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Michailova, Julija and Melnykovska, Inna

Christian-Albrechts University of Kiel, Kiel Institute for the World Economy

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# Gender, corruption and sustainable growth in transition countries

Julija Michailova

Quantitative Economics, CAU  
Neufeldtstrasse 10  
24118 Kiel, Germany  
Telephone: +491708444578

E-mail: [julija\\_michailova@yahoo.com](mailto:julija_michailova@yahoo.com)

Inna Melnykovska

Kiel Institute for the World Economy  
Duesternbrooker Weg 120  
24105 Kiel, Germany  
Telephone: +494318814229

E-mail: [inna.melnykovska@ifw-kiel.de](mailto:inna.melnykovska@ifw-kiel.de)

## Abstract

Numerous studies have found negative connection between corruption level and economic development. At the same time few of them demonstrate correlation between women representation in politics and corruption level. This paper analyzes correlation between gender and corruption for a specific sample of countries, sharing common cultural and historical legacy – transition countries. Relationship between higher number of women in parliament and decreasing level of corruption is supported by data. Relations with other forms of women social activity were found to be insignificant. Contribution of this paper to the research literature on this topic is twofold. First analysis on gender and corruption in transition economies has previously not been done. Second, this study could also be used for the practical policies on fighting corruption by application of gender quotas.

**Keywords:** Gender; Corruption; Growth; Transition Countries

**JEL:** J16, H11; K42; O10

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## Introduction

After the years of recession most transition countries experience economic recovery. Central and Eastern Europe countries (CEECs) recorded growth already in the early 1990s, though the Commonwealth of Independent States (CIS) remained in the doldrums by the late 1999. Since 2000, however, the CIS countries have also started to recover and even had more than 4 percentage points higher annual growth than the CEECs. From 1999 to 2004, 11 CIS countries had an average annual growth of 7.8 percent, while the four Central European Visegrad countries (Poland, the Czech Republic, Slovakia, and Hungary) recorded an average annual growth of 3.6 percent. The three Baltic countries came closer to the first group with 7.1 percent growth, and Romania and Bulgaria closer to the Central Europeans with 5.4 percent (Aslund and Jenish 2006).

However, this economic recovery, in particular in the CIS, is fragile, as it is rather the result of favourable world price trends than sustainable – i.e. institution-based – growth. Indeed, institution building has been recognised as a crucial additional element required for successful reforms and sustainable growth (Acemoglu et al. 2007; for the overview see Paldam and Gundlach 2008). Thus, as transition countries are keen on making their growth sustainable, they need to improve their institutional quality.

Institution building in transition countries is still slow or even retrogressive, and their quality is lower than European average. Only CEECs have succeeded in institution building and demonstrate higher level of good governance, which to a high extent is the merit of their membership in the EU (Schimmelfennig and Sedelmaier 2005, Pop-Eleches 2007). On the contrary the institution building in other post-communist countries lags behind and demonstrates a lot of deficits.

Poor level of legal institutions means poor execution of the rule of law and control of corruption. Corruption is seen to be a major problem in almost all of the transition countries. Within the space of the post-communist countries the problem has reached acute levels that hinder the equal distribution of wealth; undermines public confidence in government and discredits the concept of the free market and rule of law. Therefore, the main challenge either for transition countries themselves or for international organizations that are active in the region is fight against corruption.

Transition countries are also a good example to analyse the evolution of corruption. In the Soviet times, these countries experienced a uniform level of corruption, but diverge on this governance institution in the course of transition. In addition, transition countries are interesting from the point of the gender research. They are characterized by the high number of educated women, high number of female participation in the work-force, however distrust in mental abilities of women, not only by men but by women themselves, alongside low self-respect of women, wrong perception of feminism and ideas of this movement, apathy in political life and low representation of women in parliament. These countries are very much under the influence of the traditional view on the female and male roles, which due to economic reality is not fully realized in (social) life.

The aim of this paper is to test the alternative measure of fighting against corruption by introducing gender quotas and maintaining women participation in political, economic and social dimensions of public life. This measure seems to be far-promising, as:

- (i) there are few studies that demonstrate the negative relationship between women participation in public life and level of corruption;
- (ii) we expect that the psychological differences between genders – women to be more trust-worthy and public-spirited than men – dominate over corruption promoting experiences of the Soviet times and years of transition;

- (iii) gender quotas as the measure to fight corruption are more “regime- neutral”<sup>1</sup> and can be therefore implemented either in the open and democratizing or close authoritarian regimes.

This paper will proceed as follows: Section 1 discusses institution building in transition economies; Section 2 reviews studies on negative effect of corruption on economic and social development; in Section 3 we turn to discussion of existing works aimed at finding the connection between gender and corruption; Section 4 presents the (geographic) region of our interest, and offers the analysis of studies on gender issues and corruption related to transition countries; in Section 5 we briefly outline the variables and the data that were chosen for this project, and Section 6 is aimed at presenting main econometric results of this paper; Section 7 presents statistical analysis aimed at determination of connection between bribe taking activity and gender, and finally conclusions, and thoughts on the implementation of the current paper are presented.

## 1 Institution Building in Transition Economies

The post-soviet countries experienced quite heterogeneous economic and political developments throughout the last fifteen years. At the beginning of transition, the post-soviet countries were confronted with the triple task of building a nation state, implementing democracy and moving towards a market economy. The economic reform process based on the Washington Consensus (Williamson 1990), was expected to fulfil the latter task quickly. The transition results, however, were unsatisfying. The reforms implemented during transition decentralized governments.<sup>2</sup> Governments lost their legitimacy already before transition and became even much weaker. Especially in CIS countries, all-encompassing states dismantled and decentralized by these reforms were not able to enforce implementation of other reforms. At the same time, the policy recommendations were foreign and alien to national central and local elites. Elites were only interested in implementation of those reforms, which provided personal benefits. As a result, reforms were implemented only partially. In the early 1990-s, institutional reforms were present in the reform packages recommended to CIS countries. However, they were not at the forefront of the reform programmes and were rather seen as a by-product of other high priority policies. Such high priority policies included achievement of macroeconomic stabilization, trade liberalization and enterprise restructuring (Hare 2001). Even in cases, where the necessity of institutions was recognized and acknowledged, institution building was often flawed because of inappropriate implementation.

At that time, economics and political sciences often under-rated the role and importance of the institutional reforms, taking for granted that as soon as markets were open and market economy was implemented, institutions would be built automatically. Additionally, scientists and politicians lacked sufficient measurement tools that would incorporate a comprehensive understanding of institutions and allow them to support practical implementation. Therefore, it is not surprising that neglecting institution building turned out to be among the crucial points of criticism on the Washington Consensus.

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<sup>1</sup> By “regime-neutral” we mean the measures against corruption that are not directly based on democratic ideology. As “regime-non-neutral” measures against corruption we mean promotion of free media, import of bureaucratic practices through training programmes etc.

<sup>2</sup> "After the collapse of the Soviet Union centralised and direct interference from Moscow disappeared. Additionally, the reform agenda of the Washington Consensus advocated competitive exchange rates to provide an incentive for export growth, import liberalization, the generation of adequate domestic savings to finance investment, and cutting back the bloated role of government to allow it to concentrate on the provision of core public services and a framework for economic activity (Williamson 2003). Thus, during the first years of transition regional elites were conferred to sufficient autonomy, for example in fiscal inter-governmental relation, to take responsibility for solving their own problems (Norris 2000). It was an attempt to shift expenditure responsibilities on capital and social outlays to regional and local authorities. However, as the assignment of revenues and clear tax sharing system were absent, such decentralization resulted in non-transparent fiscal management and in the accumulation of payment arrears by local governments. The first post soviet Constitutions along with the following supplementary laws and decrees defined divisions of power between different levels of government unclear and reinforced the incentives for local governments to either hide locally mobilized revenues, or to simply reduce their efforts to mobilize revenues at the regional level (Lavrov, Litwack, and Sutherland 2000)."

