Village Government Corruption in Decentralized Indonesia: Democracy, Ethnic Diversity and Budget Authority

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Abstract

The village (*desa*) is the lowest level of government administration in Indonesia. In the pre-decentralization, although by law a village should held a regular election to select their leader, in practice the election is highly influenced and intervened by higher level of government. The new decentralization law has provided rural village governance with free election of village head and autonomy to design and decide budget and regulation without approval from the district government. The main purpose of this paper is to investigate the determinants of corruption in village government of Indonesia in the more decentralised system of government introduced in 2001, focusing on the interrelationship between democracy and ethnic fractionalization at village level. Applying a Probit model to the IFLS (Indonesian Family Life Survey) data set on the perception of corruption incidence and the changes in governance at village government in 256 communities, this paper finds that an ethnic diversity at village level is positively associated with corruption if democracy is practiced before the decentralization, and, in contrast, is negatively associated with corruption if the democracy is newly adopted following the decentralization reform. These results are robust, with and without inclusion of budget autonomy, which found to have positive association with corruption.

Introduction

Two major governance reforms were occurring in Indonesia in the beginning of 21st century. In 1999 Indonesia democratized, electing representatives to national and district assemblies for 5-year terms. In 2001, Indonesia decentralized, transferring responsibility for almost all local public services to district governments. Democratization and decentralization occurred in a country that in the late 1990s ranked as among the most corrupt in the world (Bardhan 1997; Mocan 2008).

Democratic change should be associated with political participation, transparency, and accountability. Citizens should benefit from greater freedom and means to hold their government accountable. Regular elections should constitute a key mechanism for disciplining public officials from wrong doing or corruption; so that it creates local accountability which then also fosters local government responsiveness towards demand of the population (Blair 2000; Manor 1999; Crook and Manor 1998).

A precondition for these aims of democratic government is that citizens have appropriate information about candidates' character, abilities, and performance while in office (Przeworski, Stokes, andManin1999; Besley 2006). Accordingly, a growing literature recognizes that voters having access to information to evaluate politicians' performance enhances government responsiveness, reduces corruption and rent-seeking behaviors (e.g., Besley and Burgess 2002; Reinikka and Svensson 2005; Olken 2007) and promotes electoral accountability (Ferraz and Finan 2008).

Decentralization reform is expected to fulfil this precondition of effective democracy because citizens can monitor the local government better than a distant central authority, thus

helping improve the efficiency of the provision of local public goods by reducing corruption practices (Bardhan 2002). However, decentralization is also put democracy at risk of being captured by local elite having special interest. This is because at the local level, collusion is easier to establish and maintain across different interest group, since the transaction costs and information asymmetry are lower due to greater proximity (Bardhan 2002).

With democratization, corruption in Indonesia has become a commanding political issue (McLeod 2005). Corruption is still generally perceived as pervasive in Indonesia. Even in 2011, ten years after decentralization, Indonesia scores just 3 on a scale up to 10, and ranked 100 out of 182 countries on Transparency International's Corruption Perception Index. However, empirical studies about corruption in Indonesia are still limited.

The main purpose of this paper is to investigate the determinants of corruption in village government of Indonesia in the more decentralised system of government introduced in 2001. The nature of village governance in Indonesia is unique. Village as the lowest jurisdiction in Indonesia has two forms, *kelurahan* at urban area, led by *lurah*, a local government official appointed by district head, and *desa* at rural area which is led by *kepaladesa*, a democratically elected leader by the villagers. In the pre-decentralization although by law *desa* should held a regular election to select their leader, in practice the election is highly influenced and intervened by higher level of government.

The new decentralization law has provided rural village governance with free election of village head and autonomy to design and decide budget and regulation without approval from the district government. In the old governance system *desa* has no authority to decide their budget. All the decision must be approved by district head. As part of the reform, the new law give villages mandate to change their institutional arrangement. Villages can change from a *desa* to a *kelurahan* where social or economic needs dictate, but they require consent from two thirds of the local population, and agreement with the district head. The new law also limit village government interactions with higher levels of government to the district level.

The data used in this study confirmed that there has been changed in village government institution after decentralization. In the sample of 314 villages used in this study, half of villages were using voting to elect their village leader in 1997. In 2007 it is rise to two third. Whereas villages that have their leader appointed by higher government drop from 28 percent in 1997 to 23 percent in 2007. Generally the change in selection rules at village level is consistent with democratization trend at national level. Most of villages' change their leader selection method to direct election. Given this context, the other goal of this paper is to discover whether or not democratization and decentralization reforms have changed the corruption level at village government in Indonesia.

