefits from corruption are positive, the faculty member will decide to accept a bribe or take a part in other illicit activities. When moral bounds are further diminished, more faculty members will make rational choices involving in corruption. The probability of being exposed is directly proportionate to the number of corrupt peers. When the proportion of corrupt faculty members in the department becomes larger, the probability of being exposed becomes lower. In our hypothetical example, if both peers of the faculty member are corrupt, the probability of being exposed is equal to one (i.e., the exposure is imminent). Independently of other factors, this results in the loss of opportunity to engage in illicit activities. In addition, an increasing number of corrupt faculty members in a

Table 1

The Rationale of Decision-Making for University Professors

University faculty is corrupt	Economic benefits from corruption (bribe), b	Costs of corruption, risk of being prosecuted	Social pressure				Decision to accept or reject bribe, D			
			Degree of punishment, r	Probability of being exposed, e	Total costs, c	Peer pressure, p		Moral considerations, m	Net social pressure, s	Net benefits, N
$i-1$	$i+1$									
c^a	c	c	4	0	0	2	2	4	4	Accept
c	c	n	4	0.5	2	1	1	1	1	Accept
c	n	c	4	0	0	2	1	1	3	Accept
c	n	n	4	0.5	2	1	1	0	0	Reject*
n^b	c	c	4	0.5	2	1	1	1	1	Accept
n	c	n	4	1	4	0	0	0	-2	Reject
n	n	c	4	0.5	2	1	1	1	0	Reject*
n	n	n	4	1	4	0	0	1	-3	Reject

Notes: In two cases in the numerical example of decision-making, the total benefit is equal to zero. Ideally, this would mean that the university faculty member who faces the choice of either accepting a bribe or otherwise, is indifferent. The moral values are already given consideration in the example. However, as far as the faculty member's decision is concerned, it is marked as "Reject," meaning that the faculty member will likely decide not to accept a bribe. This can be explained by some other external factors that are likely to be not in favor of accepting a bribe. Let us explain it by some minimal transaction costs that might be incurred by the faculty member in order to accept a bribe.

*The notation c means that the university faculty member is initially corrupt.

^bThe notation n means that the university faculty member is not initially corrupt.

particular department or university results in a growing proportion of faculty willing to engage in illicit activities and, hence, further perpetuates the spread of corruption. There is also a spillover effect that may be observed when illicit activities are passed from one department to another within one faculty, school, or college. Most faculty members in the Russian Federation and Ukraine, as well as in other former Soviet republics, work two to three jobs in different colleges and universities, which adds to the spillover effect.

Social environment, including peer pressure in the workplace, appears to be ever more important in determining engagement in illicit activities, especially when norms are not set, a code of conduct for the faculty is absent, laws on corruption are not clear and undeveloped, and possible administrative and legal sanctions for illicit behavior in academia are not known or clearly defined. Absence of transparency, monitoring, and accountability in the higher education sector extends the equation beyond the borders of the “everyone does it” approach and takes peer pressure to a new level. When moral considerations are weak and insignificant, peer pressure becomes the major determinant in decision-making regarding personal involvement in illicit activities.

Further developments in the model extension that addresses peer pressure in corrupt educational systems may be based on the programming techniques of cellular automata (Wirl, 1998) and its application to large educational organizations (Osipian, 2008a; 2008b).² These may include the probability of being prosecuted in addition to the probability of being exposed. Accordingly, the cost of being involved in illicit activities may be defined by the probability of being exposed by colleagues, supervisors, and students; the degree of punishment defined by the law; and the willingness of the law enforcement to prosecute. If the state ignores the reports on corruption, it may still apply the selective justice approach that directly reflects the corruption and coercion policy. This may be a best determinant of the sincerity of the state in its effort to curb corruption in education.