The disappointing results of transformation in these countries gave rise to a great number of studies on causality and reasons for mistakes in the design of reform arrangements (Hellmann 1998, Rodrik 1999, 2006, Unmüsig and Walther 1999, Stallings and Peres 2000, Schweickert und Thiele 2004). In a backline, institutional reforms have been recognised as a crucial additional element required for successful reforms and sustainable growth. In the mid-1990s, on the demand of the Post-Washington Consensus that recognized the importance of institution building (Rodrik 2003; Schweickert and Thiele 2004) and the growing need of financial lending organisations, governments and investors, several organisations established governance indicators to judge the ongoing transition process.

Although institutional quality begins to matter, institution building in transition countries is still slow or even retrogressive. The quality of institutions is lower than European average. Figure 1 shows the quality of institutions measured as aggregated value of the World Bank Governance Indicators. Only CEECs have succeeded in institution building and demonstrate a higher level of good governance. Their success is often attributed to their membership in the EU (Schimmelfennig and Sedelmaier 2005, Pop-Eleches 2007). Accepting ten CEECs as new members, the EU has driven the institutional convergence of these countries towards common European values by fostering institution building by the means of the Copenhagen Criteria, financial and technical assistance in most CEECs (Gawrich and Schweickert 2004, Raik 2005, Roland 2006). By contrary, the institution building in other post-communist countries lags behind and demonstrates a lot of deficits.

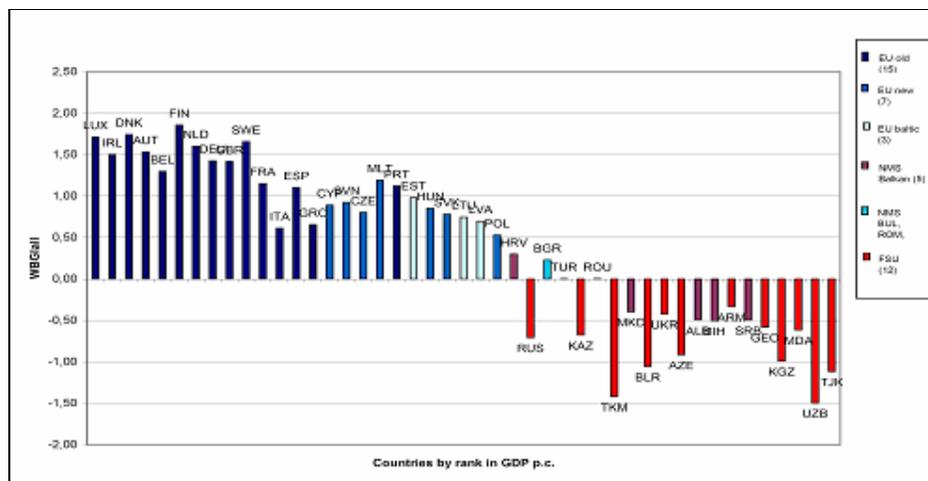


Figure 1: Institutional quality in EU and CIS, 2007 (Source: WB Governance Indicators, 2008).

The disaggregated picture of the World Bank Governance Indicators demonstrates the poor quality of legal institutions, i.e. rule of law and control of corruption (Figure 2).<sup>3</sup> The indicator on legal institutions draws a uniform negative picture through out the region. Taking into account fast transition from socialism to democracy with the following change of formal rules and laws, but lagged implementation of these new rules, such difference in institutional branches seems to be quite plausible. According to the studies of soviet and post-soviet societies, underperformance of indicators on rule of law and control of corruption can be explained by the still existing informal rules and norms, originally coming from “blat”-practices of centrally planned economies. “Blat”-practices that enable all subjects of that command economy to act in the situation of shortages still provides the basis for corruption in the time of transition (Ledeneva 1998, 2003). The influence of informal rules impedes the implementation of newly established political and economic institutions. Therefore, the level of corruption is the decisive indicator of institutional quality: the higher corruption, the lower is overall institutional quality in a particular country.

<sup>3</sup> Institution measured by WBGI can be analysed along three dimensions: political, economic and legal.



consequences for the poor. A strong connection has been demonstrated between corruption and increasing levels of poverty and income inequality (World Bank, 2000).

Corruption deteriorates investment flows, decreases economic growth rates (Mo, 2001), and brings about dishonest competition, it has negative effect on productivity of the economy and rates of technological progress in countries (Del Mar Salinas-Jimenez et al., 2008). From the abovementioned facts one can conclude that the quality of governance is one of the vital factors for economic growth, and corruption is an offspring of bad governance.

### ***2.1 Corruption and its Costs in Transition Economies***

Privatization was one of the main composing parts of the transition process. Privatization has increased political corruption in the former Soviet Union and the former communist countries of Central and Eastern Europe (Kaufman and Siegelbaum, 1996).

Bribes can represent substantial costs for firms. In 1996-1999 across the countries of CIS, average payments for administrative corruption are estimated by firms to be 3.7 percent of their annual revenues, the share falls to 2.2 percent of revenues in Central and Eastern Europe (CEE) (World Bank, 2002). World Bank (2002) also reports that administrative corruption constitutes approximately 17 percent of profits across the transition economies, with 22 percent of average reported profit margin for CIS countries, and 13 percent for CEE.

Kroska and Robeck (2007) in their study on assessment of institutional quality in East and West Germany, and four former communist countries in central Europe – the Czech Republic, Hungary, Poland and the Slovak Republic found that unofficial payments of firms to get government contracts in central Europe exceed 5 percent of the contract value, and are equal to 2.56 percent of sales of the firms paying bribes. The most common unofficial payments mentioned in the article are in connection with inspections, tax administration, customs and the judiciary, as well as regarding public services and business licenses, the highest extent of unofficial payments is in extent to public contracts.

WB (2006) presents results of the survey in transition economies on the issue of how fierce firms perceive the negative effect of corruption on their operation and growth. WB (2006) presents that average percentage of firms that viewed corruption as a problem for the operation and growth for their business in 2002 and 2005 by country: less than 25% of firms were concerned with corruption in Belarus, Uzbekistan, Estonia; around 50% of the firms in Azerbaijan, Czech Republic, Moldova and Macedonia. The highest number of firms seeing corruption as an obstacle for their development (more than 50%) was in Kyrgyzstan and Albania.

Budak and Coel (2004, 2006) results show a negative correlation between the level of country's prosperity, given by the per-capita GDP, and the level of corruption. Authors hypothesize that this might be connected to the fact that in wealthier nations both bribe givers and takers might have lower discount rates to engage in illegal activities.

Due to its disastrous economical and social consequences fighting corruption has become the main question on agenda of countries in transition. Steves and Rousso (2003) paper analyses the anti-corruption activities of 24 of the 27 transition countries in the period 1999-2002. Using the results of a large survey of firms across the region, the paper shows that countries with low levels of administrative corruption were more likely to adopt intensive anti-corruption programmes than countries with high levels of administrative corruption, independent of the level of state capture. Authors find that, to the exception of two countries, all other countries have implemented new anti-corruption legislation which addresses the issue of corruption. However those countries where EU accession is not a near-term prospect, and political power is both more concentrated and less accountable, the process of introducing anticorruption measures has been largely 'top down,' based primarily on presidential decree, and the implementation of the supporting legislation has been delayed by legislative wrangling (Steve and Rousso, 2003).

Positive effect of the countries' accession to EU on fighting corruption have also found Budak and Coel (2004, 2006), who found that lower levels of corruption are observed in the countries that have more success in the process of accession to the EU, as in the process of accession, corruption control has been an important criterion for selection.

### 3 Gender and Corruption: Previous Research Findings

The relationship between corruption and gender is still undiscovered issue, as there are only a few studies analysing this issue. Furthermore, the quality of this relationship is not clear. Some studies found that larger representations of women in government reduced corruption while other studies provide the contrary findings.

