



**INSTITUTIONAL SOURCES OF CORRUPTION  
IN THE CASE OF ARMENIA:  
IS IT RULES, BLOOD AND CULTURE, OR PUNISHMENT?**

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## ABSTRACT

*Corruption has a negative impact on development, allocation of public resources and consolidation of democracy. Controlling corruption is vital in achieving equitable socio-economic development. The republic of Armenia is one of the many countries, where the problem of corruption has as well not been thoroughly analyzed and adequately in order to tackle the problem considering its most prevalent and problematic roots. According to the director of the Transparency International Yerevan office, Amalya Kostanyan, high corruption index persisted in Armenia in 2007 despite of the activities of government anticorruption reforms ([www.a1plus.am](http://www.a1plus.am) – 09.26.07). Given this outcome of Armenia's anticorruption results, this project seeks to find answers to the following research question: Which institutional source – formal rules, informal constraints, or enforcement mechanisms – most negatively affects corruption in Armenia?*

*Using the 2008 Armenia Household Corruption Survey, the study proposes that among the three dimensions of institutions – formal rules, informal constraints, and enforcement mechanisms – specifically informal constraints and enforcement mechanisms are key deterrents of corruption in Armenia. The findings provide evidence that informal social practices should be considered as important indicators of corruption perceptions. Moreover, the regression results imply that, in a country such as Armenia, the premise of the institutional theory regarding formal political rules as most significant determinants of corruption, does not hold true. Statistical significance and evidence of a more powerful association is found only between informal constraints and corruption, and enforcement mechanisms and corruption.*

*The results of the study will be beneficial to domestic policy circles and international donors in terms of designing and enforcing policy tools that thoroughly consider all three institutional origins of corruption. Also, it will become a ground for further research both on national level and comparatively within the South Caucasus, post-Soviet region in general (excluding, perhaps, the Baltic States) or any region that goes through socio-political transformation.*

## INTRODUCTION

Corruption exists in many countries in various forms, and has become the focus of worldwide concern; it is a major global problem. Not only practitioners attempt to find a panacea to the issue of corruption, but recently there has been a remarkable upsurge of academic research the focal point of which is corruption. Based on academic research and literature, it is known that corruption is an outcome – a reflection of a country's legal, economic, cultural and political institutions (Svensson 2005:2). Yet, little is known for certain about what exactly determines the extent of corruption, let alone about definitive measures to combat it.

Theories about the determinants of corruption highlight the role of economic and structural policies and the role of institutions. These theories are, indeed, interrelated; institutions influence corruption through economic and structural policies (Acemoglu, Johnson and Robinson, 2004; La Porta, Lopez-de-Silanes, Shleifer and Vishny, 1999). The institutional explanation of corruption has recently drawn the most academic and policy attention. Institutions provide the framework for circulating and enforcing rules governing society, and the quality of

these institutions determines the degree of corruption within this society. Considering it, this study uses the institutional framework to explain corruption perceptions and levels in Armenia.

Although corruption is not a recent problem, it has not been as widely confronted previously. For example, communist states certainly contained certain corruption practices, including patronage, embezzlement, theft of state resources and bribery; but during the socialist regime, it could have been a fatal sin for anybody to reveal corruption or a related problem, despite the fact that they existed. Indeed, the cessation of the Soviet republics from the USSR makes corruption as a less taboo theme nowadays, and researchers, policymakers, civil society organizations, media, and donors openly discuss and criticize it, trying to come up with anti-corruption initiatives. On the other hand, the cessation, undeniably, broke down the communist state apparatus, creating a lack of a new institutional framework. The economic changes created poverty and deprivation, and the socio-political vacuum and disorderliness allowed for lawlessness, increase in crime and corruption. The transition process, thus, formed the initial setting for an unprecedented rise in corruption in most of the post-Soviet region. The new structural reforms provided ample opportunities for asset stripping, illegal possessions, kinship relationships in politics and policy-making. The twin transition occurring in post-Soviet countries, therefore, provides us with a unique opportunity to study the link between institutions and corruption. In light of the above-mentioned changes, some important questions come up: 1) What is public perception of corruption in post-Soviet Armenia; and 2) Which institutional source is the most important factor inducing domestic corruption according to people in Armenia?

In efforts to provide answers to these puzzling questions, this paper is organized as follows: What is corruption, how is it defined and measured in the existing literature? These questions are summarized in the first part of the paper. A brief synthesis of corruption theories, corruption forms, measurements, and its consequences is conducted. The second part dwells on institutional design and its three sources, as proposed by award winning Douglas North. This part aims to show the theoretical relationship between formal rules, informal constraints, enforcement mechanisms and corruption in general. Next part analyses the 2008 Armenian Corruption Household survey regarding the two research questions raised earlier. Further, it empirically tests relevant observations connected to the Armenian public perceptions of corruption and how those perceptions can be linked to formal rules, informal constraints and enforcement mechanisms in Armenia. The strength of the effect of each institutional source on the perceived corruption level will be tested statistically and substantively. The final part emphasizes results

and how this specific research can be translated into policy recommendations within the Armenian context.

## CORRUPTION

### *Definitions and Measurements:*

Corruption is a multidisciplinary phenomenon that cuts across the boundaries of economics, political science, psychology, criminology and sociology. Therefore, the intellectual school of corruption has produced different theories and approaches explaining origins and consequences of corruption, some of which are complex and conflicting. Yet before we discuss those theories, it is imperative to understand what corruption is. The phenomenon of corruption varies from a single act of a payment opposing the law to an endemic malfunction of a political and economic system. The problem can be considered either as a structural problem of politics and economics, or as a socio-cultural problem and moral decay. While recognizing that it can take many forms and involve different actors, corruption is most often defined as the abuse of public roles and resources for private gain. Some of the other popular definitions deserve to be acknowledged:

“Corruption is a behavior of public officials which deviates from accepted norms in order to serve private ends” (Huntington 1968:59).

“Corruption is behavior which deviates from the formal duties of a public role because of private regarding (close family, personal, private clique) pecuniary or status gains; or violates rules against the exercise of certain types of private regarding influence” (Nye 1978:419).

“Corruption exists when an individual illicitly puts personal interests above those of the people and ideals he or she is pledged to serve” (Klitgaard 1988, xi).

The report “*Corruption: A Review of Contemporary Research*” (2001) succinctly presents different sets of corruption definitions. The first set of corruption definitions, specifically stemming from research on developing countries, is state-centered. It focuses on formal structures and roles of the state institutions. Here, corruption is viewed as a particular *state-society relationship*, and the distinction between ‘political’ corruption and ‘bureaucratic’ corruption is made. Corruption has also been broadly categorized as ‘functional’ and ‘dysfunctional’, as well as either ‘upward extraction’ or ‘downward redistribution’ (page 11).

Jain (2001) categorizes corruption into three main types, based on the types of decisions that are influenced by corruption, on the source of (misused) power of the decision maker, and therefore, the types of models that can be used to explain corruption. ‘Grand corruption’, in most of the literature defined as ‘political corruption’, refers the activities of political elites exploiting their power to make economic policies to their advantage. Grand corruption is difficult to identify and measure, unless some bribes are paid, since the debate on public policy may be

implied in terms of public interest. It can be debated that those policies benefit some sectors of the population. The second category is called 'bureaucratic corruption', also known as 'petty corruption', and refers to corrupt activities of appointed bureaucrats aimed towards either political elites or the general public. The third category is the 'legislative corruption', referring to the extent of corruption influencing the voting behavior of legislators.

Sometimes, corruption is very narrowly defined and limited to particular agents, sectors and transactions. This type of narrow (legal) definition, however, is problematic, because it ignores some essential parts of the problem, such as the lack of political will to curb corruption in certain regimes, or corruption in terms of power abuse. At the same time, we should be cautious not to consider certain illegal activities such as fraud, money laundering, drug trades and black market operations as corruption, since they do not involve the use of public power. Corruption is not equal to rent-seeking. The latter is the socially costly pursuit of rents (Svensson 2005:21).

The causes and consequences of corruption can be overlapping. There is a "feed back effect between the two" (Jain 2001:23). As mentioned in the previous paragraphs of this paper, it is problematic to define corruption narrowly. In the same vein, the consequences of corruption should not be confined to specific corruption-based transactions. Corruption can affect a whole economic structure. It can as well decrease investment levels, entrepreneurial incentives, and the policy-making process of a country. Corruption certainly creates inequalities and social exclusion; it allows different amount of access to resources and assets within a country.

Although surprising, some literature points out that corruption can have positive effects. Corruption helps to overcome bureaucratic rigidities and get around the bureaucratic red tape. It has been also argued that small side payments to officials could speed up bureaucratic processes and thus promote economic growth (Leys 1970). According to Nye (1968), corruption can be a source of capital formation. It can also promote entrepreneurship as it increases opportunities of entrepreneurs to get access to political decisions. Some political scientists argue that the optimal level of corruption is positive (Leff, 1964; Huntington, 1968), while others suggest that existing corruption levels are detrimental to development (Klitgaard, 1991). These said, the research arguing that corruption may, in some instances, support development is not very popular and does not merit much attention. On the contrary, scholarly research on the negative effects of corruption has become more and more noteworthy.