While most of corruption studies are using cross-country data, this study focuses on village level data within Indonesia. One of the most important advantages of undertaking a within-country analysis is highly reduced the vast unobservable differences in institutions and cultures that exist across countries. While many differences certainly exist across villages, there is a much higher degree of homogeneity. Moreover, legal institutions are able to hold more or less constant in a within-country analysis (

Literature review

From a theoretical perspective, democracy is expected to reduce corruption. Democracy established political accountability by forcing politicians to face political competition in the election. Elections increase the probability that corrupt officials will be exposed and punished, as the opposition has an incentive to uncover corrupt activities by the incumbent, and voters have an interest in not re-electing politicians that favour their own private interests over those of the electorate(Persson et al. 2003; Djankov et al. 2001; and Laffont and Meleu 2001). Moreover, competitive elections likely drive down the private rents that can be appropriated by officials, since offers of favourable treatment for special interests can be undercut by the opposition (Myerson 1993; Ades and Tella 1999). In short, democracy may reduce corruption by reducing private benefits of corrupt actions and increasing expected costs.

There are, however, also arguments to the contrary. Diamond and Plattner (1993) and Rose-Ackerman (1999) note that the risk of exposure to corruption may be higher in more democratic systems. Their argument is that electoral competition may create incentives for corruption through the need to raise money for electoral campaigns; this need can lead to abuses of power to benefit private interests at the expense of the general welfare. Moreover, according to van den Berghe (1987) and Vanhanen (1999), democracy not necessarily produces an effective government in societies where ethnicity is too diverse. They observe members of an ethnic group display ethnocentric behaviour by favouring their group members over non-members. As Glaeser and Saks (2006) argue, if there are a number of ethnic groups in a society and the politicians/bureaucrats tend to allocate resources towards backers of their own ethnicity, then members of one ethnic group is likely to continue to support a politician/bureaucrat of their own ethnic group, even if he or she is known to be corrupt (Glaeser and Saks 2006). In fact, several empirical studies such as Mauro (1995), LaPorta et al. (1999), Treisman (2000), and Glaeser and Saks (2006) have confirmed that ethnic diversity is one of the factors explaining corruption.

Whether democracy reduces corruption is in the end an empirical question. It is, however, hard to draw any conclusions on the impact of democracy on corruption from existing empirical studies. As reflected in the review of the corruption literature by Lambsdorff (2005), existing results on the relation between democracy and corruption are mixed. Earlier studies by Treisman (2000), Gerring and Thacker (2004; 2005) and recently byRock (2009) suggest that it is the duration of democracy that matters rather than democracy in itself. These studies find that while the current degree of democracy is not significant, a long period of exposure to democracy lowers corruption. In a related study, Montinola and Jackman (2002) find a strong non-linear relationship between democratization and corruption. They explain that in the early stage of democratization, rent-seeking behaviour actually increases. Only after a certain level of democratization is reached will corrupt politicians face sufficient pressure.

Yehoue (2007) rationalize this contention by focusing on a key characteristic of most developing countries: ethnic fractionalization. In particular, he argues that in early stage of democracies, political supports emerge along ethnic group lines. Consequently, in countries characterized by a high degree of ethnic fractionalization, a candidate wins an election by forming a coalition facilitates by ethnic leaders. This pre-electoral coalition formation consists of promises of administrative positions or other rents to ethnic leaders in exchange for endorsements which carry the group members' votes. The candidate elected through such coalitions will have to compensate the ethnic leaders to maintain their continued support in order to survive in office. Thus, ethnicity appears as a rent-extracting technology that fosters

a highly politicized administration and widespread corruption. Over time, as the process of democratization matures and people become better informed, elections can effectively perform their function as a mechanism for disciplining public officials, leading to lower corruption.

Another explanation on the determinants of corruption is the degree of transparency of the government. Transparency lowers corruption because it enhances monitoring efficacy of government activities which increases the risk for a corrupt public official to get caught. It can be argued that transparency is better in smaller population because citizen is more able to monitor government activities. Some authors do observe a positive correlation between corruption and a country's size, measured by total population (Root 1999; Fisman and Gatti 2002). Smaller countries seem to be in a better position to establish a decent administration and to monitor their politicians. This might be taken as an indicator in favour of decentralization. Decentralized governance has been suggested by international donors' community to improve transparency because monitoring is easier and informational problems are less severe at the local level. Smaller constituencies facilitate the monitoring of the performance of elected representatives and public officials and, additionally, reduce the collective action problems related to political participation. Thus, in this sense, decentralized political systems tend to have stronger accountability mechanisms and lower corruption (Nas et al. 1986; Rose-Ackerman 1999).