Dollar et al. (2001) demonstrate the existing correlation between women participation in politics and corruption level. They based their study on past behavioural findings of numerous experiments and surveys (Eagly & Crowley 1986; Eckel & Grossman 1998; Glover et al. 1997) and public-spirited attitudes (Goertzel 1983; Ones & Viswesvaran 1998) that women are more inclined to demonstrate altruistic and moral behaviours than men are; and that men are more individually oriented than women, and are more likely to "sacrifice the common good for personal (material) gain". Hence, Dollar et al. (2001) evaluate quantitatively the idea that greater representation of women in parliament leads to a lower level of corruption. They take the country-level data sample for more than 100 countries and regress corruption measured by the International Country Risk Guide's corruption index on number of women in parliaments.<sup>4</sup> Dollar et al. (2001) found negative and significant relationship between the proportion of women in country's legislature and the level of corruption.

Similarly, Swamy et al. (2001) investigate the relationship between increased representation of women in commerce and politics, and decrease in corruption. They present evidence that countries with greater representation of women in government or/and in the market work have lower level of corruption. They conclude that this evidence supports of the idea that policies aimed at the increase of the women's participation in public life "at least in the short or medium term ... will reduce level of corruption". They measure corruption by three indices: "Graft index" constructed by Kaufmann et al. (1999), Transparency International's (TI) "Corruption Perception Index" and International Country Risk Guide (ICRG) corruption index. The sample size varies from 94 countries, covered by Graft index, to a 68 countries for the TI's index. For their regression analysis such measures of women's participation in politics and commerce are used: a) proportion of legislators in the national parliament who are female, b) proportion of ministers and high-level government bureaucrats who are women, and c) women's share in the labor force, as a proxy of women's representation in lower levels of government bureaucracy as well as in private sector. From these three measures, authors also compose an overall index of women's participation, as "three women's influence variables ... can be interpreted as being a partial measure of the larger concept of women's participation in public life".

Although both studies provide the empirical evidence in the support of these hypotheses, their results are challenged by ideological (i.e. democracy-concentrated) and cultural approaches.

From the ideological point of view, Sung (2003) criticizes the models of Dollar et al. (2001) and Swamy et al. (2001) that treat female participation in politics as an exogenous factor. He also doubts whether the rely on individual-level findings of female honesty can be used to propose hypotheses about groups (e.g., female citizens are less tolerant of corruption, therefore larger

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<sup>4</sup> For testing of robustness of results two other indexes are used: German Exporter Corruption Index (GCI), and the World Competitiveness Report's Corruption Index (WCRCI). Their measure of female involvement (PARL) is constructed from the data of the survey "Women in Parliaments: 1945-1995" as an average of proportions of seats in upper and lower Houses of parliament for each country. The regression modelling of country-level panel data included controls for population, civil liberties, population, average schooling, trade openness, ethnic fractionalization, and colonial history, and yielded robust backing to the formulated hypothesis.

representations of women in government prevent corruption) or whether aggregate data are appropriate to make inferences about the nature of individuals (i.e., gender differentials from cross-national analyses were used to demonstrate that male government officials are more corruption-prone). Alternatively, Sung provides a fairer system explanation. He argues that the observed association between gender and corruption is partially spurious and mainly caused by its context, liberal democracy — a political system that promotes gender equality and better governance. The empirical data of women participation in politics (the proportion of women among sub-ministerial officials and parliamentarians), level of liberal democracy (operationalized by indexes from the Freedom House and the Fraser Institute) and corruption indicator (produced by Transparency International) favour his “fairer system” thesis.

The recent work of Alatas et al. (2008) demonstrates that gender differences concerning predisposition to corruption should not be considered as a universal tenet and are more culture-specific. Gender differences in attitude to corruption may be the result of both biological and social differences, i.e., differences in social roles of men and women. An individual’s social role and presence in the public domain may play an important role in that individual’s exposure to corruption. Hence, if women and men differ in their social roles, one may also expect them to differ in their attitudes towards corruption. Higher levels of exposure to corruption in daily life may promote a tolerance and acceptance of corruption that is reflected in norms of behaviour. In addition, women may be more victimized by (and, hence, less tolerant of) corruption in countries where their presence in the public domain is lower.

Atlas et al. investigate gender differences in behaviour when confronted with a common bribery problem. Their study departs from the previous literature on gender and corruption by using economic experiments. Based on data collected in Australia (Melbourne), India (Delhi), Indonesia (Jakarta) and Singapore, they show that while women in Australia are less tolerant of corruption than men in Australia, there are no significant gender differences in the propensities to engage in and punish corrupt behaviour in India, Indonesia and Singapore. Hence, their findings suggest that there are larger variations in women’s behaviour towards corruption than in men’s across the countries.

The critics, coming from ideological and cultural approaches, make the importance of regime and cultural features evident. The incidence of corruption varies among different societies, ranging from rate to widespread to systemic (Gray and Kaufman 1998). Thus, for the analysis of the (linear) relation between gender and corruption a specific sample of countries is chosen, that share common cultural and historical legacy – transition countries; rather than analysing large sample that ignores cultural and ideological background.

The following section demonstrates the peculiarities of corruption and political regime as well as cultural characteristics of gender differences in transition countries.

## 4 Specifics of Transition Countries

### 4.1 *Corruption and Political Regime*

The transition from socialism leads to a great variety of political regimes. CEECs build democratic regimes. On the contrary, the transition in the CIS resulted in a great diversity of non-democratic regimes floating in the “grey zone” between democracy and authoritarianism. The labels for the new regimes – defected democracy, imitated democracy or soft authoritarianism – reflected the idea of a continual transition, although whether this is a movement in the direction of democracy was disputable.<sup>5</sup> Despite different degree of democracy, all transition countries meet the challenge of corruption.

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<sup>5</sup> Larry Diamond, Thinking about Hybrid Regime. In: Journal of Democracy, 13 (2002) 2, pp. 21-34; Steven Levitsky/Lucan Way, The Rise of Competitive Authoritarianism. In: Journal of Democracy, 13 (2002) 2, pp. 51-65; Michael

Corruption has historical roots in transition countries. Severe governance and corruption problems were endemic in most areas of the far-flung Russian empire even before the Bolshevik revolution (Wolf and Gürgen 2000). According to the studies of Soviet and post-Soviet societies, underperformance of indicators on rule of law and control of corruption can be explained by the still existing informal rules and norms, originally coming from “blat” -practices (acquaintances and connections) of centrally planned economies. Blat was the name for “economy of favours” (Ledeneva 1998), where friends and acquaintances were tied together in an intricate weave of favours and counter-favours in order to facilitate access to commodities or services in short supply. In other words, in conditions of shortages and a state system of privileges “blat” provided access to public resources through personal channels and served the needs of personal consumption. Despite it was provided at the public expense, “blat” was seen in the soviet society as a positive phenomenon. “Blat”-practices that enable all subjects of that command economy to act in the situation of shortages still provides the basis for corruption in the time of transition (Ledeneva 1998, 2003).

Furthermore, in the course of post-communist transition, the fusion of the state and the economy that characterized the communist system has been replaced in most of the countries by a new order, but one in which the separation of private and public interests has not been adequately defined. The undefined separation of private and public together with informal networks inherited from the Soviet times, provide the fruitful ground for corruption that soon has reached heights. In addition, privatization that was one of the main composing parts of the transition process has increased political corruption in the CIS and CEECs (Kaufman and Siegelbaum, 1996).

Although corruption is endemic and historical phenomenon in transition countries, some of them were successful in lowering corruption level due to influence of external factors, as liberalization and membership in international organizations requesting good governance from the accession candidates E.g. CEECs has improved their level of corruption in the course of EU accession. In order to join the EU, all the candidate countries need to fulfil the economic and political conditions known as the “Copenhagen criteria,” according to which a prospective member must: “be a stable democracy, respecting human rights, the rule of law, and the protection of minorities; have a functioning market economy; adopt the common rules, standards and policies that make up the body of EU law” (Gawrich and Schweickert 2004). Thus, the fight against corruption has become a key element of the policy agendas of governments and international development agencies in many East-Central European countries. The other transition countries were less liberalized, do not profit from EU accession and still suffer from corruption.