Although ample, most of the literature on the causes and consequences of corruption tends to study different variables in isolation. Research that can analyze causes and consequences in a synchronized framework will add a lot more to our understanding of the phenomenon and

how to tackle it. In this research, all three institutional sources are examined in an equilibrium framework; we cannot understand perceptions of corruption in the country, if we look only how people link the judicial system to corruption, or how perceived social norms are related to the same perception of corruption.

While it is difficult to find a consensus for a definition of corruption, it is even more complex to measure it. It is difficult due to the secretive nature of corruption, as well as due to the various forms it has. Below is a table that summarizes different measures of corruption and their features. I will not dwell on a more detailed analysis of the below presented measures, because the quantitative part of this research is designed in such a method that will not allow me to utilize any of these measures as the dependant variable (corruption in Armenia). Instead, I have created another measure of corruption (perception of corruption) based on the answers to one of the questions of 2008 Armenia household corruption survey.

**Table 1: Summary of Features of Measures of Corruption**

Index/Survey Source	Definition of corruption measured	Information sources	Coverage	Interpretation
Corruption Perceptions Index (CPI)	Perceived corruption (composite) and some measures of corruption control	Statistical summary of expert assessments (e.g. expatriate business executives, senior business leaders, assessment by US, regional, and in-country experts )	Almost global depending on having sufficient sources. Annual (though not all data sources annual)	Cross-sectional ranking of perception of corruption focusing on business environment
Control of Corruption Index (CCI)	Perceived corruption (composite) and some business and public opinion survey evidence and corruption control assessment	Similar sources to CPI but with some survey evidence	Almost global depending on having sufficient sources. Biannual (though not all data sources annual or biannual)	Cross-sectional ranking of perception of corruption. Sources may be somewhat wider than business environment focus of CPI
Public Integrity Index (PII)	Overall institutional environment for controlling corruption	Expert assessment	25 countries	Absolute ranking (in principle allows assessment of change over time)
Bribe Payers Index (BPI)	Perceived willingness of companies from different countries to pay bribes, and sectors in which bribery most prevalent	Business experts	21 countries based on evidence from main emerging market economies. Last carried out 2002	Ranking of perceived willingness to pay bribes in different countries. Validity of perceptions and weighting uncertain
Global Corruption Barometer (GCB) and related surveys by Transparency International	Bribe payments by households and public perceptions of corruption prevalence	Public opinion surveys and partial household surveys	69 countries in 2005, though not nationally representative in many cases	Comparative prevalence and amounts of bribe payments though quality of survey data needs validation
World Bank Enterprise Survey (WBES)	Bribe payments by firms	Surveys of businesses	62 countries, various years	Quantitative comparisons of bribe prevalence and cost
Governance and Corruption Diagnostic Surveys (GCDS)	Bribe payments by households	Household surveys	16 countries	Quantitative comparisons of bribe prevalence and cost

**Source:** Oxford Policy Management (OPM) briefing notes, “*Measuring Corruption*”, 2007-01, page 2, [www.opml.co.uk](http://www.opml.co.uk)

As we can see, there is not a single definition of corruption that is completely straightforward and overarching, as well as a most accurate method of measuring it. The ARD expert group (2002) state that in Armenia, corruption has attacked the operating systems of political, economic and social institutions in its most malignant forms. The ARD report identifies “five categories of corruption (bribes, theft/illegitimate acquisition of assets, clientelism, political corruption, and conflict of interest) and two levels of corruption in the public sector (grand corruption or “state capture” and administrative corruption)” and finds credible evidence of substantial existence of each (page 21). The accent of the definition in this paper is on public corruption and it is measured based on the public perceptions of corruption existence (level) in the 2008 Armenian Corruption Household survey.

### ***Theories and Models:***

The list of most corrupt countries suggests that countries with the highest levels of corruption are developing or transitioning countries. Many of them have been under socialist rule, have low income levels, and are considered closed economies. These common features, however, cannot be accepted as a rule of thumb for fighting corruption in different countries in the same manner. Corruption characteristics can totally differ in different contexts and in different regions, which suggests that different theories should be considered in order to thoroughly understand which model or models best suit each case.

An array of theories, such as public choice (Rose-Ackerman 1978), game theory (Macrae 1982), and transaction-cost economics (Husted 1994), has made their contributions to the study of corruption. A most popular model among corruption theories is the agency theory used to explore corruption (Jain 1987, 1993, Sheifer and Vishny 1993, Klitgaard 1990, Rose-Ackerman 1999). Agency model views corruption as affecting incentives and constraints faced by political elites and examines the effects of changes in these incentives on their decisions (Jain 2001). This model, also called principal-agent model, highlights the relationship between the principal, that is, the political elite representative, and the agent, such as an official, who takes the bribe to provide a government-produced good or a service. Another model is the resource allocation theory, which suggests a rent-seeking behavior (Krueger 1974, Collander 1984). In this model, corruption alters the relative costs of inputs and outputs as well as the penalties faced by decision-makers and, so, the players' behavior. Both models must allow for uncertainties involved in enforcement of corrupt contracts as well as risks of penalties and controls that may be imposed (Jain 2001:17). As we can observe, there are quite similar patterns in the agency and resource allocation models.

Most literature regarding the causes of corruption have considered economic and political factors. For example, Alam proposes some countervailing actions closely related with the level of economic development in a country that can decrease corruption. The availability of these actions depends on factors, such as: "(a) secular increases in wages, education and urbanization; (b) growth of mass media; (c) advances in transportation and communications technology; (d) improvements in managerial and accounting skills; (e) growth of capitalist classes, urban middle classes, and an urban labor force; and (f) upward pressures on government expenditure" (Alam, 1995:430). Economic distribution as well plays a significant role in the extent of corruption in a country. Social inequality of income causes higher corruption levels (Alam 1995). On the other hand, higher corruption can cause for wider disparities in income distribution (Johnston 1989). Some political scientists believe the size of government affects the level of corruption. LaPalombara (1994) and Husted (1999) hypothesize that there exists a positive correlation between the size of a government (GDP share of government) and the level of corruption in the country.

Although cultural norms and values have an indomitable impact on economic and political practices in many countries, culture has been extensively neglected in the formulations of corruption theories (Hofstede, 1997). The premise of 'cultural' theories of corruption is that some countries can have similar formal institutions, laws and regulations but different corruption pervasiveness at the same time. The explaining factors, therefore, are cultural values, such as accepted norms, social behavior, religion, ethnic diversity, etc. The "Cultural values are those conceptions of the desirable that are characteristic of a particular people" (Husted 1999:341).

The institutional school of corruption is divided into two main groups. Some authors determine that economic (e.g., per capita income level) and human capital factors (educational level) affect the institutional quality of corruption (Lipset, 1960; Demsetz, 1967). Others stress the role of historical traditions, colonization and religion in the extent of corruption (Acemoglu, Johnson and Robinson, 2001; La Porta, Lopez-de-Silanes, Shleifer and Vishny, 1998, 1999; Treisman, 2000). In this research I have employed the institutional framework, which looks not only at the political institutions, but also the informal rules that are inseparable element of institutional design.<sup>1</sup>

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<sup>1</sup> Most authors isolate economic or political factors from cultural specificities and traditions. The institutional theories studying corruption also tend to look at only these two areas, failing to remember that formal rules and constraints are as well institutional sources.

The causes and consequences of corruption are quite intertwined, and it is difficult to show the causal direction; still, in the framework of this research, we have identified that institutional sources are causes rather than consequences of corruption; and first we want to understand the conceptual links between those two processes.

It is argued that differences between the economic performances are greatly affected by the institutional choices certain countries make (North 1990). Economic progress in its turn depends on certain factors and processes; among these the phenomenon of corruption should not be ignored. Corruption itself is a process that is greatly facilitated or impeded by different institutional sources.

The concept of institution generally refers to “relatively enduring systems of social beliefs and socially organized practices associated with varying functional areas of societal systems (religion, work, family, politics, regulations)” (Judge 2004:150). “*Institutions include any form of constraint that human beings devise to shape human interaction*” (North 1990:4). Institutions frame and structure human interaction and everyday life, in this way reducing uncertainty. And since institutions are designed by people with different bargaining powers, some patterns may be less efficient than others, producing a corrupt and stagnant economy. New institutionalism further contends that Third World countries remain poor, because their institutions foster corruption and distort incentives.

Institutions structure social life; they can produce socially beneficial or socially undesirable outcomes. According to Moe, institutions are weapons of coercion and redistribution. “They are the structural means by which political winners pursue their own interests, often at the great expense of political losers” (1990a:213). Thus, the consequences of institutional design are of greatest importance for a country’s corruption patterns and, therefore, development. The implication of institutions, formally and informally, on corruption trends and social development could be evidenced through the examination of 2008 Corruption Household Survey.