However, Persson et al. (2003) argue small electoral districts encourage corruption by limiting political competition. Empirically, they find that larger voting districts–which would mean lower barriers to entry–are correlated with less corruption. Meanwhile, Prud'homme (1995) and Tanzi (1995) also considered that decentralization as counterproductive in curtailing corruption. They argue that decentralization brings officials in close contact with citizens. This promotes personalism and reduces professionalism and arms-length relationships. Personalism in their view breeds corruption as officials pay greater attention to individual citizen needs and disregard public interest. As a result incidence of corruption is expected to increase with decentralization, especially in a geographical area where feudal or industrial interests dominate and institutions of participation and accountability are weak or ineffective. However, the empirical evidence on decentralization and corruption relationship is not clear. Crook and Manor (2000), de Mello and Barenstein (2001) and Fisman and Gatti (2002) find support that decentralization leads to enhanced transparency and positive influence of localization in controlling corruption. On the other hand, Goldsmith (1999), Treisman (2000), and Kunicová and Rose-Ackerman (2005) found that decentralization and federal structure was associated with higher perceived corruption. As a result the population and decentralization influence on corruption is inconclusive.

Income and education of the population is also mentioned in the literature as factors that influence corruption. A richer and more educated citizen may have people who are more willing to pay attention to corrupt activities and who are better able to take action against corrupt officials. As Alt and Lassen (2003) emphasized that the probability that a corrupt public official is caught not only related to the transparency of government and the amount of information available to the public, but also related to how observable his actions are to the voters. Higher levels of income and education increase the ability of private individuals to monitor political activities and punish malfeasance by members of the government. This positive relationship may be because political attention is a luxury good, or because education makes it easier to learn about politics. Furthermore, education may indoctrinate individuals towards having a higher value of staying politically involved. This explains Fisman and Gatti (2002) finding that less developed countries are likely to be more corrupt. Moreover, Treisman (2000), Paldam (2001, 2002) and La Porta et al. (1999) confirms that higher per-

capita income tend to reduce corruption levels. It seems stage of economic development also a strong determinant of corruption.

Government size may also play an important role in corruption, although its effect on corruption is controversial. Adserà et al. (2003) find a negative relationship between government size and corruption. Furthermore, Billger and Goel (2009), using a quantile regression, suggest that an increase in government size leads to a reduction in corruption at almost all degrees of corruption. These results support the views that a larger government is associated with strong checks and balances and reduces corruption (La Porta et al., 1999), and/or that higher public wages induce bureaucrats not to accept bribes (Acemoglu and Verdier2000). This viewpoint is supported from the fact that developed countries generally have bigger governments and are less corrupt than developing countries.

Some researchers, however, predict that corruption and government size are positively related. Rose-Ackerman (1999), for instance, points out the possibility that the opportunity for corruption might increase, as the size of the government becomes larger. An increase in government size provides more opportunity for political rent-seeking, leading the politicians and bureaucrats to become more corrupt (e.g., Rose-Ackerman 1978, 1999). This viewpoint is suggested by the "crime and punishment" model in Becker (1968). In other words, bigger governments increase the expected payoff of illegal activities and, as a result, give an incentive for more illegal activities, such as corruption. Goel and Nelson (1998) empirically indicate that the size of the state and local governments in the United States has a strong positive influence on corruption.

The legal system has also been stressed as a source of variation in corruption across countries. For instance, La Porta et al. (1999) argue that the common law systems in Britain and its former colonies are more effective in protecting property rights and enforcement than civil law systems, which would imply that the probabilities of corruption being exposed are higher in common law countries. Treisman (2000) likewise finds that Britain and its former colonies have substantially lower levels of corruption than other countries; however, Pellegrini and Gerlagh (2008) find no such linkage.

Empirical approach

Data

The data used for this analysis comes from the fourth wave of the Indonesian Family Life Survey (IFLS4) conducted in 2007. The IFLS4 is fourth in a series of nation-wide random sample surveys covering thirteen of the twenty-seven provinces, where approximately 83 percent of the population resides. Four provinces are located in Sumatra Island (North, West, and South Sumatra, and Lampung), five in Java Island (West, Central, and East Java, DKI Jakarta, and Yogyakarta), and the four remaining provinces are Bali, NTB, South Kalimantan, and South Sulawesi.

The analysis is based on the community level data set collected from 256 communities (*kelurahan* dan *desa*). This is a particularly rich data set that provides community level information on a whole range of demographic characteristics and access to public goods, local governance and its public finances, citizens' participation in planning and implementation of local development projects, as well as a range of public utilities, infrastructure and transport, health and education facilities. The IFLS 2007 introduce new questioner to address public perception on governance in the community data set. Two local informants were randomly selected in each community from a list of 6 types of informants (school principal or senior teachers; health professionals; youth activists; religious leaders; local political party activists; and local business leaders) to assess the quality of local

infrastructure and public services, governance and corruption incidence. This make the total observation available to this study is 512 (=256 x 2).