## **4.2 Gender differences**

Scientists in the field of social and political sciences quite often mark low level of political activity of women in the various societies, connected with existence of the traditional woman's roles adopted by women in the course of early socialisation, which are a serious obstacle on their way to public activities and involvement in decision-making process at the state level (Andreenkova, 2000). We follow these ideas and present here historical retrospective of the conditions that model individual social roles of women and have impact on their presence in the public domain of the 27 transition economies chosen for our analysis.

### *Communist-Era Characteristics of Women's Situation.*

The October Revolution of 1917 brought about significant changes into women's lives, who gained access to many professions and education. In USSR, mass involvement of women into public production began in 1930ties (Bondarenko, 1997). In Soviet Era 90% of women were employed,

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McFaul, The fourth wave of Democracy and Dictatorship: Non-Cooperative Transition in the Post-Communist World. In: World Politics, 54, (2002) 2, pp. 212-224.

and made up 52 % of the national labour force (Goscillo, 1996, as cited in Chittenden, 2000). In mid 80ties in the industrial society of USSR, women participation was the highest, and 92% of the capable of working women have studied or worked (Bondarenko, 1997).

However, manifested equality did not brought to the real equality, and moreover during this period women gained double load “wok-home”, which men did not have (1997), and were only weakly integrated in the Soviet family (Ashwin et al., 2004). Ashwin et al. (2004) claims, that although women were drawn into the workforce in large numbers during industrialization, however, the idea of domestic work as inalienably female was never challenged by the ruling party. Due to involvement of women into workforce a problem of holding both positions “household keeper-(soviet) worker” occurred, as men’s roles haven’t changed so much as those of women. Men haven’t got involved as strong into household activities, as women have into work. As main reason for this situation Ashwin et al. (2004) names the fact, that essentialist views of sexual difference were taken for granted not only in the ruling party, but also within wider society. Despite their equal or higher educational attainment relative to men, women’s careers typically ended in the lower or middle tiers of the professional pyramid (Remennick, 2007).

#### *Post-Communist/ Post Soviet Era Characteristics*

In the post-soviet era active involvement of women in social, political and economic structures was hindered by return of the patriarchal relations in a society, which, dependent on the cultural and historic past, are more or less dominant (e.g. Tajikistan, Azerbaijan vs. Russia, Ukraine). As Bondarenko (1997) writes, revival of old patriarchal views and growth of nostalgia about traditional woman's roles were promoted by economic crisis and wreck of former system. These views were largely shared by women themselves, who got tired of “emancipation” of the former period and from double workload. Remennick (2007) posits that exhausted by their multiple roles and burdens, many women valorized traditional femininity, represented in their eyes by slim and sexy, stay-at-home suburban women from American and French movies.

Similar processes have taken place in most of the post-communist countries. Social transformations of femininity ideals brought back idealization of femininity and its traditional characteristics of possessing “gentleness, sensitivity, maternal instincts and the capacity to love” (Goscillo, 1996, as cited in Chittenden, 2000). Younger generations of Russian women no longer strived for independence and interesting jobs; instead they dreamed of successful and rich husbands (Remennick, 2007). In the „Oriental“ post-soviet republics the traditional view of a secondary role of women in society, has found its way to reappear with new intensity.

Situations in the households haven’t changed however due to economic reasons. Although from the ideological point of view there is no need anymore for the family with two bread winners, from the economic point of view it is necessary as ever before (Ashwin 2006). Nowadays a family model with man-breadwinner and woman-housewife is virtually a fantasy. If a stay-at-home wife could be a symbol of status for the rich men, men with average income do not consider such women as potentially attractive partners (Ashwin, 2006). Many women have even turned to be the only bread winner of the family. At the same time even those men who were unemployed or had part-time jobs have not joined house keeping on the more active basis, and as before they provide little help to their wives who dedicate, for example in Russia, 13-15 hours per day to work and household activities (Morvant, 1995 as cited in Bondarenko, 1997). However as Ashwin (2006) writes, women also hold to the soviet gender roles and thus they might consciously, or not, keep men apart from participation in the household duties.

#### *Women’s Participation in Public Domain*

With the collapse of communist system the traditional divisions between male and female occupations were reinstated, with women pouring back into services, clerking, sales, and the beauty industry, while leaving business, technology and finances to men (Remennick 2007). In general women occupy least prestigious and least paid professions (Bondarenko 1997). Privatization had

negative consequences for women, as entrepreneurship was meant in the first place for men (Bondarenko 1997). According to the state statistics, in 1994 among co-owners of the commercial enterprises (about 900 thousand) there were 39% women, among owners of small co-operatives - 23%, among private entrepreneurs with hired workers – 17% to 19%, farmers - 20%, individual entrepreneurs – one third (Andreenkova, 2000). These data reveal the fact that in entrepreneurship quantity of women is essentially below quantity of men.

Chances of participation in politics for women are hindered by different factors, and perhaps the most important of them is high level of corruption. This leads to under-representation (or poor representation) of interests of more than half of the population of transition economies in legislative and executive authorities. Results of the two first democratic elections in the Russian and Ukrainian parliaments (1993 and 1995 in Russia both 1994 and 1998 in Ukraine) have shown that women are presented both parliaments lesser, than men. In Russia (1995) only 10 %, and in Ukraine (1998) 7 % from 450 members of the lower chamber made women. The same situation has developed not only in central, but also in local elected authorities (Andreenkova, 2000). On the basis of information provided by National Parliaments by October 2008 (IPU, 2008) average number of women elected to the lower or single House in all 27 transition states was 16.9%<sup>6</sup>, ranging from the highest of 31.82% in Belarus to the lowest in Georgia (6%). The 10 states that are the members of European Union have on average 18.2%<sup>7</sup> women in Parliament.

Deputy of the Bundestag chairman of German-Central-Asian parliamentary group H. Vegener, claims that in Tajikistan women have limited possibilities of participation in politics, including parliamentary elections (Nigora Buhari-zade, 2005). In her opinion, the most serious obstacle for women's participation in politics is the existing in East opinion about a secondary role of women in society, and also corruption of authorities in Tajikistan. The member of political council of Social-democratic party of Tajikistan M. Mamadshoev blames widespread corruption, which influences distribution of places in government, to have a baneful influence on representation of women in authorities (Nigora Buhari-zade, 2005).

Employment and the government today still favours male workers even though they might be less qualified or reliable (Goscillo, 1996, as cited in Chittenden, 2000). Due to this favouritism, women are more likely to be laid off (Goscillo, 1996, as cited in Chittenden, 2000). This results in the fact that, for example, in 2007 in Russian Federation 63.3% (FSSS, 2007) of all unemployed was women. In Russia and Ukraine women occupy lower position in parties and rarer than men, take managing positions (51% and 74%, 60% and 71%) (Andreenkova, 2000). Women-political candidates are less trusted by economic and political elite, it is considered that women possess worse skills for achieving of business agreements (Andreenkova, 2000). Women, who are being perceived as more moralistic than men are less trusted by representatives of "grey" business, and receive less support and resources for carrying out of successful election campaign (Andreenkova, 2000).

However, not all women remained politically passive. Unlike in the Soviet times, when the political participation of women had no feministic direction, transition results in the birth of feministic movements in the FSU. In the late 1980s and early 1990s, several very promising federated women's organizations emerged, uniting thousands of women into a new and vocal public that worked through the independence movement to demand path-breaking changes in state policies concerning families. During the 1990s, hundreds of new women's organizations were established, many of which benefited from extensive foreign funding and training (Hrycak 2005).

#### *Attitude towards Corruption of Women in Post-Communist Countries*

Corruption is widely disseminated in post-soviet area, thus women in this area might face corruption quite often and could tolerate it better, and even have no negative attitude to it, compared

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<sup>6</sup> Calculations by authors based on IPU (2008).