Institutions are characterized in terms of three dimensions: formal rules (constraints), informal constraints (rules), and enforcement mechanisms. Formal rules are well-defined rules, such as constitutions, laws, and property rights. They include “political (and judicial) rules, economic rules and contracts” (North 1990:47). Those rules may increase the effectiveness of informal constraints, modify them, or supersede them (p. 46).

Informal rules are conventions, codes of conduct, norms of behavior, which develop differently in different communities and nations. They consist of “1) extensions, elaborations, and modifications of formal rules, 2) socially sanctioned norms of behavior, and 3) internally

enforced standards of conduct” (p. 40). Those constraints come from socially transmitted information and are part of culture. North simultaneously uses two terms for informal constraints: ‘rules’ or ‘constraints’. All constraints that derive from human behavior are essentially rules. Subsequently, we accept that there is no difference between informal rules and informal constraints, and we as well use both terms in this paper.

A most simple, yet very characterizing statement of formal and informal rules is that the former are created, written and intentional norms, while the latter evolve over time, are unwritten and most often unintentional. While formal rules are designed and enforced by the polity, informal constraints are linked to cultural inheritance. Informal rules, on the contrary, are deemed as irrational and typically limiting the benefits that formal rules potentially create.

There is a repeated interaction between the three dimensions of institutions, particularly formal rules and informal constraints. Weber (1921), for example, mentions that the interaction between these two forms of rules is complex and reciprocal. Informal constraints are not just additions to formal rules and will not alter quickly in reaction to such rules. These constraints arise from the need to structure interaction and reduce uncertainty. Hayek (1973, 1988) and North (1990) stress that moral (informal) rules develop over a long period of time, pass through incremental cultural evolution, and eventually transform into laws and legislation. Nonetheless, many aspects of social culture are extremely persistent, and in spite of total change in formal rules, there happens no or little transformation in a society. Hence, we can note that informal rules can sometimes shape the content of the new formal rules, so the influence does not necessarily move in one direction. This can happen due to the persistence of certain cultural norms, as well as the weakness of enforcement mechanisms.

Both forms of rules and constraints need enforcement, and as society becomes more complex, the need for third-party enforcement arises. The successful operation of any system or policies depends on whether the deployed enforcement mechanisms can guarantee the compliance with the policies, which is extremely difficult. “There are costs associated with imperfect enforcement due to (i) costs of measuring contract compliance, and (ii) enforcement agents having their own utility functions” (p. 54). Considering this, we can assume that the inability of societies to develop effective, low-cost enforcement mechanisms, such as contracts, can be a significant source of corruption.

As previously stated in the brief literature review of this study, the central explanation for the origins of corruption utilizes the institutional approach. This approach posits the view that increasing the costs of corruption through increasing the rule of law will decrease corruption levels. The World Bank and related organizations have propagated some aspects of the

institutional approach (specifically, voice and accountability, and quality of bureaucracy) in many developing countries. Yet, the level of corruption has not changed much in those countries. Therefore, how do we explain cases, such as Armenia, where government sponsored anti-corruption system is in place, however, corruption still flourishes?

My hypothesis argues that the origins of corruption do not lie in the existence or creation of formal rules alone. Most often, those rules do not work in developing and/ transitioning countries, which means that the first source of institutional approach is very much dependent on the third source – enforcement mechanisms. Further, even if those enforcement mechanisms are created, they do not work properly, and in certain societies people often avoid them without punishment. This means that informal relations (kinship) and social networks become significant factors explaining high levels of corruption. As North states, “the informal constraints that are culturally derived will not change immediately in reaction to changes in the formal rules” and enforcement efforts (North 1990:45). Social norms, culture and traditions (informal rules), in this way, can challenge the consequences of formal rules on corruption.

While formal rules and enforcement mechanisms shape and constrain decisions and preferences, informal rules that derive from culture, religion, traditions and accepted social norms and behavior determine those preferences. Thus, the institutional approach of analyzing corruption should not be focused chiefly on the rule of law, political stability, regulatory quality, control of corruption, and governance issues, but also on societal norms and behavior and whether it is possible to alter public perceptions of corruption through the latter. In other words, “informal societal norms derived from specific cultures also play a role in helping to set actor preferences, sometimes in conflict with the incentives structured by institutions” (Teets 2004:19).

The above discussion leads to the following main hypothesis: All three dimensions of institutions – formal rules, informal constraints, and enforcement mechanisms – are key determinants of corruption in Armenia. Methodologically, this statement can also be presented in the following three hypotheses:

- Hypothesis 1: Public perception of corruption level is high, when perceptions of formal rules are weak.
- Hypothesis 2: Public perception of corruption level is high, when perceptions of informal rules are strong (informal constraints are weak).
- Hypothesis 3: Public perception of corruption level is high, when perceptions of enforcement mechanisms are weak.

### *Formal rules and Corruption:*

While economists often consider economic organization of a country when studying the problem of corruption, political scientists traditionally focus on the formal aspects and institutions of power. Corruption has frequently been studied according to a country's institutional characteristics, such as the balance of power between the state institutions, judicial independence and the strength of the parliament in counterbalancing the executive branch, as well as different models of bureaucracy. It is natural to believe that there is a relationship between political institutions, particularly the rules set by them, and corruption. On one hand, corruption can affect the functioning of political institutions, and on the other hand, the quality of political institutions can affect the level of corruption. Some case studies discuss the relationship between corruption and system legitimacy (Della Porta 2000; Pharr 2000), but it is theoretically and empirically challenging to show the direction of these two factors. For example, Gibson and Caldera (1995) mention that corruption causes procedural and distributive unfairness, which, in turn, diminishes legitimacy of democratic political institutions. A low level of support for regime, or in other words low political trust, is related to a high level of corruption (Rose, Mishler, and Haerpfer, 1998).

A well-written constitution is an important formal rule and an essential pledge for less corruption; nonetheless, it is not an absolute guarantee for eradication of corruption. There should be a clear separation of the executive, legislative and judiciary branches and de facto checks and balances that create a conflict of interest between the executive and legislative branches (Kobonbaev, 2006). In this case, the role of the independent and powerful parliament becomes crucial for inhibiting corruption, because it constraints the performance of the executive. This type of legislature has the power to remove politicians from office and veto the president, as it has higher institutional accountability.

Another element of formal rules is the legal system. If the legal system is weak, people and public officials do not feel threatened to be caught for corrupt practices. Sometimes, they might not even be aware that this or that act is corrupt, because of the lack of the rule of law. Johnson, Kaufmann, and Zoido-Lobaton (1998) have found that the effectiveness of the legal system significantly affects the size of the underground economy, which is an indirect measure of corruption. A weak judicial system is both a cause and consequence of corruption.

Within certain contexts, when people based on their culture and traditions are inclined to view corruption as acceptable, high levels of corruption should not be associated with negative attitudes towards existing formal rules or political institutions, or vice versa. In any case, it is certain that corruption and political institutions or formal rules are strongly interrelated.

According to the 2004 report of OECD *Anti-Corruption Action Plan for Armenia: Review of Legal and Institutional Framework for Fighting Corruption*, the criminal code of Armenia does not fully meet the requirements of international anti-corruption standards. For example, “criminalized passive bribery and active bribery should cover offering or soliciting a bribe. The provision which legalizes a *payment* of a considerable amount of money to a public official for an action or non-action within his competences, provided there is no preliminary agreement, appears as an odd anachronism. This provision seems construed to make de facto corruption legal and would thus serve to foster corruption” (page 4, italics are mine).

Armenian legislation does not explicitly cover bribery of foreign or international public officials or bribery in international financial transaction. Also, the transfer of non-material advantages to public officials is not considered corruption. Another negative point is that Armenian legislation does not contain any type of liability for legal persons involved in corruption-related cases or corruption. These are only some of the shortcomings of the Armenian legal code.

The same report mentions that although police officers, senior government officials, among them the president and the ministers, have to annually declare their revenue and property, the law in Armenia neither requires the verification of the financial statements nor provides for strict punishment for providing false information. It allows for tax evasion on these official’s behalf or ample opportunities for soliciting bribes.

Similar problems can be observed in regard to having an ‘independent’ parliament. Frequently, you can hear that many deputies and ministers use the state apparatus for personal business interests. In the words of the Expert Group, “there exists the merger of the three branches of power: legislative, executive and judicial with large business within the economic sphere to develop a “captured” State.” If misuse of public office for private gain is an accepted definition of public sector corruption, then according to the Expert Group, “the majority of the public sector of Armenia can be considered to varying degrees corrupt” (pages 23-24).

All these, indeed, are vivid examples that the absence of an important formal rule and its enforcement can foster corrupt activities. Since in this paper, methodologically we cannot objectively test the relationship between the form of government (parliamentary vs. presidential), the quality of the legislature (e.g., independent parliament), the quality of the judicial system and the quality of the constitution, and the perceptions of corruption, we measure the mentioned political institutions/formal rules based on how the surveyed public perceives certain aspects of formal rules. We want to find out how people’s attitudes of formal rules/political institutions affect their perceptions of corruption.