Conclusion

The role of the state in developing and sustaining corruption is often underestimated. Strengthening of state through the vertical administrative hierarchy is necessary to advance the state policy of corruption and coercion. This policy, in turn, leads to further strengthening of the state machine. Sharing and profiteering create a base for and strengthen the vertical structure of the mechanism of corruption and coercion. The state applies the corruption and coercion mechanism to the higher education system. Universities have increasingly become important institutions for political socialization. Control over the universities equates to control over their curriculum, ideology, and

^a The notation c means that the university faculty member is mutually corrupt.
^b The notation n means that the university faculty member is not initially corrupt.

behavior and is very valuable for the regimes to sustain themselves. State funding as one of the mechanisms of control over the universities is replaced with the mechanism of corruption and coercion.

The government forces higher education faculty to seek means of survival and encourages them to take bribes by condoning corrupt practices in the universities. Indulgence, as a necessary detail in the mechanism of corruption and coercion, is presented here in the form of informal approval, most often expressed as opinions and views of public officials and administrators and tolerance of the general public. Involvement in illegal activities requires braking personal ethics and certain norms of behavior and establishing new types of relations with familiar and new people and organizations. The post-Soviet system of higher education chooses this way of adaptation to the new economic realities.

The adverse reactions of educators are supported by the numerous cases when professors enter into positions of power (i.e., occupy different administrative or semi-administrative positions). They chair different state and local committees, serve as members of the local and central administrations, and receive military ranks for teaching part-time in military and police academies. As a result, faculty members secure their societal positions. The concept of corruption and coercion applied to higher education demonstrates how the state creates, breeds, and then influences unhealthy institutional environments in order to advance its own interests.

University autonomy can be considered a response to state pressure. The autonomy itself will not eradicate corruption but may decrease it significantly. Distinct from the early 1990s when the faculty demonstrated opportunistic behavior at their workplaces, the faculty currently claim a certain degree of ownership of higher education institutions, including the redistribution of property rights. More university autonomy will demand greater responsibility from the faculty over the quality of educational services provided, academic degrees conferred, and establishment of higher standards of academic integrity. Such a process will eventually result in a decline of corruption in many higher education institutions and diminishing the base for the corruption and coercion policy exercised by the state. Reconfiguring the state-university relations as a part of a new social contract will further weaken the state's position in the higher education sector and the regime's ability to manipulate its constituents with coercive techniques.

Notes

1. About half of higher education students in the Russian Federation are funded by the state and the competition for admission to public and municipal higher education

institutions is fairly high, reaching 206 candidates per 100 places (*Russia in Figures*, 2007, p. 140).

2. Cellular automata are simple deterministic computational machines, where state of each cell is determined based on the state of the neighboring cells. Any large bureaucracy or professional organization, including those with complex hierarchical structures, can be decomposed to a simple linear one-period system. The resulting abstraction can be processed and analyzed with cellular automata based on the set rules of functions.

References

- Almond, G., & Coleman, J. (1960). *The politics of the developing areas*. Princeton: Princeton University Press.
- Anechiarico, F., & Jacobs, J. (1995). *The pursuit of absolute integrity: How corruption control makes government ineffective*. Chicago: University of Chicago Press.
- Biswal, B. (1999). Private tutoring and private corruption: A cost-effective education system for developing countries. *Developing Economies*, 37(2), 222–240.
- Bray, M. (2003). *Adverse effects of private supplementary tutoring: Dimensions, implications and government responses*. Paris: International Institute for Educational Planning (IIEP).
- Buchanan, J., Tollison, M., & Tollock, G. (Eds.). (1980). *Toward a theory of the rent-seeking society*. College Station: Texas A&M Press.
- Coleman, J. (Ed.). (1965). *Education and political development*. Princeton: Princeton University Press.
- Council of Europe (2005). *Evaluation report on Georgia*. Group of States Against Corruption. Strasbourg: Council of Europe.
- Darden, K. (2001). Blackmail as a tool of state domination. *East European Constitutional Review* 10(2/3). www.law.nyu.edu/eecr/v0110num2_3/focus/darden.html, accessed March 25, 2002.
- Darden, K. (2002). *Graft and governance: Corruption as an informal mechanism of state control*. Yale University Working Paper.
- Demidova, N. (1987). *Sluzhilaia biurokratiia v Rossii XVII v. i ee rol' v formirovanii absoliutizma* [Public bureaucracy in Russia in the seventeenth century and its role in shaping absolutism]. Moscow: Nauka.
- Flynn, J. (1988). Russia's "university question": Origins to great reforms 1802–1863. In L. Brockliss (Ed.), *History of universities*. Oxford: Oxford University Press.
- Hallak, J., & Poisson, M. (2002). *Ethics and corruption in education: Results from the expert workshop held at the IIEP*. Paris: IIEP-UNESCO.
- Hallak, J., & Poisson, M. (2007). *Corrupt schools, corrupt universities: What can be done?* Paris: Institute for International Educational Planning.
- Heyneman, S. (2004). Education and corruption. *International Journal of Educational Development*, 24, 638–658.
- Heyneman, S., Anderson, K., & Nuraliyeva, N. (2008). The cost of corruption in higher education. *Comparative Education Review*, 52(1), 1–26.
- Johnston, M. (1986). Right and wrong in American politics: Popular concepts of corruption. *Polity*, 18(3), 367–391.
- Kagarlitsky, A. (2002). Political capitalism and corruption in Russia. *Links*, 21, 8–20.