<sup>7</sup> Calculations by authors based on IPU (2008).

to women from “western” nations. For example article “The tolerance to corruption<sup>8</sup> in Kazakhstan becomes social norm” by the company Ksilon Astana CG (2008) reveals that, more than half, namely 54,3% surveyed Kazakhs have quite tolerant attitude towards corruption. Although men are more tolerant to corruption, than women, difference doesn’t seem very large. Amount of people being tolerant to corruption (i.e. those who consider that without it “nothing can be achieved” and that “with bribes it is easier to do business”) is 57,5% of men and 51,7% of women in the sample. On the contrary, findings from the examination of business people in Georgia reported that female business owners and managers were less likely to give bribes than their male counterparts (Swamy 2001).

In the interview to the Radio Svoboda (2002) G. Sillaste, professor of sociology said that she thinks that in Russia women in general liberally concern the corruption phenomenon. Until it doesn’t concern them personally, women regard it as a very distant from her fact. In the same interview Russian feminist M. Arbatova (Radio Svoboda, 2002) notices that often, while speaking about corruption we forget that it exists not only on the level of authorities, but also in schools, kindergartens, hospitals. These are the institutions where most of the jobs are occupied by women. Arbatova (Radio Svoboda, 2002) says that we try to convince ourselves that presence of women in “big politics” and economy is a panacea. However for the post-communist and post-soviet countries this might be an incorrect statement. This is supported by Remennick (2007), who writes that many women were also better at navigating soviet bureaucracy and managing their families’ contacts with welfare, medical and other institutions, which at times were extremely corrupted. We think that being quite often in contact with everyday-corruption might have resulted in the adaptation to the existence of it.

Based on the abovementioned analysis we state that both men and women have equally often exposed to corruption in our sample although through different sources: men are more “familiar” with corruption in business and higher echelon of authorities, whereas women - in lower levels of bureaucracy, institutions of education, medical services etc. However we expect that the effect of psychological differences between men and women in their attitudes towards corruption dominates over liberal views of women on corruption which has been fostered in the Soviet Union as well in the era of transition.

## 5 Data and Variables for the Regression Analysis

For the analysis of the relationship between gender and corruption a specific sample of countries sharing common cultural and historical legacy was chosen – transition countries. Thus 28 countries form the sample of this analysis (See Appendix A). The data for this paper was collected from the wide range of sources, which can be found in Appendix C, together with the detailed description of the variables. Summary statistics of the sample can be found in the Appendix B.

The main corruption measure in this paper is the corruption index created by the World Bank ( $CORRUPT_{WB}$ ), which according to Kaufmann et al. (2008) is the most credible currently available corruption measure.  $CORRUPT_{WB}$  measures the exercise of public power for private gain, including both petty and grand corruption and state capture (Kaufman et al., 2008). The aggregate estimates are based on the 340 individual variables, which are taken from 35 different sources, produced by 32 different organizations. However in order the results more comparable to the previous works, the analysis was repeated with the Transparency International corruption index CPI ( $CORRUPT_{CPI}$ ), which is based on the perceptions of the degree of corruption as seen by business people and country analysts.

Based on the fact that the corruption index measures not only political corruption, but a general level of corruption, social and political activity of women is measured by four variables: the

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<sup>8</sup> Tolerance to corruption is defined as readiness to resort to corruption, as to “effective remedy” of achievement of own purposes. It was measured by a survey in which people had to answer a question, what did they think of that Kazakh citizens sometimes should give bribes for the decision of their problems.

proportion of parliamentary seats held by women in the upper and lower houses of parliament (WPARL), women's share of legislators and managers (WMANAG), percentage of women in the adult labour force (WLABOR), and gender empowerment index, measuring equality of opportunities for women and men, which among other factors also takes into account all three abovementioned proportions (GEM). This index combines inequalities in the areas of political participation and decision making, economic participation and decision making, and power over economic resources. This should provide deeper insight into the relationship between corruption and gender.

As Dollar et al. (2001) suggest GDP per capita value ( $\ln(\text{GDP})$ , and  $\ln(\text{GDP})$  squared) is included as control variable in regression, as both level of corruption and political opportunities available to women are affected by the overall level of social and economic development. Greater political and civil freedom might result in higher women participation and decreased corruption, thus Freedom House Civil liberties index is included (CIVIL), which accounts for freedom of expression, assembly, association, education, and religion, equality of opportunity, economic freedom and rule of law. An alternative measure of liberal democracy is based on suggestion of Sung (2003) and consists of indices that estimate freedom of press (PRESS) and rule of the law (LAW). Freedom of press index by Reporters without Borders considers the number of journalists murdered, expelled or harassed, and the existence of a state monopoly on TV and radio, as well as the existence of censorship and self-censorship in the media, and the overall independence of media as well as the difficulties that foreign reporters may face. Rule of Law index measures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence (Kaufman et al., 2008).

The proposition of the existence of the negative relationship between more active women participation in the social and political life and corruption was estimated with the help of multivariate regression. Multivariate regressions were run separately for each measure of women activity, and as well as a combination of them. Since the sample size was initially very small, plus a problem of missing values arose, findings of the current analysis should be considered very critically, and no firm conclusions can be drawn.

## 6 Empirical Results

In the spirit of Dollar et al (1999) basic specification of this paper is the following:

$$CORRUPT_{WB} = \beta_1 + \beta_2 WACTIV + \beta_3 \ln(\text{GDP}/\text{capita}) + \beta_4 [\ln(\text{GDP}/\text{capita})]^2 + \beta_5 CIVIL + \varepsilon \quad (1)$$

Here WACTIV stands for 4 measurements of women participation in economic and social life, namely: percentage of women in parliament (WPARL), in managerial and legislative positions (WMANAG), in labor force (WLABOR), and finally a common index calculated by UNDP gender empowerment index (GEM).

In order to account for the proposition of Sung (2003), who said that that if we take different measure of liberal democracy, connection between women participation measures and corruption index becomes insignificant, a regression of second specification is run, where freedom of press (PRESS) and rule of law (LAW) are included instead of the civil liberties index (CIVIL):

$$CORRUPT_{WB} = \beta_1 + \beta_2 WACTIV + \beta_3 \ln(\text{GDP}/\text{capita}) + \beta_4 [\ln(\text{GDP}/\text{capita})]^2 + \beta_5 LAW + \beta_6 PRESS + \varepsilon \quad (2)$$

Finally in order to make my results comparable to the previous works I run two more additional regressions of the above-mentioned structure where as a measure of corruption CPI index of the Transparency International is used:

$$CORRUPT_{CPI} = \beta_1 + \beta_2 WACTIV + \beta_3 \ln(\text{GDP}/\text{capita}) + \beta_4 [\ln(\text{GDP}/\text{capita})]^2 + \beta_5 CIVIL + \varepsilon \quad (3)$$

$$CORRUPT_{CPI} = \beta_1 + \beta_2 WACTIV + \beta_3 \ln(GDP/capita) + \beta_4 [\ln(GDP/capita)]^2 + \beta_5 LAW + \beta_6 PRESS + \varepsilon \quad (4)$$

Table 1 shows the results from the regression specification one, Table 2 – of specification two and so on. In all regressions the reported standard errors are corrected for heteroskedasticity.

We start by analyzing the coefficient on the WPARL (-0.30) in Table 1, which is negative and significant at the 5% level. It means that a one standard deviation increase in WPARL (0.07) would be accompanied by a decrease in corruption by a 0.17 of a standard deviation. This relation is found to be significant in the three out of four specifications. In Table 2 and 3 coefficients on WPARL are also negative (-0.23 and -2.68 respectively) and significant at 10%. A one standard deviation increase in WPARL in Table 2 results in decrease in corruption by 13% of a standard deviation, and in specification (3) as well by 13%. This is in line with the previous research, thus we conclude that increase of women representation in parliament has a positive effect for a country through its negative (linear) relationship to corruption.