### *Informal rules and corruption:*

Cultural values also play a fundamental role on the level and perceptions of corruption. Certain cultural values may either foster or restrain corruption within a society. Moral codes of one society may allow certain corrupt activities to be considered and accepted not only as 'normal' behavior but even a 'necessary' one; those types of activities may be considered as exchange of favors, rather than bribery or corruption. As the proverb says, "scratch my back and I'll scratch yours". The same norms may be considered as absolutely unethical and lawless in another society.

According to 2002 ARD's report "*Armenia: Rule of Law/Anti-Corruption Assessment*", in 2002, "unofficial payments were ubiquitous in Armenia – literally from the cradle to the grave" (page 22). In the Armenian context, accepted moral values require, for example, expression of your gratitude to your doctor by 'putting into his/her pocket' a pleasant amount of extra money (excluding the fees already paid for the medical examination or surgery). The report mentions, that typically, families of newborn Armenians must pay an unofficial payment of three hundred or more dollars to 'secure the release of mother and child' from the hospital. Another example is paying a bribe to university administrators or university professors for entrance exams of state universities or for a high/higher grade (not always mandatory but a very preferable act by both parties). Those exchanges, perhaps, could be teased at in most Western democracies, although some of them have somehow similar political cultures. For example, the political culture in the United States allows the influence of interest groups or political action committees on legislators, a practice that some other democratic societies consider as an activity close to legalized corruption.

In "*Wealth, Culture and Corruption*", Husted (1999) tries to show how particular values specified by famous Geert Hofstede relate to corruption. According to Hofstede (1997) the following values characterize different cultures of the world: power distance, individualism, masculinity, uncertainty avoidance, and Confucian dynamism. Uncertainty avoidance is defined as "the extent to which members of a culture feel threatened by uncertainty or unknown situations" (Hofstede 1997:113). Confucian dynamism refers to "concern with respecting the demands of virtue" versus "personal steadiness and stability" and the truth. (Hofstede 1997:168-173). Concerning these two values, there are quite many contradictions by different authors (Husted, 1999; Alam 1995; Cohen, Pant and Sharp, 1996). I am also uncertain of Armenia's cultural characterization of uncertainty avoidance and Confucian dynamism; therefore, I will discuss the other three values only.

Power distance is "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede 1997:28). Nations can have a high-power or a low-power distance culture. High-power distance provides ample opportunities for corruption in the form of favoritism and nepotism, because in those cultures subordinates significantly depend on their superiors. I assume Armenia to be a high-power culture case.

The opposite of individualism is collectivism. Individualism refers to the extent to which decisions about a person's life are determined by the individual. If a culture is collectivist, then we expect to see that a person's decisions and actions are determined by his family, friends and relatives. Husted (1999), for instance, hypothesizes that less individualistic (more collectivistic) societies have higher levels of corruption. It is natural that most of the post-communist societies, having a socialist legacy, are collectivist rather than individualist. Armenia is not an exception, although recently we can see some alterations towards more individualism within certain groups of the society. In any case, we consider Armenia as a country with a collectivist culture.

The dimension of masculinity highlights "material success" as opposed to "quality of life" (Hofstede 1997:82). Although disputable, the assumption here is that greater masculinity of a culture causes higher level of corruption in a country (Husted, 1999). Armenia can be accepted as a culture with high masculinity. This is evidenced with the lifestyle most Armenians are in favor of. Most people would prefer driving expensive automobiles or wearing famous brand outfit, sacrificing other aspects of their life (quality of life), such as, for example, visiting to doctors as soon as needed, having hygienic and convenient conditions at home, etc. In Armenia, what can be observed of the person by others should be trendy and luxurious, while things that cannot be observed by others are easily ignored, although the latter can be more important for human well-being and development.

Armenia's having a *collectivist, high-power* and *high masculinity* culture and at the same time possessing pervasive corruption levels supports the proposition that the existence and power of certain informal rules (cultural values and social norms) instigate corruption. After all, it becomes clear that cultural institutions are also influential on corruption. Until public sentiment changes, corruption cannot be defeated. This is also supported by the frequency of corruption scandals where the sinners are not punished, particularly in non-democratic countries. It undermines public trust in legal effectiveness and encourages people to give bribes (Cábelkova and Hanousek, 2004). Wisely observed by Chaithanakij (2007), "the propensity to punish is more involved with norms, and the propensity to engage in corruption is more associated with cultural values. Such norms and values are necessary for the general public and governmental

officials respectively. To minimize corruption, society needs at least a strong norm of low tolerance to corruption” (page 6).

*Enforcement mechanisms and corruption:*

Weak formal rules and weak informal constraints cannot be the only problem to the fact that corruption in Armenia has spiraled out of control in recent years. Not only are those formal or social regulations weak, but also the mechanisms to enforce those, are not strong enough. Although we discuss formal rules and enforcement mechanisms separately, in fact, those two are deeply intertwined in real world and one cannot work appropriately without the other.

The combination of four elements of enforcement mechanisms is vital to achieve positive results in corruption eradication: 1) existence of penalties, 2) committed and incorrupt enforcement agencies, 3) independence of the judiciary from the politicians, and 4) equal access to the law for everyone (Jain 2001). In Armenia, there is a considerable lack of all four.

Creating penalties for corruption is a good method to fight corruption. Of course, higher penalties are associated with less corruption. But many can avoid penalties; particularly, a country’s political elite may easily avoid penalties for corruption because they control the political and judicial system. Ordinary people can as well escape penalties, depending on whether the probability of being caught is high or low. “Penalty is a joint function of the probabilities of being caught and, once caught, being punished” (Jain 2001:15). In a country where corruption is widespread, there may be few or no efforts to catch/detain people, who are corrupt, while in a country, where corruption is unpopular, all corrupt activities may be uncovered. So, the following questions come up: Is there a cut-off point at which public perception of corruption changes from “corruption is unacceptable” to “corruption is efficient and is the only way to do things here?” Or is there any relationship between perceptions of corruption and perceptions of the enforcement system in a country?

The presence of effective enforcement also depends on the level of law-enforcement officials’ corruptness. Often, law-enforcement departments are among the most corrupt departments in transitioning countries. Regarding legal systems and independent courts, Treisman (2000) hypothesizes that corruption is higher in countries with civil law systems as compared to those with common law systems. In order to have less corruption, the judiciary has to be independent of the executive and legislative branches. And finally, it is important to have a system with equal access to law for everyone. Public awareness of what counts for corruption and how corrupt acts can be reported does not necessarily mean that anybody, who faces/encounters a corruption concern, will report about it. This is because, in practice, the law is not equally accessible for everyone. Jain (2001) rightly observes that a system where the legal

channels are open and easily accessible will possibly have better counter-balancing forces against corruption and lower levels of corruption.

## METHODOLOGY, DATA, AND SOURCES

*Not everything that can be counted counts, and not everything that counts can be counted.*

—Albert Einstein

While it is a relatively easy task label a society as corrupt, it is quite difficult to measure the corruptness due to its inherently complicated nature of the phenomenon and its illegal character. Corruption can be measured and evaluated quantitatively and qualitatively. In both cases, it is very complicated to document evidence of links between levels of corruption and any variable assumed to be affecting corruption.

To test our hypotheses, this study uses the 2008 Armenia Household Corruption Survey, conducted through the period of September-October 2008 by CRRC-Armenia, in coordination with USAID MAAC Activity and IFES in Armenia. The survey aims to explore the public opinion and perceptions of corruption issues within different spheres of public life. The research methodology of this study utilizes logistic regression, since both the dependent and the main independent variables are categorical in nature. The number of observations is 1549; those are individuals aged 18 and higher, coming from Yerevan and other marzes.<sup>2</sup> There are two models constructed, one model tests the association of the dependent variable with the *primary* independent variables alone. The second model incorporates socio-demographic *control* variables to find if the influence of the latter can change results obtained in the first model.

The dependent variable of the study is perception of corruption. The independent variables of the study are perceptions of formal rules, enforcement mechanisms and informal rules. Due to shortage of time and the nature of the dataset available, it was impossible to find and use actual data on these three variables. Therefore, I have constructed those variables using the answer codes of the 2008 Armenia household survey. Each of those independent variables is presented through several answer codes of the 2008 survey, representative of the variable. Some of the questions of the survey clearly reveal public perception of formal rules, other questions more closely concern the informal rules, yet others are representative of the enforcement mechanisms in Armenia. Those perceptions might not match the real picture; this research, however, is more concerned with the *public perceptions* of the institutional sources of corruption and *not actual* institutional sources of corruption.

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<sup>2</sup> In Armenia, marz is a territorial-administrative subdivision equaling a region: there are 11 marzes, including the city of Yerevan with its outskirts.

“*Perceptions of corruption*”, a dummy variable, is constructed based on the answers to the question: “In your opinion, how serious of a problem is corruption in Armenia?” For answers ‘very serious’ and ‘serious’, the variable is coded as 1, and for all the other answers, it is coded as 0. For most variables, the answers ‘don’t know’ and ‘refused’ are missing values, as there were very few of those answers. In any case, they would not change the results of the regression.

The first set of primary independent variables, representing the concept of “*perceptions of formal rules*”, is constructed based on the answers to the following questions of the database.