The corruption variable is taken from perception of corruption incidence at village level as recorded in the community questioners of IFLS4. In the survey, respondents were asked whether corruption practice is present at their village government. Specifically, the respondents were asked: According to your opinion, are there any cases of corruption, collusion, and nepotism (KKN) in village government office now? (1) yes; (2) no; (3) refused to answer; (4) don't know. The answer is then classified in two categories: 1 for yes; 0 for no; and missing value for others.

Democracy variable is constructed from information on local polity in IFLS2 (1997) and IFLS4 (2007). Although IFLS data are available for the years 1993, 1998 and 2000 as well, information on local polity could only be found in the 1997 and 2007 rounds of the survey. The 1997 and 2007 rounds of the IFLS asked community leaders about how a leader was selected, which we use to classify these communities. Answers to this question are coded as: (i) consensus of all resident, (ii) voting, (iii) local elites, (iv) local institutions, (v) appointed by government and (vi) other. Accordingly, this study classify a polity as "democratic" if its leader is selected by consensus of all resident (code(i)), which is a form of open voting, or if its leader is elected by voting (code(ii)).Other types of selection are classified as non-democratic. Democracy is entered as dummy variable with value 1 for democratic polity and 0 for others. Even though the number of villages surveyed in IFLS4 is 314, this study only use 256 which match the villages surveyed in IFLS2.

Following Alesina et al. (1999), a fractionalisation index is employed to measure ethnic diversity. The measure of ethnic diversity for a village-$i$is:

$$ethnic\ fractionalization_i = 1 - \sum_j (ethnic_{ji})^2 \qquad (1)$$

Where $ethnic_{ji}$ is the proportion of the j-th ethnic group in village i. This variable measures the probability that any two randomly selected individuals in the village have different ethnic backgrounds. Ethnic variation is 0 where the village is ethnically homogenous and 1 in the hypothetical case where everyone in the village has a different ethnic background. Further summary statistics are presented in Table 1.

Table 1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.
Corruption in village government	424	0.179	0.384
Democracy in post-decentralization	512	0.768	0.423
Democracy in pre-decentralization	512	0.721	0.449
Ethnic Fractionalization (EF)	512	0.164	0.201
Budget autonomy	512	0.285	0.452
Urban	512	0.572	0.495
Population density	504	142.462	674.726
Village budget per capita	512	53342.660	83924.140
Java	512	0.617	0.487

Source:

Model

The main focus of this study is to investigate the determinants of village corruption in Indonesia, taking into account the role of democracy, ethnic diversity and decentralization.

To achieve this purpose, the estimation equation is specified as implementations of Probit model to explain the determinants of the likelihood of corruption at village government as follow:

$$Corruption = \beta_1 + \beta_2 democracy\ in\ postdecentralization_i +$$
$$\beta_3 democracy\ in\ predecentralization_i +$$
$$\beta_4 ethnic\ fractionalization_i +$$
$$\beta_5 (ethnic\ fractionalization_i \times$$
$$democracy\ in\ postdecentralization_i) +$$
$$\beta_6 (ethnic\ fractionalization_i \times$$
$$democracy\ in\ predecentralization_i) +$$
$$\beta_7 budget\ autonomy_i + \beta_8 X_i + u_i \qquad (2)$$

where i stands for a village and u is an error term. $Corruption_i$ is a corruption perception incidence from IFLS4 public perception questioner at community level, as explained in the previous section. It is a binary variable where 1 means that there are corruption cases in village government and 0 means no corruption. The $democracy\ in\ postdecentralization_i$ is a dummy variable taken from IFLS4; with value 1 if a village democratically elected its leaderin post decentralization (2007). Whereas, $democracy\ in\ predecentralization_i$ is a dummy variable on village polity referring to IFLS2, value as 1 if a village democratically elected its leader in pre decentralization (1997). The *ethnic* fractionalization is an index which describes ethnic heterogeneity of a village as explained in the previous section. The higher the index the more diverse is ethnic diversity of a village. Furthermore, to capture the role of ethnic diversity in the effects of democracy on corruption, the interaction term between ethnic fractionalization and democracy is added to the model. This approach is to examine how ethnic diversity level influences the effect of democracy on corruption, which is the main purpose of this study.