- Karklins, R. (2005). *The system made me do it: Corruption in post-communist societies*. Armonk, NY: M.E.Sharpe.
- Klitgaard, R. (1986). *Elitism and meritocracy in developing countries*. Baltimore, MD: John Hopkins University Press.
- Klitgaard, R. (1988). *Controlling corruption*. Berkeley: University of California Press.
- Krueger, A. (1974). The political economy of a rent-seeking society. *American Economic Review*, 64(3), 291–302.
- Lipsky, M. (1979). *Street-level bureaucracy: Dilemmas of the individual in public services*. New York: Basic Books.
- McChesney, F. (1997). *Money for nothing: Politicians, rent extraction, and political extortion*. Cambridge: Harvard University Press.
- Miller, W., Grodeland, A., & Koshechkina, T. (2001). *A culture of corruption? Coping with government in post-communist Europe*. Budapest: Central European University Press.
- Milov, L. (1998). *Velikorusskii pakhar' i osobennosti rossiiskogo istoricheskogo protsessa* [The great Russian peasant and specifics of Russian history]. Moscow: ROSSPEN.
- Newsru (2006). MVD Rossiiskoi Federatsii: razmery vziatok v vuzakh kolebliutsia ot neskol'kh soten do odnogo miliona rublei [Ministry of the Interior of the Russian Federation: Size of bribes in higher education institutions varies from several hundred to up to a million rubles]. Newsru.com.
- Nye, J. (1967). Corruption and political development: A cost-benefit analysis. *American Political Science Review*, 61(2), 417–427.
- Osipian, A. (2007a). Corruption in higher education: Conceptual approaches and measurement techniques. *Research in Comparative and International Education*, 2(4), 313–332.
- Osipian, A. (2007b). Corruption as a legacy of the medieval university. *Higher Education in Europe*, 32(4), 303–312.
- Osipian, A. (2008a). The world is flat: Modeling educators' misconduct with cellular automata. *Social Science Research Network*. <http://ssrn.com/abstract=1104088>, accessed May 2, 2008.
- Osipian, A. (2008b, August). *Modeling educators' misconduct with cellular automata*. Paper presented at the Annual Meeting of the American Sociological Association, Boston.
- Payne, P. (1975). *The corrupt society: From ancient Greece to present-day America*. New York: Praeger.
- Petrov, G., & Temple, P. (2004). Corruption in higher education: Some findings from the states of the former Soviet Union. *Higher Education Management and Policy*, 16(1), 83–99.
- Pisar'kova, L. (2004). Chinovnik na sluzhbe v kontse XVII–nachale XIX vv. [The bureaucrat as a public servant in the late seventeenth to early nineteenth centuries]. *Otechestvennye zapiski*, 2(17). www.strana-oz.ru/?numid=17&article=833, accessed October 10, 2007.
- Popov, O. (2005). Diagnosing corruption in Russia: A sociological analysis. *Russian Social Science Review*, 46(1), 19–37.
- Pososhkov, I. (1937). *Kniga o skudosti i bogatstve* [The book about scarcity and wealth]. Moscow.