1. Do you know what institutions to contact in order to report a corrupt act by a public official
2. Do you agree or disagree that NGOs are capable of combating corruption in Armenia?
3. Are you aware of any anti-corruption measures being taken by the Government of Armenia?
4. Are you aware of the Anti-Corruption Strategy and Action Plan implemented by the Government of Armenia?

The first variable in this set, which is “*Knows what institutions to contact to report a corrupt act*”, is coded in the following manner: answer ‘no’ is coded as 0 and answer ‘yes’ is coded as 1. The variable “*Agrees that NGOs are capable of combating corruption in Armenia*” is coded 1 for the answers ‘strongly agree’ & ‘somewhat agree’, and 0 for the answers ‘somewhat disagree’ & ‘strongly disagree’. The variable “*Is aware of any anti-corruption measures being taken by the Government of Armenia*” is coded 1 for the answer ‘yes’ and 0 for the answers ‘no’ and ‘don’t know’. I have coded the answer ‘don’t know’ as 0, because, if somebody would be aware of any anti-corruption measures, he/she would most probably not answer ‘don’t know’. The variable “*Is aware of the Anti-Corruption Strategy and Action Plan implemented by the Government of Armenia*” is coded exactly as the above variable: 1 for the answer ‘yes’ and 0 for the answers ‘no’ and ‘don’t know’.

Next set of variables are the variables representing the concept “*perceptions of enforcement mechanisms*”. They are constructed based on the answers to the following questions of the database:

1. During the past 12 months, have you heard of anyone including relatives, friends, acquaintances or neighbors paying bribes to obtain a public service?
2. How effective or ineffective is the Government’s fight against corruption in Armenia?
3. Does the current government of Armenia have a sincere desire and will to combat corruption?

The first variable in this category “*Have heard of someone paying bribes to obtain a public service*” is coded 1 if the answer is “yes” and 0 if the answers are ‘no’ & ‘don’t know’. The second variable “*Thinks the Government’s fight against corruption in Armenia is effective*” is coded 1 for the answers ‘very effective’ & ‘somewhat effective’ and 0 for the answers ‘somewhat ineffective’, ‘very ineffective’ & ‘don’t know’. The variable “*Agrees that the Government of Armenia has a*

*sincere desire and will to combat corruption*” is coded as the above variable: 1 for the answers ‘strongly agree’ and ‘somewhat agree’ and 0 for the answers ‘somewhat disagree’, ‘strongly disagree’ and ‘don’t know’.

The final of set of primary variables are variables of “*perceptions of informal constraints*”. Those variables are formed based on the answers to the following questions of the database:

1. How would you react if you were offered to take a bribe? Would you take it or would you not take it?
2. How would you react if you were offered to take a bribe? Would you take it or would you not take it?
3. In your opinion, what can you personally do to reduce corruption in Armenia?

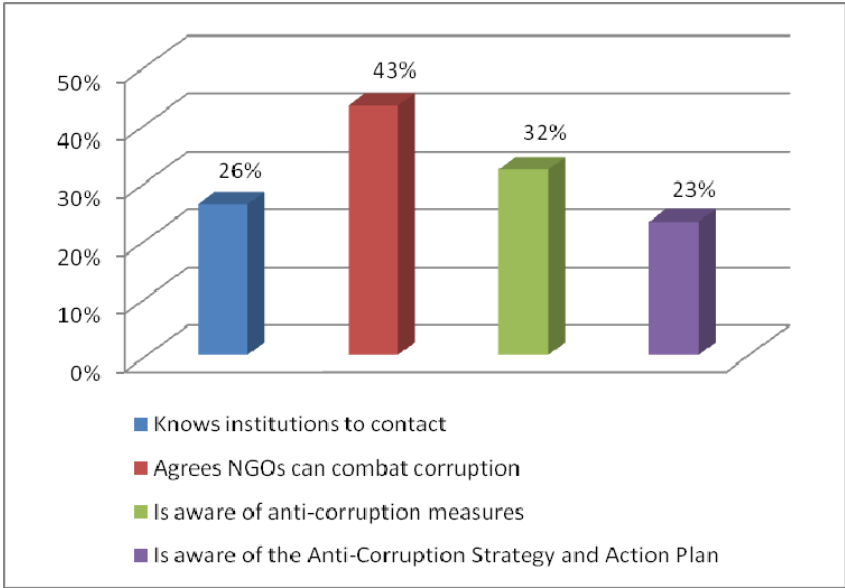
The variable “*Would not take a bribe if offered*” is coded 0 for the answer ‘I would take it’ and 1 for the answer ‘I would not take it’. The variable “*Would not give a bribe if asked*” is coded likewise: 0 for the answer ‘I would give it’ and 1 for the answer ‘I would not give it’. Finally, the variable “*Will personally undertake actions to reduce corruption in Armenia*” is coded in the following way: only the answer ‘there is nothing I can do’ is coded 0, all the other seven answers are coded as 1, which suggests that a person will undertake some kind of activity against corruption.

In addition to those primary independent variables, this analysis includes several control variables identified as potentially significant predictors of corruption. Those are *gender*, *education* and *income*.

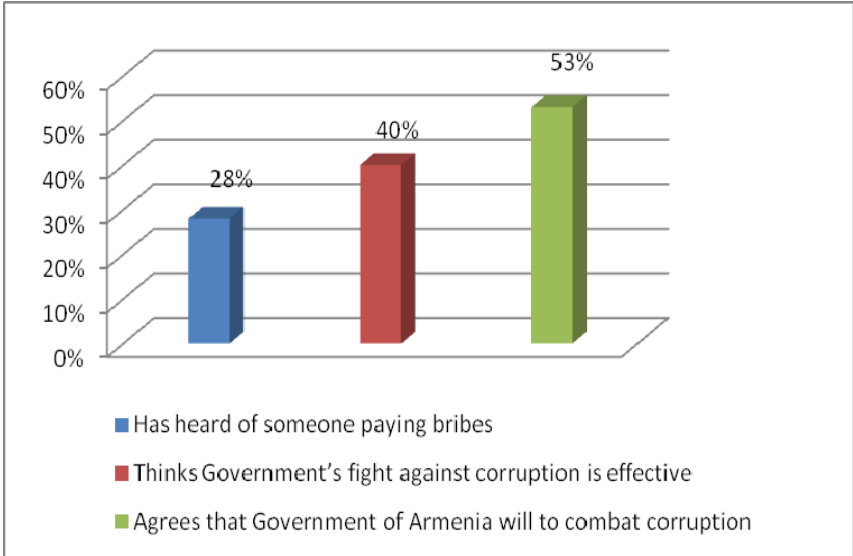
## RESULTS, RECOMMENDATIONS, AND CONCLUSION

Descriptive statistics of the variables are listed in Table 1 and Figures 1, 2 and 3. As we can see 87% of the respondents think that corruption is a serious problem. This is a significantly high number. Unfortunately, but as expected, a quite small percentage of respondents has knowledge and a positive attitudes about the most of the variables representing ‘perceptions of formal rules’ and ‘enforcement mechanisms’, except for the variable “agrees that the Government of Armenia has a sincere desire and will to combat corruption”. Nearly half of the respondents, 53%, strongly or somewhat agree that the Government of Armenia has a sincere desire and will to combat corruption (please see Figure 2). This reveals that public attitudes towards formal rules and enforcement mechanisms that can change corruption extent in Armenia are somehow encouraging. Although people think that corruption currently is a serious problem, they still optimistically believe that the Armenian Government can reduce it.

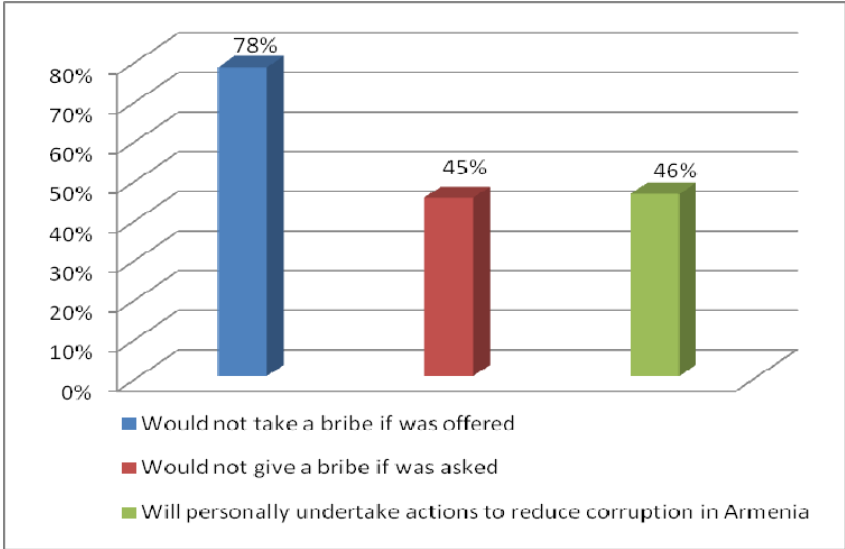
**Figure 1: Perceptions of Formal Rules**



**Figure 2: Perceptions of Enforcement Mechanisms**



**Figure 3: Perceptions of Informal Rules**



Regarding ‘perceptions of informal rules’, interestingly, 78% of the respondents would not take a bribe if they were offered, but at the same time only 45% would not give a bribe if they were asked. These numbers suggest that perhaps giving a bribe is a more accepted norm in the country, than taking it. The former is less punishable than the latter. Perhaps the legal code of Armenia and/or the enforcement departments do not view as offering a bribe and soliciting a bribe equally liable to be punished. But as mentioned earlier in this paper, according to international standards, bribery should cover both offering and soliciting a bribe. These trends can also be observed in Table 1 below.

