CHAPTER IV
FINDINGS AND DISCUSSION

4.1   FINDINGS

4.1.1   Descriptive Statistics of Sample

Table 4.1 presents summary statistics for the key measures in regency and village characteristics used in the analysis. A more detailed description of each of these measures follows.

(a) Characteristics of Regency Level

Administrative decentralization in Indonesia in this study is measured by calculating the proportion of education level attained by village/neighborhood heads per regencies/cities. That higher education level is related to the better competency in the lowest administrative tiers of government officials or street level bureacracies in delivering public services and resolving communal conflict. The percentage of high educated chief of villages in regencies/cities in Indonesia ranges from 0% to 100%, and the average proportion per regency/city is 80% which standar deviation is 20%. This means that the percentage of village heads who attained junior high school and undergraduate in each regency/city in all around is 0,80.

Fiscal decentralization allows financial transfers from central government to local government, through the transferred block grants. Regencies/cities could spend those transferred block grant in some determined key function. These key

functions includes general affairs, educations, social protections, economic, living environment, settlement and general facilities, health, tourism and culture, and peace and order. For instance, by transferring block grants in peace and order key function, national level aims to decentralize key function to the local government to be more responsive and pro-active to establish peace and order and resolving communal conflict until lowest administrative tiers. During the period of 2007 to 2013, regencies or cities spent ranged about 100 millions IDR to 61,6 billions IDR, and in averages is 9,51 billions IDR with standard deviation is 6,50 biillions IDR (in term of logaritmic function, Log Fiscal Decentralization in all around 22.70, standar deviation 75% which range from 18.50 to 25.46) for peace and order function.

Political decentralization in Indonesia was launched by organizing people to participate in directly electing mayor in regency and city level (Pilkada). This local elections allow people to choose their mayor and giving sanction to the incumbents who did not perform well during their term and did not fulfill promises made during electoral campaigns. The indicator of political decentralization in this study is measured by computing the lag of year from the first Mayor election (calculated from database of The Ministry of Home Affairs) in each regency/city to the recent year. Regencies and Cities experienced in all around 4 years old of political decentralization. This meaning that in the period of 2008 and 2014, regencies and cities in Indonesia drave 4 years old of their direct Mayor election. Likewise, the age of the first Mayor elections ranging from 0 to 9 years in the period of 2008 to 2014. This values is a proximate to measure the mature of

democracy. The more mature democracy is indicated by the older of age of

Pilkada (Sujarwoto and Tampubolon, 2014).

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Table 4.1

Descriptive statistics of analytic sample

	Mean	Std. Dev.	Range
Communal conflict	0.03	0.17	0-1
Regency (N=510)			
Administrative Decentralization	0.80	0.20	0-1
Fiscal Decentralization	22.70	0.75	18.50-25.46
Political Decentralization	4.60	2.82	0-9
EFI	0.35	0.30	0.01-0.94
GRDP	29.60	1.26	25.33-33.53
Gini Ratio	0.31	0.05	0-0.5
NGO	132	145	0-1.151
Poverty	0.17	0.09	0.01-0.54
Eastern Indonesia	0.21	0.41	0-1
Village Characteristics (N=234.717)			
Teritorrial force fficers	114	127	0-633
Local Traditional Leaders	0.01	0.12	0-1
Community Group Social Capital	0.75	0.43	0-1
Slum Areas	0.05	0.22	0-1
Converted Land Use	0.25	0.43	0-1
Mining Areas	0.25	0.44	0-1
Television	0.71	0.45	0-1
Daily Crimes	0.47	0.50	0-1
Drought	0.03	0.18	0-1
Mountain	0.21	0.41	0-1
Valley	0.05	0.22	0-1
Seaside	0.15	0.36	0-1

Source: PODES 2008, PODES 2011, PODES 2014 and official statistics

Indonesia experiences heterogeneous ethnicity across the regencies and

cities which consists of the varied the combination of 15 largest ethnicity, e.g:

Acehnese, Minangkabau, Javanese, Sundanese, Malay, Batak, Madurese,

Buginese, Banjarese, Dayak, and Sasak. Using the index of heterogeneity

(Ethnic Franctionalization Index/EFI) quantified by Arifin, et.al (2015) in their manuscript "Quantifying Indonesia's Ethnic Diversity", this study employed this variables as one of regency characteristics. They quantified the index of ethnic heterogeneity until the regencies/cities level based on 497 regions (399 regencies and 98 cities) recorded in the 2010 indonesia population census. The index ranged from 0 (homogenous) to 0.94 (heterogeneous) (Arifin, et.al, 2015). This study used this index for regencies and cities and those new proliferated regencies/cities used the same EFI as their main regencies.

Regencies and Cities in Indonesia experiences Gross Domestic Regional Product (GRDP) per annum which was serries of publication by Central Board Statistics of Indonesia (BPS) based on current market prices for year 2008, 2011, and 2014. GRDP experiences in all around 10.000 billions IDR (excluded oil and gas) per regencies and cities. However, for the multilevel estimation purposes, I used logaritmic of GRDP for about 29,60. By considering logaritmic values, the poorest regencies or cities have log GRDP 25.33 and the richest regencies or cities experienced 33,53 log GRDP.

The standard measures of geographical inequality of economic capital is Gini Ratio (Datt and Ravallion, 1990; Kanbur and Venables, 2005). This Gini coefficient is an indicator in reflecting how economic development lead to economic growth but making larger gap between the poor and the rich. Regencies and cities Indonesia had experienced sustained relative high economic inequality for many years in all around 31%. The higher gini coeficient in this period of study is 50%.