- Rose-Ackerman, S. (1994). Reducing Bribery in the Public Sector. In D. Trang (Ed.), *Corruption and democracy: Political institutions, processes and corruption in transition states in east-central Europe and in the former Soviet Union* (pp. 21–28). Budapest: Institute for Constitutional and Legislative Policy.
- Russia in figures (2007). Moscow: Goskomstat Rossii.
- Satarov, G. (2006). Corruption process in Russia: Level, structure, trends. In G. Satarov (Ed.), *Diagnostics of corruption in Russia: 2001–2005*. Moscow: INDEM Foundation. www.indem.ru/en/publicat/2005diag_engV.htm, accessed May 12, 2006.
- Sayed, T., & Bruce, D. (1998). Inside and outside the boundaries of police corruption. *African Security Review*, 7(2). www.iss.co.za/Pubs/ASR/7N02/SayedAndBruce.html. accessed May 20, 2002.
- Sayed, T., & Bruce, D. (1998). Police corruption: Towards a working definition. *African Security Review*, 7(1). www.iss.co.za/ASR/7N01/SayedBruce.html. accessed May 20, 2002.
- Shaw, P. (2005). *The determinants of educational corruption in higher education: The case of Ukraine*. Paper presented at the 2005 NEUDC Conference. Yale University, New Haven, CT.
- Shlapentokh, V. (2003). Russia's acquiescence to corruption makes the state machine inept. *Communist and Post-Communist Studies*, 36, 151–161.
- Shleifer, A., & Treisman, D. (2003). *A Normal Country*. NBER Working Paper 10057. www.nber.org/papers/w10057, accessed May 12, 2004.
- Silova, I., Johnson, M., & Heyneman, S. (2007). Education and the crisis of social cohesion in Azerbaijan and Central Asia. *Comparative Education Review*, 51(2), 159–180.
- Silova, I., & Bray, M. (2006). The hidden marketplace: Private tutoring in former socialist countries. In I. Silova, V. Budijene, & M. Bray (Eds.), *Education in a Hidden Marketplace: Monitoring of Private Tutoring* (pp. 71–98). Budapest: Open Society Institute.
- Solnick, S. (1998). *Stealing the state: Control and collapse in Soviet institutions*. Cambridge: Harvard University Press.
- Solomon, P., & Foglesong, T. (2001). The two faces of crime in post-Soviet Ukraine. *East European Constitutional Review*, 19(3). www.law.nyu.edu/eecr/v019num3/pdfs/solomon.pdf, accessed May 20, 2003.
- Solov'ev, S. (1991). *Sochineniia. Kn. VII* [Essays. Book VII]. Moscow: Logos.
- Staats, S. (1972). Corruption in the Soviet system. *Problems of Communism*, 21, 40–51.
- Transparency International. (2007). *Corruption perceptions barometer, education sector*. www.transparency.org/policy_research/surveys_indices/gcb/2007, accessed May 2, 2008.
- Treisman, D. (2000). The causes of corruption: A cross-national study. *Journal of Public Economics*, 76, 399–457.
- Waite, D., & Allen, D. Corruption and abuse of power in educational administration. *Urban Review*, 35(4), 281–296.
- Weber, M. (1978). *Economy and society*. Berkeley: University of California Press.
- Weidman, C., & Enkhjargal, A. (2008). Corruption in higher education. In D. Baker & A. Wiseman (Eds.), *The Worldwide Transformation of Higher*

Education: International Perspectives on Education and Society (pp. 63–88).
Oxford: Emerald Group.

Wilson, J. (1975). The rise of the bureaucratic state. In S. Theodoulou and M. Cahn (Eds.), *Public Policy* (pp. 251–258). Boston: Kluwer.

Wirl, F. (1998). Socio-economic typologies of bureaucratic corruption and their implications. *Journal of Evolution Economics*, 8(2), 199–220.

Woronowycz, R. (2003). Nationwide survey reveals culture of corruption in Ukraine. *Ukrainian Weekly*, 71(4). www.ukrweekly.com/Archive/2003/040302.shtml, accessed May 20, 2004.