**Table 1.** Descriptive Statistics (in percents, unless noted otherwise)

<i>Perception of corruption</i>	
Thinks corruption is a serious problem in Armenia	87%
<i>Perception of formal rules</i>	
Knows what institutions to contact to report a corrupt act	26%
Agrees that NGOs are capable of combating corruption in Armenia	43%
Is aware of anti-corruption measures taken by the Government of Armenia	32%
Is aware of the Anti-Corruption Strategy and Action Plan implemented by the Government of Armenia	23%
<i>Perception of enforcement mechanisms</i>	
Have heard of someone paying bribes to obtain a public service in the last 12 months	28%
Thinks the Government’s fight against corruption in Armenia is effective	40%
Agrees that the Government of Armenia has a sincere desire and will to combat corruption	53%
<i>Perception of informal rules</i>	
Would not take a bribe if was offered	78%
Would not give a bribe if was asked	45%
Will personally undertake actions to reduce corruption in Armenia	46%
<i>Socio-demographic characteristics</i>	
Age of the respondent (mean)	47
Sex of the respondent	
Female	66%
Male	34 %
Education	
Less than secondary	12%
Secondary	33%
Technical and incomplete higher	31%
Higher and postgraduate	23%
Household’s monthly income (in drams)	
Less than 30 000	26%
30 001 to 75 000	33%
75 001 to 120 000	23%
120 001 and up	18%

Concerning the socio-demographic variables, it is important to note that 66% of the respondents are females. This fact can potentially have certain effects on the regression results. Although gender trends are significantly changing, in post-Soviet republics “family equals

woman” is still a sacred canon. As a result of women’s ties with the home, in public debates family is often considered equal to a woman, and women's involvement in decision-making at all levels is quite low, this concerning bribe offering or soliciting as well. What we want to stress here, is that women do not deal much about corruption politics, and it is a major question whether female perceptions of corruption can distort public perceptions of corruption, which is a theme for analysis beyond this study.<sup>3</sup>

In regards to the regression analysis, we should note that the results are presented in odds ratios, which means, that a coefficient less than 1.0 represents a negative association and a coefficient higher than 1.0 represents a positive association with the dependent variable (please see Table 2).

There is statistical significance between only three of the independent primary variables and the dependent variable. Those variables are *‘have heard of someone paying bribes to obtain a public service in the last 12 months’*, *‘agrees that the Government of Armenia has a sincere desire and will to combat corruption’*, and *‘would not give a bribe if was asked’*. Two of those variables represent perceptions of enforcement mechanisms and one represents perceptions of formal rules. Very surprisingly, there is no statistical significance between the perceptions of formal rules and perception of corruption in the above regression. However, when we separately look at variables of perception of formal rules, ignoring variables of the other institutional sources, respectively, perceptions of informal constraints and enforcement mechanisms, then the relationship of *‘Agrees that NGOs are capable of combating corruption in Armenia’* and perception of corruption becomes significant (please see Table 3 in Appendix). I acknowledge that this significance might be due to the fact that this very variable could have been equally (perhaps even more fit) considered as a variable representing enforcement mechanisms rather than formal rules.

In any case, it is astonishing to find absence of association between perceptions of formal rules and corruption. This absence should not be viewed as a recommendation to weaken or ignore the power of formal rules in combating corruption. Assumingly, the lack of statistical significance in this case is due to the fact that the answers chosen to represent the concept of formal rules do not match the reality, even in public perceptions. Indeed, an answer to a question such as, for instance, *‘knows what institutions to contact to report a corrupt act’* does not necessarily a representative constituent of formal rules. Further research should focus more on actual existence or quality of the formal rules instead of public attitudes of formal rules. Another

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<sup>3</sup> The term ‘female perceptions of corruption’ in this context should not be overall prescribed to ‘female perceptions of corruption’. This refers to the Armenian milieu, particularly within the context of household surveys.

approach could be selecting questions from the survey which stress the role of the President, courts, the National Assembly, legislation, etc. as variables revealing the nature of formal perceptions.

Among control variables only the influence of education level is statistically significant in relation to perception of corruption. Unpredictably, gender and income, particularly the latter, do not have any statistically significant relationship to perceptions of corruption. The regression results are not much different in the two models; the control variables do not change either the statistical or the substantive strength of the relationships tested.

**Table 2.** Odds ratios of logistic regression of considering corruption a serious problem in Armenia on indicators of perception of formal rules, perception of enforcement mechanisms and perceptions of informal rules

	<b>Model 1</b>	<b>Model 2</b>
Intercept	6.89**	<b>4.21**</b>
<b>Perception of formal rules</b>		
Knows what institutions to contact to report a corrupt act	1.03	0.93
Agrees that NGOs are capable of combating corruption in Armenia	1.32	1.39
Is aware of anti-corruption measures taken by the Government of Armenia	0.95	0.85
Is aware of the Anti-Corruption Strategy and Action Plan implemented by the Government of Armenia	0.90	0.92
<b>Perception of enforcement mechanisms</b>		
Have heard of someone paying bribes to obtain a public service in the last 12 months	1.76*	1.51†
Thinks the Government's fight against corruption in Armenia is effective	0.83	0.82
Agrees that the Government of Armenia has a sincere desire and will to combat corruption	1.61*	1.51*
<b>Perception of informal rules</b>		
Would not take a bribe if was offered	1.18	1.06
Would not give a bribe if was asked	0.45**	0.44**
Will personally undertake actions to reduce corruption in Armenia	0.86	0.83
<b>Socio-demographic characteristics</b>		
Age of the respondent		0.99
Sex of the respondent		
Female (Ref.)		1.00
Male		0.83
Education		
Less than secondary (Ref.)		1.00
Secondary		3.24**
Technical and incomplete higher		2.56**
Higher and postgraduate		4.70**
Household's monthly income (in drams)		
Less than 30 000 (Ref.)		1.00
30 001 to 75 000		0.96
75 001 to 120 000		0.86
120 001 and up		0.59†
N of cases	1241	1176
*-2LL	895.0**	814.8**

Significance level: \*\* -  $p < 0.01$ ; \* -  $p < 0.05$ ; † -  $p < 0.1$ .

To better understand the estimated substantive impact of the variables of interest, I have interpreted the results below:

1. If a person has heard of someone paying bribes to obtain a public service in the last 12 months increases the odds of considering corruption as a serious problem in Armenia by about 77%.
2. The odds that a person considers corruption as a serious problem in Armenia increases by about 60%, if a person agrees that the Government of Armenia has a sincere desire and will to combat corruption.
3. The odds that a person considers corruption as a serious problem in Armenia decreases by 55%, if a person says he/she would not give a bribe if asked.
4. The odds that person with secondary education will think of corruption as a serious problems in Armenia increases by 3 times as compared to that of a person with less than secondary education.
5. The odds that a person with technical and incomplete higher education will think of corruption as a serious problem in Armenia increases by about 2.5 as compared to that of a person with less than secondary education.
6. The odds that a person with higher and postgraduate education will think of corruption as a serious problem in Armenia increases by 5 times as compared to that of a person with less than secondary education.

Thus, if a person has heard of others paying bribes, he/she would consider enforcement mechanisms to be weak in the country, and, thus his/her perception of corruption would be high. This coincides with what we hypothesized earlier. The second statement has a totally different direction as compared to what we hypothesized. I assumed that if a person optimistically agrees that the Government of Armenia has a sincere desire and will to combat corruption (referring to strong enforcement mechanisms), he would optimistically consider corruption not to be as pervasive. This, unfortunately, is not supported by the regression results. The contradiction could be due to several phenomena. For example, public opinion is often distorted; people often hide their feelings of government and are afraid of open and honest statements. And finally, if a person does not give bribes, his perception of corruption is low. Unfortunately, we could not detect same kind of positive pattern for the relationship between perception of corruption and the fact that the person does not take bribes; although percentage-wise more respondents prefer not take bribes than not to give bribes.

Concerning the variable of education, naturally, the more educated the person is, the stronger his/her corruption perception will be, which our regression results support.

Some limitations of the results of this research should be acknowledged. The dependent variable cannot be considered as a very accurate and reliable measure or an indicator of actual corruption in Armenia; it is a perceptual measure and has been defined as such in this paper. In any case, it may not reflect the actual extent of corrupt behavior in the country; corruption may

be more or less pervasive than actually observed based on the survey answers, depending on the bias, trust, mood and some other characteristics of both the interviewers and the individuals interviewed. Our data may be subject to bias and error despite the fact that it was collected by persons detached from this particular study.