Coefficient on the WLABOR is of the right sign (negative) in three of the four specifications; this is in line with the findings of Swamy et al. (2000) who found negative relationship between corruption and participation of women in the labor force. However we fail to reject null hypothesis of zero coefficient, thus there is no sufficient evidence for the linear relationship between  $CORRUPT_{WB}$  and  $CORRUPT_{CPI}$ , and WLABOR. Most probably because it is traditional that most of the women are included in the labor force due to traditional in communist regime inclusion of women in labor force as well as uneasy economic situation. Moreover women have to participate in the so called “lower level” corruption on a day to day basis, which is especially widespread in health and education sectors, where as well most of the women work. Thus more active participation of women in labor force would not bring significant reduction in corruption.

Women’s share of legislators and managers, which is the indicator of the presence of women in decision-making positions, is consistently positively associated with corruption in all of the specifications of regression (1 to 4) however it never reaches the significant level. Unfortunately, author is unable to give any intelligent interpretation of this phenomenon.

The Gender Empowerment Measure (GEM), which takes into account all three measures of women participation in social and economic life, is negatively related to corruption, meaning that the more equality between men’s and women’s opportunities there are in a country, the less corruption there will be. It is clear from Table 1 and 2 that an increase in one standard deviation in GEM (0.08) is associated with the decrease in WB corruption index in the size of 0.16 to 0.20 of a standard deviation. From Table 3 and 4 we see that the same increase in GEM would be associated with 14% and 18% of a standard deviation decrease in corruption. However it is statistically significant at 10% only in the second specification, presented in the Table 2.

The strongest negative relationship in all specifications is between measures of liberal democracy and corruption measured by both indices. It is also significant at the 1% level. From the Table 1, one can see that a one standard deviation increase in civil liberties index CIVIL (1.93) is followed by a decline in corruption measure of WB which varies from approximately 73% to 87% of a standard deviation. On the other hand Table 4 demonstrates that a one standard deviation increase in the rule of law index LAW (4.36) will result in decrease in corruption indices  $CORRUPT_{WB}$  from approximately 77% to 96% of a standard deviation. Index  $CORRUPT_{CPI}$  would react to a similar increase in CIVIL by decrease of the sizes from 71% to 89% of a standard deviation (see Table 3); and to an increase of one standard deviation in LAW by a decrease from approximately 75% to 99% of a standard deviation (see Table 4).

A positive association between the wealth of the countries and corruption is found in all specifications of regression for this specific sample, however this relationship is of the inverted U-shape form i.e. after the countries in our sample would reach some specific level of wealth corruption would start decreasing. This is in line with previous research that found that high economic performance is in essence incompatible with poor public governance (Sung, 2003).

## World Surveys Analysis

Numerical analysis aimed at determination of the existence of the inverse relationship between women in participation in the public life and corruption is continued by the analysis World Value Surveys. This is done, following the paper by Swamy et al. (2001) who analyzed the data from the World Values Survey and found that women were more likely than men to condemn bribe taking.

World Values Survey is a continuous project aimed at studying values of different nations around the globe. Five waves of the surveys were conducted from the years 1981 to 2007. One of the numerous questions, respondents are being asked, is connected to bribe justification. Namely, participants are asked to assess on the scale from 1 (never justifiable) to 10 (always justifiable) the act of accepting by someone a bribe in the course of their duties.

Table 5 presents average percent of respondents who have chosen one or another answer to this question for the 20 countries chosen for the analysis. First glance of the data enables us to conclude that on average a little bit more women (M=66.97, SD=13.16) than men (M=61.25, SD=14.29) think bribery can't be justifiable. The same is true for the respondents who would always justify bribe (women: M=1.31, SD=1.29; men: M=2.18, SD=1.60). A statistical test of the null hypothesis that there is no gender difference in choosing the option "bribe is never justifiable" versus the alternative one – women choose this option more often, we can't reject null hypothesis as the difference is insignificant (Mann Whitney  $Z=-1.27$ ,  $p=0.102$ , one-sided). Figure 1 presents the data on the choice of the option "bribe is never justifiable" for each of the transition economies chosen for the analysis.

On the other hand if we jointly analyze the answers falling in the categories which evaluate bribe taking as more justifiable (7 to 10) we can see that average percentage of male respondents whose answers fall in one of these categories (M=6.45, SD=3.70) is significantly higher than average percentage of women (M=4.81, SD=3.49) falling in these categories (Mann-Whitney  $Z = -1.678$ ,  $p<0.05$ , one-sided). Figure 2 depicts the aggregated percentage of male and female respondents whose answers are falling in categories 7 to 10 for each of the 20 countries used in the analysis.

Table 5: Gender differences in the attitude towards bribery

	Men	Women
Never justifiable	61.25	66.97
2	11.13	10.68
3	8.09	7.15
4	4.35	3.43
5	6.16	4.97
6	2.58	2.00
7	1.95	1.47
8	1.44	1.43
9	0.89	0.60
Always justifiable	2.18	1.31

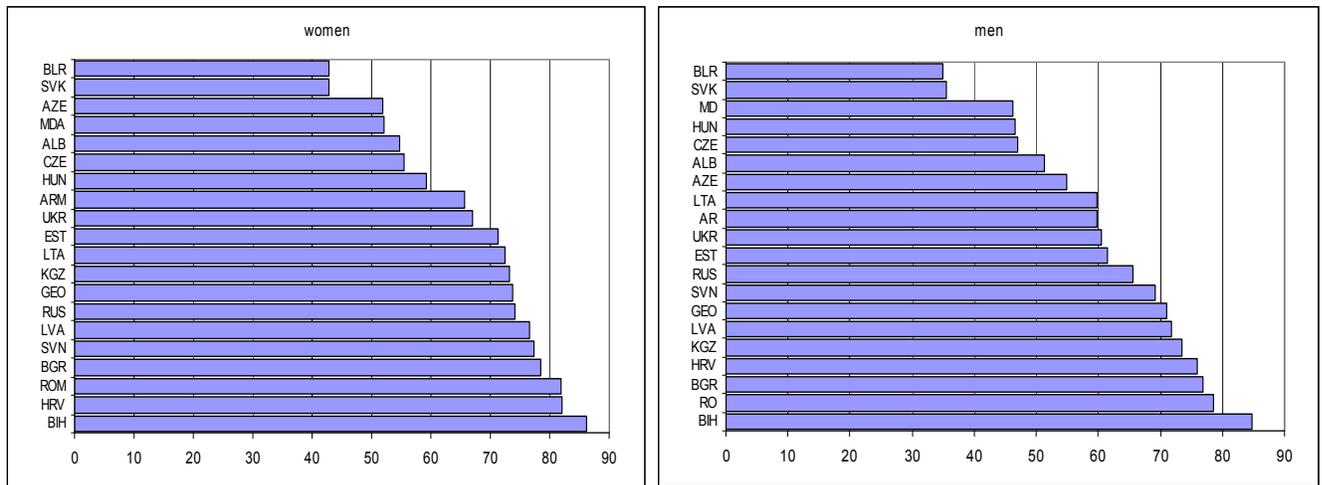


Figure 3: "Bribe is never justifiable" for each country of the analysis (a. women, b. men)