The $budget\ autonomy_i$ is a dummy variable for fiscal decentralization. It is 1 when a village has an authority to reallocate their budget without approval from higher level of government. The X_i is a vector of variables to control regional characteristics. This include dummy variables for urban and Java (the most populated island in Indonesia); population density to control village size; and village budget per capita to control government size. Even though GDP per capita and education is shown to have a significant influence on corruption in most of previous studies, it is not included in the model. This is because both of the data is not available at village level on IFLS. However, this factor is considered to imperfectly control by urban dummy in the model since urban village is argued to have population with higher income per capita and more educated compared to rural village population. According to previous studies, generally the corruption level in a region is expected to decrease when per capita income and education level of its inhabitant increases.

Other variable which considered as a strong determinant of corruption in previous studies is legal institution. In a cross-section analysis, institutional legal differences among countries are so great as to explain most of the variability of corruption. However, in this study corruption is analysed at a village level within a country (e.g.,Indonesia). Since the Indonesia judicial system and the police are always centralized it would be expected that the differences in quality of legal system across region is negligible, so that the variable to

control cross-regional legal institutional differences can be safely excluded from the model of this study.

Estimation Results

Table 2 presents the results of the binary Probit model for determinants of corruption in the post-decentralized village governments. All regression in column (1) to (6) is controlled for regional characteristics (e.g., *urban*, *population density*, *village budget per capita* and *Java*). *Urban* and *population density* are the only controlled variables that consistently significant in all regressions. The urban dummy is negative, represents the negative association of income and education on corruption. An urbanized village is generally expected to have more educated and wealthy population which more capable in detecting and monitoring village government officials, compared to rural villages. *Population density* is positive and significant, which suggest that population size matters for corruption. The bigger is a population of an area, the more difficult is to properly monitor its government. *Village budget per capita* which represents government size is not significant in all equation, whereas *Java*, which represent the most populated island in the country, only positively significant in two regressions.

Table 2. The determinants of corruption in the post-decentralized village governments

	Corruption in village government					
	[1]	[2]	[3]	[4]	[5]	[6]
Democracy in post-decentralization	-0.1652	-0.1989	0.3572	0.2517	0.2607	0.1475
	(0.2323)	(0.2382)	(0.3155)	(0.3683)	(0.3203)	(0.3745)
Democracy in pre-decentralization	-0.2047	-0.2288	-0.7589**	-0.7805**	-0.7783**	-0.8007**
	(0.2308)	(0.2350)	(0.3256)	(0.3255)	(0.3281)	(0.3277)
Ethnic Fractionalization (EF)		-0.3175		-0.4552		-0.4837
		(0.4472)		(0.8570)		(0.8668)
EF x democracy in post-decentralization			-2.2803**	-1.9659*	-2.2946**	-1.9635*
			(0.9718)	(1.1407)	(0.9972)	(1.1644)
EF x democracy in pre-decentralization			2.2858**	2.4542**	2.2779**	2.4584**
			(0.9935)	(1.0491)	(1.0129)	(1.0709)
Budget autonomy					0.3686**	0.3699**
					(0.1658)	(0.1659)
Control variables						
Urban	-0.4219**	-0.4044**	-0.5153***	-0.5076***	-0.5921***	-0.5845***
	(0.1786)	(0.1807)	(0.1889)	(0.1893)	(0.1943)	(0.1947)
Population density	0.0003*	0.0003*	0.0003*	0.0003*	0.0003*	0.0003*
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Village budget per capita	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Java	0.2663	0.2422	0.2977*	0.2901*	0.2454	0.2369
	(0.1582)	(0.1620)	(0.1639)	(0.1647)	(0.1668)	(0.1676)
Sample size	417	417	417	417	417	417

Notes: ***, **, and * refer to significance at 1%, 5%, and 10% levels respectively. Number in bracket presents standard error.

Column (1) and (2) reports the regression of democracy and ethnic fractionalization on corruption. The results suggest that democracy and ethnic fractionalization has no significant association with corruption. However, in both of analysis, the effect of democracy and ethnic fractionalization on corruption may not be fully captured. The reason is that, as described in literature review, the effect of democracy on corruption may depend on degree of ethnic fractionalization. As Glaeser and Saks (2006) argue, democracy may not be effective in punishing corrupt officials if a polity is ethnically too diverse, since it could induce ethnic voting. Given these, to address the effect of democracy on corruption more precisely, the regression in column (3) and (4) is taken into account the interaction effect between ethnic fractionalization and democracy. This interaction term is to evaluate how the ethnic fractionalization level in a village influences the effect of democracy on corruption.