Another issue is that the independent variables are classified into too broad categories; while, for example, formal rules or constraints are typically defined very specifically (as earlier analyzed in this paper), here this variable is formed based on public answers to a couple of questions only. Unfortunately, usage of merely the Household Survey as my data source and the shortage of time deprived me of the opportunity to create more specific and narrowly-defined variables within each broad category of the institutional source.

We also recognize that the dependant and independent variables of the study are quite interrelated and the causal direction may be opposite than the hypothesized ones. For example, corruption may be affecting the existence of weak formal rules or enforcement mechanisms, instead of the opposite. Clearly, future studies need to examine the longitudinal nature of these relationships in order to verify causality. Moreover, while a household survey is helpful, ordinary citizens' knowledge on corruption is incomplete and limited. More definitive answers to multiple relevant questions can be predicted through a survey or interviews among experts of the field, as they are likely to have more informed views on the issue. The causes, which may be important from the point of a housewife, for example, may not be relevant from the point of view of a corruption expert, or a businessman. The selection of more specific respondents may foster new insights and can promote more informed anti-corruption strategies.

Despite these limitations, the study makes some important contributions to the corruption literature in Armenia. First, it employs the institutional theory to explain and predict the vexing problem of corruption, and this is a rare approach within the scholarly and policy debates on the issue in Armenia. Secondly, it puts forward a focal policy lesson, that controlling corruption is not fundamentally about designing credible institutional rules that ensure accountability and checks and balances, well-rewarded and transparent bureaucracies, but more importantly ensuring that those rules are well-enforced and administered in practice, and even more notably, impacting the informal rules through educational and advisory activities. Corruption can become institutionalized, if the informal rules and constraints are not well structured and deeply rooted within the society. Not only will the general public, specifically the middle class and the poor benefit from the above-mentioned recommendations, but in the long run, also public officials of regional and national levels.

The research output will help improve impacts on different social groups, particularly the poor, in the country. It can also contribute to more effective design and implementation of anticorruption strategies, focusing not only on strengthening the rule of law, but also trying to impact the cultural and mental framework of the society in concern to corruption. The study is a significant contribution within the domestic corruption policy circles regarding the characteristics and effects of corruption.

The main recommendation of this paper is that anti-corruption efforts in Armenia should include *institutional reforms*, as well as *societal reforms*, such as changes in social attitude towards formal rules and political processes and mobilization of political will for sustained anticorruption interventions. Particularly, a combined range of institutional and societal reforms is required.

The “*Handbook on Fighting Corruption*” (1999) designed by the Center for Democracy and Governance; Bureau for Global Programs, Field Support, and Research offers an inventory of anti-corruption measures, which are part of the above-mentioned institutional and societal reforms. Some of these measures have already been applied in Armenia, yet many still need to be reconsidered. Below are a list of these recommendations, which, based on the results of the quantitative analysis of this very research, could be considered and/or further developed by anti-corruption organizations and agencies in Armenia:

#### Formal Institutional and Enforcement reforms:

- ✓ *Elimination of tariffs, quotas, exchange rate restrictions, price controls, and permit requirements:* This type of policies strip officials of the power to extract bribes. Also, it eliminates bottlenecks and fosters competition.
- ✓ *Competitive procurement:* It removes personal discretion from the selection of government suppliers and contractors by prescribing an open bidding process and laying out clear procedure and criteria for selection.
- ✓ *Competition in public service:* It reduces the extent of corruption by removing the monopoly power of any one government office.
- ✓ *Freedom of information legislation:* This increases accountability and transparency of government activities and operations, therefore reducing attempts to subvert the system or to ask for bribes/gratuities for information that legally should be public.
- ✓ *Financial disclosure:* This type of a law requires transparency of public officials’ finances and, theoretically, should reduce the opportunity to profit through corruption.
- ✓ *Open budget process:* This improves accountability, as the general public is aware of government expenditures and income.
- ✓ *Legislative oversight:* It provides a powerful check on executive authority, enhancing accountability where a dominant executive branch might otherwise operate with impunity. Requiring, for instance, that anti-corruption agencies report to parliament, rather than the executive, facilitates legislative oversight.

- ✓ *Hot lines:* These allow the public to report corrupt acts. Here, the anonymity of the reporting organization, business, or a citizen is important to be guaranteed, as it does not place them at risk.
- ✓ *Sanctions:* Penal codes and formal rules should be in place to prosecute corruption in any form, thus criminalizing corruption. These sanctions should sometimes allow prosecution of not only bribes, but also, for example, possession of wealth and income that cannot be traced to lawful activities.
- ✓ *Judicial reforms: Impartial enforcement of sanctions is significant.* Without enforcement, even the best laws have no impact on reducing corruption.
- ✓ *Performance-based incentives* not only as a salary raise, but also non-monetary non-monetary rewards, such as influential assignments, public recognition and professional awards (pages 8-12).

Societal reforms:

- ✓ *Public relations campaign:* These campaigns teach citizens through different programs about the harms of corruption and ways to fight it. They also highlight citizens' rights to laws and services concerning corruption, as well as procedures to report corrupt acts.
- ✓ *Investigative journalism:* By revealing corrupt acts and corrupt officials, investigative journalism elicits popular resentment in regards to corruption. This, in turn puts pressure on corrupt officials to change.
- ✓ *Workshops:* These tend to increase public awareness and understanding of corruption and can produce practical steps for reducing corruption. They can also become the places where political will for reform is generated.
- ✓ *International pressure:* Often change in social attitudes can be enforced through international organizations, which deal with programs addressing corruption issues. Higher levels of pressure can be also channeled through foreign embassies, UN offices, etc (pages 13-15).

Even if academics and researchers come up with the most seemingly solid anti-corruption factors and activities, unfortunately it is very complicated to implement and enforce them in real life. The problem is pervasive and complex. Wisely, it has been noted that corruption does not disappear as countries develop and modernize, but rather that corruption takes on new forms (Girling 1997). This, however, should not discourage politicians, policy-makers and civil society representatives to do their best in the anti-corruption initiatives, because every iota counts towards improvement, even a tiny one.

As a final recommendation for further research in this area, it will be fruitful to extend this study into a comparative research, because country-specific knowledge cannot be always replicable in tracing the causes of corruption and suggesting remedies. While this type of research explains why within a given society corrupt behavior is widespread, it does not explain why corruption varies across nations. Thus, the recommendations, in this case, are limited to the country they originated. Those recommendations possibly ignore particular structural and institutional context of other cases, as well as the cultural context that different societies possess.

Hence, the comparative insights can have more general and typical results, which may easily be tailor-made to other similar cases.

## BIBLIOGRAPHY

- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91 (5): 1369-1401.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2004. "Institutions as the Fundamental Cause of Long-Run Growth." Manuscript, MIT.
- Alam, M.S. 1995. "A Theory of Limits on Corruption and Some Applications." *Kyklos*, 48: 419-35.
- Andvig, Jens, and Odd-Helge Fjeldstad, Inge Amundsen, Tone Sissener and Tina Søreide. 2001. "*Corruption: A Review of Contemporary Research*". Chr. Michelsen Institute (CMI), *Development Studies and Human Rights*.
- ARD. 2002. *Armenia: Rule of Law/ Anti-Corruption Assessment*. Report submitted to the United States Agency for International Development
- Cábelkova, Inna, and Hanousek, Jan. 2004. "The Power of Negative Thinking: Corruption, Perception, and Willingness to Bribe in Ukraine." *Applied Economics* 36: 383-97.
- Center for Democracy and Governance. 1999. *Handbook on Fighting Corruption*, Technical Publication Series
- Chaithanakij, Surasak. 2007. "Toward a Theory of Corruption in Developing Countries: An Institutional Approach", Prepared for the 32nd Conference of FAEA.
- Cohen, Jeffrey R., Laurie W. Pant & David J. Sharp. 1996. "A Methodological Note on Cross-cultural Accounting Ethics Research." *International Journal of Accounting*, 31(1): 55-66.
- Collander, David. 1984. *Neoclassical Political Economy: The Analysis of Rent seeking DUP Activities*, Cambridge MA: Ballinger.
- Della Porta, Donatella. 2000. *Social Capital, Beliefs in Government and Political Corruption in S.J. Pharr and R.D. Putnam (eds.), Disaffected Democracies. What's Troubling the Trilateral Countries*, Princeton, Princeton University Press.
- Demsetz, Harold. 1967. "Towards a Theory of Property Rights." *American Economic Review* 57 (2): 61-70.
- Gibson, James, and Gregory Caldeira. 1995. "The Legitimacy of Transnational Legal Institutions: Compliance, Support, and the European Court of Justice." *American Journal of Political Science* 39(2):459-89.
- Hofstede, Geert. 1997. *Cultures and organizations: Software of the Mind*. New York, NY: McGraw Hill.
- Huntington, Samuel. 1968. *Political Order in Changing Societies*. New Haven: Yale University Press.