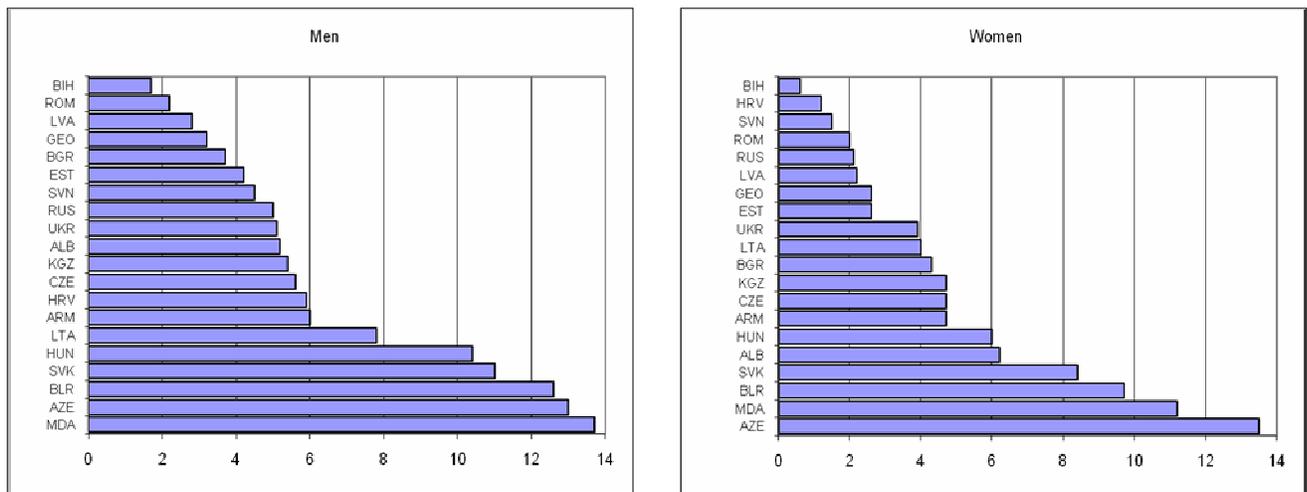


Figure 4: Justification of a bribe in countries of analysis (aggregated categories 7-10).

## Conclusions

The goal of this paper was to analyze the existence of the negative relationship between women social, economic and political activity, expressed as women's share in parliament, in adult labour force, in decision-making positions, and gender empowerment measure, and corruption measure for the group of countries who share common cultural and historical legacy. As such group of countries former communist and USSR countries were chosen. We believe that this was a very important step in the research of gender relation to corruption, as previous studies (Dollar et al., 1999, Swamy et al., 1999, and Sung, 2003) did analyze "impersonalized" large common samples, which included African, Western and Eastern countries. Taking into account intuition of Alatas et al. (2008) we were conscious of the fact that gender differences of the abovementioned authors might be culture-specific, and that these findings might not apply for our sample.

We explored issue of relationship between gender and corruption from the two sides: first we regressed a measure of corruption of World Bank and Transparency International on several measures of women participation and control variables, and as a second step, based on the data from World Values Surveys we analyzed attitude of women in our sample towards bribery.

Our findings suggest that the gender differences found in previous studies indeed might to some extent be culture related, as we get positive (although) insignificant relationship between women's share of legislators and managers and corruption index, which can't be explained. Amount of women in the labour force can't be a good predictor of changes in corruption index either, as most of the women in countries in our sample due to uneasy economic situation and communist labor traditions are already in the labour force.

However analysis of the coefficient on the variable measuring women's share in parliament is consistent with findings of the previous research, although they show numerically a bit lower influence of WPARL on corruption index. Coefficient on the WPARL is negative and significant in the three of the four regression specifications, and it shows that a one standard deviation increase in WPARL is connected to a decrease in corruption measures varying from 13% to 17%. To compare: Dollar et al. (2001) found that one standard deviation increase in WPARL will result in a decline in corruption by 20% of a standard deviation; Swamy et al. (2000) found that same increase in WPARL would be followed by a decrease in corruption measure which is slightly higher than 20% of a standard deviation.

Our second line of analysis revealed, that although more women than men find the bribe taking behaviour as never acceptable, this difference is not significant. However this difference turns to be significant when we jointly analyze the answers falling in the categories which evaluate bribe taking as more justifiable (7 to 10), where on average more men were likely to choose an answer falling in one of these categories.

Empirical evidence presented in our paper enables us to conclude that an increase in women representation in parliament has a positive effect for a country through its negative (linear) relationship to corruption. However we understand that due to a really small sample size the results could not be considered as fully credible. As the next stage of this research a panel data analysis could be utilized, to check if data support the conclusions of the cross-section analysis.

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## Appendix A

### Countries Included in the Analysis

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Albania	Lithuania
Armenia	Macedonia
Azerbaijan	Moldova
Belarus	Montenegro
Bosnia and Herzegovina	Poland
Bulgaria	Romania
Croatia	Russian Federation
Czech Republic	Serbia
Estonia	Slovakia
Georgia	Slovenia
Hungary	Tajikistan
Kazakhstan	Turkmenistan
Kyrgyzstan	Ukraine
Latvia	Uzbekistan

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**Appendix B:** Summary statistics of variables

Variable	Mean	SD	Observ.
WB corruption <sup>ab</sup>	0.43	0.12	27
CPI corruption <sup>b</sup>	3.54	1.45	27
Women in parliament	15.85	6.95	27
Women in labor force	46.71	2.88	27
Women manager/legal	30.95	8.48	21
Gender Empowerment Index	0.57	0.08	21
GDP/capita (in thousands US\$)	4.92	4.20	27
Civil Liberties <sup>b</sup>	3.04	1.93	27
Rule of Law	8.67	4.36	27
Press Freedom <sup>b</sup>	21.94	23.00	27

<sup>a</sup> Normalized variable on the interval [0,1], with 0 meaning the most corrupted country, and 1 the least corrupted. Original variable in the interval [-2.5, 2.5].

<sup>b</sup> variable values are multiplied by (-1) in statistical analyses to allow easier interpretation of coefficients

## Appendix C: Variables and Sources

Variable	Year	Source	Notes
WB corruption index	2007	WB Worldwide Governance Indicators. Access through: <a href="http://www.govindicators.org">www.govindicators.org</a>	Ranges between -2.5 (highly corrupt) to 2.5 (highly corrupt)
CPI Score	2008	Transparency International. Access through: <a href="http://www.transparency.org/policy_research/surveys_indices/cpi/2008">http://www.transparency.org/policy_research/surveys_indices/cpi/2008</a>	Ranges between 10 (highly clean) and 0 (highly corrupt).
Women in Parliament	2008	Inter Parliamentary Union. Access through: <a href="http://www.ipu.org/wmn-e/arc/classif310108.htm">http://www.ipu.org/wmn-e/arc/classif310108.htm</a>	Percentage of parliamentary seats held by women in the upper and lower Houses.
Women in adult labor force	2007	United Nations, Statistics and indicators on women and men. Access through: <a href="http://unstats.un.org/unsd/demographic/products/indwm/statistics.htm">http://unstats.un.org/unsd/demographic/products/indwm/statistics.htm</a>	Percentage of women in adult (15+) labor force.
Women legislators and managers	2001-2006	United Nations, Statistics and indicators on women and men. Access through: <a href="http://unstats.un.org/unsd/demographic/products/indwm/statistics.htm">http://unstats.un.org/unsd/demographic/products/indwm/statistics.htm</a>	The indicator refers to the number of women legislators and managers as a percentage of all workers in this occupational group.
GDP per capita	2005	UNDP, Human Development Report 2007/2008. Access through: <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>	Measured in thousands of USA dollars
Civil Liberties	2008	Freedom House. Freedom in the World 2008: Country Subscores. Access through: <a href="http://www.freedomhouse.org/uploads/FIW2008_Subscores.xls">http://www.freedomhouse.org/uploads/FIW2008_Subscores.xls</a>	CL is from 1 to 7, where 1 stands for the most free, and 7 stands for states that virtually have no freedom.