The results illustrate that the estimated coefficient of the interaction term is significantly negative for democracy in post-decentralization but significantly positive for democracy in pre-decentralization. Column (3) and (4) also show how the baseline coefficient of democracy in pre-decentralization is significant and negative, whereas baseline coefficient of democracy in post-decentralization is positive but not significant. The finding is in line with previous studies which suggest that the duration of democracy that matters in reducing corruption rather than democracy in itself (Treisman 2000, Gerring and Thacker 2004; 2005 and Rock 2009). However, this corruption reducing association is weakened given the result of the positively significant interaction term coefficient of pre-decentralization with ethnic fractionalization. This implies ethnic diversity increases probability of corruption in village with experience of democracy in pre-decentralization. The corruption inducing effect of ethnic diversity in democracy is in agreement with previous findings in cross-country studies (e.g., Mauro (1995), LaPorta et al. (1999), Treisman (2000), and Glaeser and Saks (2006).

On the other hand, although the baseline coefficient of democracy in post decentralization in column (3) and (4) are not significant, its interaction term coefficient with ethnic fractionalization is negative and significant. Consequently, the level of ethnic diversity in a village can be considered a main factor in decreasing corruption in a village which adopt democracy in post-decentralization. This suggests that in newly democratized polity, ethnic diversity can reduce corruption. In another words, the more homogenous is a village, the higher is the probability of corruption if the village adopt democracy in post-decentralization. Taken together it seems like the impact of ethnic diversity on corruption depends on the length of exposure of a village to democracy. Ethnic diversity stimulates corruption in villages that previously exposed to democracy. On the other hand ethnic diversity reduces corruption in newly democratized villages.

Column (5) and (6) reports the regression results to examine the relationship between corruption and fiscal decentralization, taking into account democracy and ethnic diversity. Fiscal decentralization in the regression is proxy by budget autonomy (i.e., ability of village government to reallocate its budget). The result is consistently positive and significant in both columns. This suggests that a fiscally decentralized village government has higher probability of corruption compared with non-decentralized village. The finding validates some of the existing literature which found that decentralization was associated with higher perceived corruption (Goldsmith 1999, Treisman 2000, and Kunicová and Rose-Ackerman 2005). It appears that the delegation of authority for budgeting from district governments to village governments in post-decentralization is not an assurance for accountability. Meanwhile, *democracy* and *ethnic fractionalization* association with corruption is still robust with the inclusion of *budget autonomy.*

Discussion & Conclusions

This paper investigates the determinants of corruption in post-decentralized village governments in Indonesia using the nationally representative Indonesian Family Life Survey (IFLS4) dataset. The paper emphasize interrelationship between democracy and ethnic fractionalization to explain corruption incidence at village government. The corruption incidence data is based on perception survey to local informants in community data set of IFLS4. The analysis also takes into account changes in village governance following the Indonesia decentralization reform in 2001, by taking into account village leader selection method exercised in the community before and after decentralization and the implementation of budget autonomy in village government.

Previous studies at cross-country level have provided mixed results for the relationship between corruption and democracy. In an attempt to explain these ambiguous results, this study investigates the effect of democracy on corruption, taking into account the role of ethnic fractionalization. The estimation results indicate that a higher ethnic diversity is positively associated with corruption if democracy is practiced before the decentralization, and, in contrast, is negatively associated with corruption if the democracy is newly adopted following the decentralization reform. These results are robust, with and without inclusion of budget autonomy, which found to have positive association with corruption.

The mixed result of ethnic fractionalization on corruption in this study can be related to Dincer (2008) finding on an inverse-U-shaped relationship between ethnic fractionalization and corruption. Dincer (2008) suggest that under a certain threshold higher ethnic diversity enhance corruption, but above that threshold the ethnic diversity effect on corruption is reversed (i.e. higher ethnic diversity reduce corruption). However, different from Dincer (2008), this study finds that it is the experience of democracy that matters in determining ethnic diversity effect on corruption. A higher ethnic diversity reduces corruption in young democracy, but it increase corruption in old democracy.

The contradictory effect of ethnic diversity on corruption might be driven by the transitional nature of a society. Since trust is more difficult to establish in an ethnically diverse society, a heterogeneous society encourages each ethnic group to put more effort in monitoring government. As a result a young democracy could run with sufficient check and balance mechanism, even if it is for the wrong reason. The establishment of electoral accountability could then overcome the society immaturity with democracy; despite their election might experience asymmetric information and ethnic voting.