- Husted, Bryan. 1994. "Honor among Thieves: A Transaction-cost Interpretation of Corruption in the Third World." *Business Ethics Quarterly* 4 (1):17-27.
- Husted, Bryan and Instituto Tecnológico y de Estudios. 1999. "Wealth, Culture, and Corruption." *Journal of International Business Studies* 30 (2): 339-60.
- Johnston, Michael. 1989. "Corruption, Inequality, and Change." in Peter M. Ward, (ed.), *Corruption, Development, and Inequality: Soft Touch or Hard Graft*. London and New York: Rutledge.
- Jain, Arvind. 1987. "Agency Problem and the International Debt Crisis." Proceedings of the Fourth Symposium on Money, Banking, and Insurance (Geld, Banken und Versicherungen), Karlsruhe, West Germany, Band I:367-91.
- Jain, Arvind. 1993. "Dictatorships, Democracies, and Debt Crisis." in S. P. Riley, (ed.), *The Politics of Global Debt*, New York: St. Martin's Press.
- Jain, Arvind. 2001. "Corruption: A Review." *Journal of Economic Surveys* 15 (1):71-121.
- Johnson, Simon, Daniel Kaufmann, and Pablo Zoido-Lobaton. 1998. "Regulatory Discretion and the Unofficial Economy." *American Economic Review* 88 (2): 387-392.
- Judge, William. 2004. "Antecedents of National Corruption: An Institutional Perspective." *AIB-SE (USA) 2004 Annual Meeting, Knoxville, TN*
- Klitgaard, Robert. 1988. *Controlling Corruption*. Berkeley: University of California Press.
- Klitgaard, Robert. 1990. *Tropical Gangsters*, New York: Basic Books.
- Klitgaard, Robert. 1991. *Adjusting To Reality: Beyond State versus Market in Economic Development*, San Francisco, California: ICS Press and International Center for Economic Growth.
- Kobonbaev, Maksat. 2006. "Why is Corruption Less Pervasive in the Baltic States than in Central Asia?: Institutional Explanation with Particular Focus on Estonia and Kyrgyzstan." Doctoral Dissertation in Political Science at the University of Missouri-St. Louis (UMSL)
- Krueger, Anne Osborne. 1974. "The Political Economy of the Rent-Seeking Society," *American Economic Review*, 64: 291-303.
- LaPalombara, Joseph. 1994. "Structural and Institutional Aspects of Corruption." *Social Research* 61 (2): 325-50.
- La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer, and Robert Vishny. 1999. "The Quality of Government." *Journal of Law, Economics and Organization* 15 (1): 222-279.
- Leys, Colin. 1970. "What is the Problem about Corruption?" in Arnold J. Heidenheimer, (ed.) *Political Corruption: Readings in Comparative Analysis*, New York: Holt Reinhart, 31- 37
- Leff, Nathaniel. 1964. "Economic Development through Bureaucratic Corruption." *American Behavioral Scientist* 8(2): 8-14.

- Lipset, Seymour. 1960. *Political Man: The Social Bases of Politics*. Garden City, NY: Doubleday.
- Macrae, John. 1982. Underdevelopment and the Economics of Corruption: A Game Theory Approach. *World Development* 10 (8): 677-87.
- North, Douglas. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge University Press
- Nye, Joseph. S. 1967. "Corruption and Political Development: A Cost-Benefit Analysis." *American Political Science Review* 61 (2): 417-427.
- Pharr, Susan. 2000. "Officials' Misconduct and Public Distrust: Japan and the Trilateral Democracies." In *Disaffected Democracies: What's Troubling the Trilateral Democracies?*, (ed.) Susan J. Pharr and Robert D. Putnam. Princeton: Princeton University Press.
- Rose-Ackerman, Susan. 1978. *Corruption: A Study in Political Economy*. London/New York: Academic Press.
- Rose-Ackerman, Susan. 1999. *Corruption and Government: Causes, Consequences and Reform*. Cambridge: Cambridge University Press.
- Rose, Richard, William Mishler, and Christian Haerpfer. 1998. *Democracy and Its Alternatives: Understanding Post-Communist Societies*. Baltimore: The Johns Hopkins University Press.
- Shleifer, Andrei, and Robert Vishny. 1993. "Corruption." *Quarterly Journal of Economics* 108 (3): 599-617.
- Svensson, Jakob. 2005. "Eight Questions about Corruption." *Journal of Economic Perspectives* 19(3): 19-42.
- Teets, Jessica. "The Origins of Corruption in Developing and Transitional Countries: Institutional Decentralization and Social Norms", *Paper presented at the annual meeting of the Western Political Science Association, Marriott Hotel, Portland, Oregon, Mar 11, 2004*
- Treisman, Daniel. 2000. "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics* 76: 399-457.
- Weber, Max. 1921 (1968). *Economy and Society*, 3 volumes. Totowa, New Jersey: Bedminster Press.
- Report: Armenia Losing Fight against Corruption*. 2007, URL: [www.a1plus.am](http://www.a1plus.am), <http://www.washprofile.org/en/node/7064> , last visited on July 20, 2009
- OECD (Organization for Economic Cooperation and Development), ACN (Anti-Corruption Network). 2004. *Review of Legal and Institutional Framework for Fighting Corruption: Armenia: Summary Assessment and Recommendations*, URL: <http://www.anticorruptionnet.org>
- OPM (Oxford Policy Management). *Measuring Corruption*. 2007-01, URL: [www.opml.co.uk](http://www.opml.co.uk)

## APPENDIX

**Table 3.** Odds ratios of logistic regression of considering corruption a serious problem in Armenia on indicators of the perception of formal rules.

	<b>Model 1</b>	<b>Model 2</b>
<i>Intercept</i>	5.74**	4.30**
Knows what institutions to contact to report a corrupt act	1.146	1.02
Agrees that NGOs are capable of combating corruption in Armenia	1.42*	1.37 <sup>†</sup>
Is aware of anti-corruption measures taken by the Government of Armenia	0.97	0.81
Is aware of the Anti-Corruption Strategy and Action Plan implemented by the Government of Armenia	0.95	0.90
<i>Age of the respondent</i>		0.99
<i>Sex of the respondent</i>		
Female (Ref.)		1.00
Male		0.87
<i>Education</i>		
Less than secondary (Ref.)		1.00
Secondary		2.49**
Technical and incomplete higher		2.54**
Higher and postgraduate		4.26**
<i>Income</i>		
Less than 30 000 (Ref.)		1.00
30 001 to 75 000		1.11
75 001 to 120 000		0.93
120 001 and up		0.69
N of cases	1518	1435
-2LL	1170.3	1060.1**

*Significance level: \*\* -  $p < 0.01$ ; \* -  $p < 0.05$ ; <sup>†</sup> -  $p < 0.1$ .*

**Table 4.** Odds ratios of logistic regression of considering corruption a serious problem in Armenia on indicators of the perception of enforcement mechanisms.

	<b>Model 1</b>	<b>Model 2</b>
<i>Intercept</i>	4.83**	4.03**
Have heard of someone paying bribes to obtain a public service in the last 12 months	2.06**	1.69*
Thinks the Government's fight against corruption in Armenia is effective	0.90	0.85
Agrees that the Government of Armenia has a sincere desire and will to combat corruption	1.52*	1.46*
<i>Age of the respondent</i>		0.99†
<i>Sex of the respondent</i>		
Female (Ref.)		1.00
Male		0.87
<i>Education</i>		
Less than secondary (Ref.)		1.00
Secondary		2.36**
Technical and incomplete higher		2.27**
Higher and postgraduate		3.51**
<i>Income</i>		
Less than 30 000 (Ref.)		1.00
30 001 to 75 000		1.08
75 001 to 120 000		0.91
120 001 and up		0.69
N of cases	1518	1437
*-2LL	1149.4**	1053.7**

Significance level: \*\* -  $p < 0.01$ ; \* -  $p < 0.05$ ; † -  $p < 0.1$ .

**Table 5.** Odds ratios of logistic regression of considering corruption a serious problem in Armenia on indicators of the perception of informal rules.

	<b>Model 1</b>	<b>Model 2</b>
<i>Intercept</i>	10.51**	6.62**
Would not take a bribe if was offered	1.21	1.12
Would not give a bribe if was asked	0.39**	0.39**
Will personally undertake actions to reduce corruption in Armenia	0.86	0.79
<i>Age of the respondent</i>		0.99
<i>Sex of the respondent</i>		
Female (Ref.)		1.00
Male		0.81
<i>Education</i>		
Less than secondary (Ref.)		1.00
Secondary		3.17**
Technical and incomplete higher		2.60**
Higher and postgraduate		4.35**
<i>Income</i>		
Less than 30 000 (Ref.)		1.00
30 001 to 75 000		0.94
75 001 to 120 000		0.77
120 001 and up		0.51*
N of cases	1284	1216
*-2LL	941.3**	853.5**

*Significance level: \*\* -  $p < 0.01$ ; \* -  $p < 0.05$ ; † -  $p < 0.1$ .*