Variables and Sources: Continued

Variable	Year	Source	Notes
Rule of Law	2008	Freedom House. Freedom in the World 2008: Country Subscores. Access through: <a href="http://www.freedomhouse.org/uploads/FIW2008_Subscores.xls">http://www.freedomhouse.org/uploads/FIW2008_Subscores.xls</a>	Measured in points ranging from 16 to 0. Where 0 means no rule of law.
Freedom of press	2008	Reporters Without Borders. Access through: <a href="http://www.rsf.org/article.php3?id_article=29031">http://www.rsf.org/article.php3?id_article=29031</a>	Ranges from 0 to 100, where the latter stands for the worst press situation.
Gender Empowerment Measure (GEM)	2008	UNDP, Human Development Report 2007/2008. Access through: <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>	Ranges from 1 (absolute equality) to 0 (absolute inequality).
Acceptance of a Bribe	1996-2003	World Value Survey. Online Data Analysis. Religion and Morale. Justification of social behaviors. Access through: <a href="http://www.worldvaluessurvey.org/">http://www.worldvaluessurvey.org/</a>	Ranges from 1 (never acceptable) to 10 (always acceptable)

Table 1: Regression  $\text{CORRUPT}_{\text{WB}} = \beta_1 + \beta_2 \text{Wactivity} + \beta_3 \ln(\text{GDP/capita}) + \beta_4 (\ln(\text{GDP/capita}))^2 + \beta_5 \text{CIVIL} + \varepsilon$

	1	2	3	4	5
C	-0.547 <sup>***</sup> (0.036)	-0.492 <sup>***</sup> (0.177)	-0.608 <sup>***</sup> (0.041)	-0.450 <sup>**</sup> (0.244)	-0.456 (0.152)
WPARL	-0.304 <sup>**</sup> (0.131)			-0.136 (0.241)	
WLABOR		-0.204 (0.399)		-0.339 (0.628)	
WMANAG			0.020 (0.122)	0.089 (0.128)	
WEM					-0.243 (0.233)
GDP	(0.017) (0.013)	0.023 <sup>*</sup> (0.012)	0.030 <sup>**</sup> (0.015)	0.021 (0.017)	0.033 <sup>*</sup> (0.020)
GDP2	-0.011 <sup>*</sup> (0.008)	-0.016 <sup>*</sup> (0.008)	-0.024 <sup>**</sup> (0.011)	-0.020 <sup>**</sup> (0.011)	-0.022 <sup>**</sup> (0.011)
CIVIL	-0.055 <sup>***</sup> (0.007)	-0.054 <sup>***</sup> (0.008)	-0.066 <sup>***</sup> (0.007)	-0.068 <sup>***</sup> (0.011)	-0.059 <sup>***</sup> (0.011)
N	27	27	21	21	21
adjR2	0.76	0.73	0.77	0.76	0.78
SER	0.06	0.06	0.06	0.06	0.06

Table 2: Regression  $\text{CORRUPT}_{\text{WB}} = \beta_1 + \beta_2 \text{Wactivity} + \beta_3 \ln(\text{GDP/capita}) + \beta_4 (\ln(\text{GDP/capita}))^2 + \beta_5 \text{LAW} + \beta_6 \text{PRESS} + \varepsilon$

	1	2	3	4	5
C	-0.157 <sup>**</sup> (0.068)	-0.179 (0.198)	-0.203 <sup>**</sup> (0.081)	-0.234 (0.237)	-0.026 (0.142)
WPARL	-0.232 <sup>*</sup> (0.135)			-0.073 (0.236)	
WLABOR		-0.010 (0.386)		0.095 (0.657)	
WMANAG			0.063 (0.110)	0.049 (0.163)	
WEM					-0.318 <sup>*</sup> (0.212)
GDP	0.016 (0.016)	0.021 (0.017)	0.040 <sup>**</sup> (0.018)	0.040 <sup>*</sup> (0.024)	0.045 <sup>**</sup> (0.022)
GDP2	-0.010 (0.008)	-0.014 <sup>*</sup> (0.008)	-0.023 <sup>**</sup> (0.012)	-0.022 <sup>*</sup> (0.014)	-0.021 <sup>*</sup> (0.012)
LAW	-0.026 <sup>***</sup> (0.005)	-0.027 <sup>***</sup> (0.005)	-0.028 <sup>***</sup> (0.006)	-0.028 <sup>***</sup> (0.007)	-0.026 <sup>***</sup> (0.006)
PRESS	0.0004 (0.001)	0.001 (0.001)	-0.0003 (0.001)	-0.0002 (0.002)	0.0003 (0.001)
N	27	27	21	21	21
adjR2	0.77	0.75	0.79	0.75	0.81
SER	0.06	0.06	0.06	0.06	0.05

\* p<0.1, \*\* p<0.05, \*\*\* p<0.01 (one-tailed)

Table 3: Regression  $\text{CORRUPT}_{\text{CPI}} = \beta_1 + \beta_2 \text{Wactivity} + \beta_3 \ln(\text{GDP/capita}) + \beta_4 (\ln(\text{GDP/capita}))^2 + \beta_5 \text{CIVIL} + \varepsilon$

	1	2	3	4	5
C	-5.064 <sup>***</sup> (0.436)	-4.612 <sup>**</sup> (2.046)	-5.693 <sup>***</sup> (0.503)	-3.257 (2.822)	-3.893 <sup>**</sup> (2.038)
WPARL	-2.682 <sup>*</sup> (1.646)			-1.496 (3.001)	
WLABOR		-1.738 (4.692)		-5.428 (7.289)	
WMANAG			0.734 (1.469)	1.802 (1.410)	
WEM					-2.584 3.144
GDP	0.299 <sup>*</sup> (0.177)	0.347 <sup>**</sup> (0.162)	0.423 <sup>**</sup> (0.193)	0.289 (0.220)	0.456 <sup>*</sup> (0.266)
GDP2	-0.169 <sup>*</sup> (0.109)	-0.214 <sup>**</sup> (0.112)	-0.332 <sup>**</sup> (0.136)	-0.289 <sup>**</sup> (0.136)	-0.305 <sup>**</sup> (0.134)
CIVIL	-0.657 <sup>***</sup> (0.079)	-0.652 <sup>***</sup> (0.089)	-0.770 <sup>***</sup> (0.093)	-0.799 <sup>***</sup> (0.128)	-0.681 <sup>***</sup> (0.139)
N	27	27	21	21	21
adjR2	0.75	0.73	0.74	0.73	0.75
SER	0.73	0.75	0.73	0.74	0.71

Table 4: Regression  $CORRUPT_{CP} = \beta_1 + \beta_2 Wactivity + \beta_3 \ln(GDP/capita) + \beta_4 (\ln(GDP/capita))^2 + \beta_5 LAW + \beta_6 PRESS + \varepsilon$

	2a	4a	6a	8a	10a
C	-0.174 (0.878)	-0.709 (2.161)	-1.059 (1.014)	-0.598 (2.671)	0.960 (1.975)
WPARL	-1.782 (1.612)			-0.672 (3.016)	
WLABOR		0.750 (4.116)		-1.329 (7.657)	
WMANAG			1.257 (1.259)	1.514 (1.903)	
WEM					-3.361 (2.965)
GDP	0.272 <sup>*</sup> (0.163)	0.308 <sup>**</sup> (0.172)	0.529 <sup>**</sup> (0.206)	0.469 <sup>*</sup> (0.288)	0.583 <sup>**</sup> (0.285)
GDP2	-0.154 <sup>*</sup> (0.098)	-0.184 <sup>**</sup> (0.096)	-0.319 <sup>**</sup> (0.144)	-0.297 <sup>*</sup> (0.161)	-0.294 <sup>**</sup> (0.150)
LAW	-0.331 <sup>***</sup> (0.069)	-0.336 <sup>***</sup> (0.066)	-0.321 <sup>***</sup> (0.073)	-0.306 <sup>***</sup> (0.091)	-0.296 <sup>***</sup> (0.082)
PRESS	0.008 (0.010)	0.009 (0.010)	-0.004 (0.015)	-0.008 (0.025)	0.002 (0.017)
N	27	27	21	21	21
adjR2	0.77	0.77	0.77	0.73	0.78
SER	0.69	0.70	0.70	0.74	0.67

\* p<0.1, \*\* p<0.05, \*\*\* p<0.01 (one-tailed)