On the contrary, in an older democracy which has experience several cycle of election, ethnic diversity could induce corruption. This is because after experiencing several rounds of election key players in democracy (e.g., political and ethnic leaders) manage to reveal their preference, established reputation, and developing political network. These networks could then evolve into collusion among elites to cooperate in rent seeking activities. In other words, corruption is higher in an older democracy because political and ethnic leaders have spent enough time and effort to coordinate and develop an optimal rent seeking strategy. Furthermore, the higher is a society ethnic diversity the larger is its scale of corruption, since there are more ethnic leaders that extorting the rent.

Although this study results are new to the existing literature, there are several caveats that must be noted. First, the corruption indices used in the study is based on people's perceptions. However, there may be a gap between perceptive and actual corruption. Second, the sample size of this study consist only two local informants in each village and using only the 2007data, although IFLS data are available for the years 1993, 1998 and 2000. This is because corruption

incidence question is only available in IFLS4 (2007). Therefore, our sample may not be sufficient to identify the national and the long-run relationship between democracy, ethnic fractionalization and corruption.

Overall these results emphasize the important role that democracy and decentralization play in influencing corruption incidence at village level. From a policy perspective, the high levels of budget autonomy enjoyed by some villages in post-decentralization must be cautiously monitored by higher level of government since current accountability mechanism at village level appears ineffective in controlling corruption. Future research will need to explore the long run effects of ethnic fragmentation on corruption in democratic regime and to explore whether the finding in this study is robust in cross-country setting.

References

Acemoglu, D., Verdier, T., 2000. "The Choice between Market Failures and Corruption". *American Economic Review* (90): 194–211.

Ades, A., Di Tella, R., 1999. "Rents, Competition, and Corruption". *American Economic Review* (89): 982–993.

Adserà, A., Boix, C., Payne, M., 2003. "Are you being Served? Political Accountability and Quality of Government". *Journal of Law, Economics, and Organization* (19): 445–490.

Alesina, A., Baqir, R., Easterly, W., 1999. "Public Goods and Ethnic Divisions". *Quarterly Journal of Economics* (114): 1243–1284.

Alt, J., Lassen, D. 2003. "The Political Economy of Institutions and Corruption in American States". *Journal of Theoretical Politics* (15): 341– 365.

Bardhan, P., 1997. "Corruption and Development: A Review of Issues". *Journal of Economic Literature* (35): 1320–1346.

Bardhan, P., 2002. "Decentralization of Governance And Development". *Journal of Economic Perspectives* (16): 185–205.

Becker, G.S., 1968. "Crime and Punishment: An Economic Approach". *Journal of Political Economy* (76): 169–217.

Besley, T., Burgess, R., 2002. "The Political Economy of Government Responsiveness: Theory and Evidence From India". *The Quarterly Journal of Economics* (117): 1415-1451.

Besley, T.. 2006. *Principled Agents? The Political Economy of Good Government*. Oxford: Oxford University Press.

Billger, S.M., Goel, R.K., 2009. "Do Existing Corruption Levels Matter in Controlling Corruption? Cross-country Quantile Regression Estimates". *Journal of Development Economics* (90): 299–305.

Blair, H., 2000. "Participation and Accountability at the Periphery: Democratic Local Governance in Six Countries". *World Development* (28): 21-39.

Crook, R., Manor, J. 1998. *Democracy and Decentralisation in South Asia and West Africa: Participation, Accountability, and Performance*. Cambridge: Cambridge University Press.

_____. 2000. "Democratic Decentralization". OED Working Paper Series No. 11, Summer 2000, World Bank, Washington, DC.

de Mello, L., Barenstein, M., 2001. "Fiscal Decentralization and Governance: Across-Country Analysis. IMF Working Paper No.WP/01/71.

Diamond, L., Plattner, M.F., 1993. *The Global Resurgence of Democracy*. Baltimore: Johns Hopkins University Press.

Dincer, O. C., 2008. "Ethnic and Religious Diversity and Corruption". *Economics Letters* (99): 98-102.

Djankov, S., McLiesh, C., Nenova, T., Shleifer, A.. 2001. "Who Owns the Media?". World Bank Policy Research Working Paper No. 2620, World Bank, Washington, DC.

Ferraz, C., Finan, F., 2008. "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes". *Quarterly Journal of Economics* (123), 703-45.

Fisman, R.,Gatti, R., 2002. "Decentralization and Corruption: Evidence Across Countries". *Journal of Public Economics* (83): 325-345.

Gerring, J., Thacker, S., 2004. "Political Institutions and Corruption: The Role of Unitarism and Parliamentarism". *British Journal of Political Science* (34): 295-330.

Gerring, J., Thacker, S., 2005. "Do Neoliberal Policies Deter Political Corruption?". *International Organization* (59): 233–254.

Glaeser, E. L., Saks, R. E., 2006. "Corruption in America". *Journal of Public Economics* (90) 1053–1072.

Goel, R.K., Nelson, M.A., 1998. "Corruption and Government Size: A Disaggregated Analysis". *Public Choice* (97): 107-120.

Goldsmith, A. A., 1999. Slapping the Grasping Hand: Correlates of Political Corruption in Emerging Markets". *The American Journal of Economics and Sociology* (58): 866-883.

Kunicová, J., Rose-Ackerman, S., 2005. "Electoral Rules and Constitutional Structures as Constraints on Corruption". *British Journal of Political Science* (35): 573-606.

La Porta, R., López-de-Silanes, F., Shleifer, A.,Vishny, R. 1999., "The Quality of Government". *Journal of Law, Economics and Organization* (15): 222-279.

Laffont, J. J.,Meleu, M., 2001. "Separation of Powers and Development". *Journal of Development Economics* (64): 129–145.

Lambsdorff, J. G., 2005. "Consequences and Causes of Corruption - What Do We Know from a Cross-Section Of Countries? Section of Countries?". Discussion Paper No.V-34-05. Passau, University of Passau.

Manor, J., 1999. *The Political Economy of Democratic Decentralization*. Washington DC: The World Bank,.

Mauro, P., 1995. "Corruption and Growth". *Quarterly Journal of Economics* (110): 681-712.

McLeod, R.H., 2005. "The Struggle to Regain Effective Government under Democracy in Indonesia". *Bulletin of Indonesian Economic Studies* (41): 367–386.

Mocan, N., 2008. "What Determines Corruption? International Evidence from Microdata". *Economic Inquiry* (46): 493-510.

Montinola, G.,Jackman, R.W., 2002. "Sources of Corruption: A Cross-Country Study". *British Journal of Political Science* (32): 147-170.

Myerson, R. B., 1993. Effectiveness of Electoral Systems for Reducing Government Corruption – a Game-Theoretic Analysis". *Games and Economic Behavior* (5): 118-132.

Nas, T., Price, A., Weber, C., 1986. "A Policy-Oriented Theory of Corruption". *American Political Science Review* (80): 107–119.

Olken, B. A., 2007. "Monitoring Corruption: Evidence from a Field Experiment in Indonesia". *Journal of Political Economy* (115): 200–249.

Paldam, M., 2001. "Corruption and Religion Adding to the Economic Model". *Kyklos* (54): 383-414.

_____. 2002. "The Big Pattern of Corruption: Economics, Culture and the Seesaw Dynamics". *European Journal of Political Economy* (18): 215-240.

Pellegrini, L., Gerlagh, R., 2008. "Causes of Corruption: A Survey of Cross-Country Analyses and Extended Results". *Economics of Governance* (9): 245–263.

Persson, T., Tabellini, G., Trebbi, F.. 2003. "Electoral Rules and Corruption". *Journal of Europen Economic Association* (1): 958-89.

Prud'homme, R., 1995. "On the Danger of Decentralization". *World Bank Research Observer* (10): 201–220.

Przeworski, A., Stokes, S.,Manin, B., 1999. *Democracy, Accountability and Representation*. New York: Cambridge University Press.

Reinikka, R., Svensson ,J.. 2005. "Fighting Corruption to Improve Schooling: Evidence from a Newspaper Campaign in Uganda". *Journal of the European Economic Association* (3): 259-67.

Rock, M., 2009. "Corruption and Democracy". *Journal of Development Studies* (45): 55-75.

Root, H., 1999. "The Importance of Being Small". Center for International Studies Working Paper No. 99-13, University of Southern California.

Rose-Ackerman, S.. 1978. *Corruption: A Study in Political Economy*. New York: Academic Press.

_____. 1999. *Corruption and Government: Causes, Consequences, and Reform*. London: Cambridge University Press.

Tanzi, V., 1998. "Corruption Around the World: Causes, Consequences, Scope and Cures". IMF Staff Papers (45): 559–594.

Tanzi, V., 1995. "Fiscal Federalism and Decentralization: A Review of Some Efficiency and Macroeconomic Aspects". In *Annual World Bank Conference on Development Economics*, *1995, World Bank, Washington, DC*.

Treisman, D., 2000. "The Causes of Corruption: A Cross-National Study". *Journal of Public Economics* (76): 399-457.

Van den Berghe, P.L.. 1987. *The Ethnic Phenomenon*. Westport, CT: Praeger,.

Vanhanen, T., 1999. "Domestic Ethnic Conflict and Ethnic Nepotism". *Journal of Peace Research* (36): 55–73

Yehoue, E., 2007. "Ethnic Diversity, Democracy, and Corruption. IMF Working Papers, WP/07/218.