Poverty in this study is measured by Central Board of Statistics (BPS) using basic need approach on food and non food as poverty line. BPS determined households with consume under 2.100 ccal percapita per days as poor households. The proportion of poor households per regencies and cities in this study about 17 % in average (ranging from 1 % to 54%).

Non Government Organizations in this study are the average number of Local Non Government Organizations and Foreign Non Governmental Organizations (or affiliated with foreign NGOs), e.g: Lembaga Study Pembangunan (LSP), Yayasan Dian Desa, CIDES, WALHI, Green Peace, and Oxfams. This variable also includes communities organizations, e.g: Muhammadiyyah, Nahdlatul Ulama (NU), Pemuda Pancasila (PP), and Musyawarah Kerja Gotong Royong (MKGR). Religions organizations also included in this variable, e.g: Majelis Ulama Indonesia(MUI), Persatuan Gereja Indonesia (PGI), WALUBI, and Parishada Hindu Dharma Indonesia. For further estimations, I summed those Non Government Organizations in each regency and city. They ranged in all around 132 NGOs across regencies and cities in Indonesia, but there are some regencies/cities with 1.151 NGOs

Likewise, eastern part of Indonesia coverage is included in this study. Regencies and cities in Eastern Part of Indonesia are with in Provinces in the eastern part of Indonesia, e.g: Maluku, North Maluku, Papua and West Papua. There are in all around 21 % regencies and villages in the Eastern part of indonesia (N=100 regencies and cities) of total villages in Indonesia. This variable is important since decentralization encourages local elites to create new regency governments, especially in the eastern part of Indonesia.

Territorial Force Officers (Babinsa) represents army representatives in the lowest administrative tiers of local government. They are vertically responsible to the army force of Indonesia to anticipated the potential threat to the state. In regency and cities, this territorial force officers under *Koramil* (Resort Military Command) command with in *Kodim* (district military command). Territorial force officers in each regencies or cities ranges in all around 114 army territorial force officers, and the highest number is 633 army territorial force officers in all villages within regencies.

(b) Characteristics of Villages Level

Villages and neighborhoods are lower administrative tiers within regencies and cities in Indonesia. Indonesia faces demoghraphical compotition's change of number of recidents who live in villages and neigborhoods. In 1961, Central Bureau of Statistics released the official statistics based on the 1960's Population Census, Indonesian people recided mostly in villages (85,4% or 86.700.000 people). Now, after 6 decades of that population census, people live in villages in all around (50,21% or 119.321.070 people) (BPS, 2010). They live in villages and neigborhoods which mostly proned areas related to communal conflict.

Indonesia experienced about 3 % of communal conflict in all around N= 2.300 villages/neighbourhoods accross N=511 regencies/cities in Indonesia in the period of 2008 to 2014. This number shows that Indonesia still faces a large number of communal conflict in villages / neighborhoods which could be threats for national developing agenda, especially in lowest administrative tiers. Communal conflict in the lowest administrative tiers (villages/neighborhoods

level) ranged from intervillage brawl, intergroups within villages-outgroups villages' brawls, student riot, ethnic riot, and other. In this study, brawls between villagers and the apparatus are excluded.

By reviewing qualitative literature of key determinants of communal conflict, We establish some characteristics of villages or neighborhoods characteristics as the predictors of communal conflict, e.g: the role of local traditional leader, community group social capital, slum areas, converted land use, mining areas, television, daily crimes, drought, reciding in mountanous areas, valley and seaside.

Local traditional leaders have beneficial roles, such as *Tuan Guru* in NTB provinces in resolving communal conflict around village heads' election (Kingsley, 2012), *Raja's role* in resolving communal conflict in Ambon (Brauchler, 2015), and Penghulu in Central Kalimantan in leading customary laws (Koentjaraningrat, 1964). Professor Koentjaraningrat, an Indonesian Antropolog, compiled various research by varied authors about villages communities in his manuscripts (1964) which titled " Masjarakat Desa di Indonesia Masa Kini". For Instance, those manuscripts tells that in some provinces in Indonesia, e.g in Central Kalimantan Provinces which tribes as Dayak Kaharingan, villages have two official leaders, called Pembakal (village head) for administrative services and Penghulu (customary head) in leading customary laws (laws that is backgrounded by religions and traditions). Although the two official leaders is commonly come from an election, some leaders granted their role by inheritance of bloodline. Village heads are elected by villagers, but in other case, people follow the leader granted

their role by inheritance of bloodline. For those beneficial reasons of the traditional leader role in villages in Indonesia, this study involve the dummy variable which indicates the role of traditional leader in conflict resolving. In this study, local traditional leader always involve in communal conflict resolving. There was about 1 % of villages involve local traditional leader in resolving communal conflict (n=700 villages).

Community group social capital in this study follows the measurement of social capital by Putnam (1993). Putnam (1993) found that social groups not only exert pressure to the government in providing better services, but also present models of the services in subjecting community welfare. At the same time, such groups provide a channel for the community in providing peace and order. Following Putnam (1993), We use the density of community security groups in villages to measure social capital, as a predictor of communal conflict. By calculating dummy indicator 1 for villages with community group social capital and 0 for villages with no community group social capita, We found that community social capital varies within 75% of total villages.

Villages and neighborhoods with slum areas, converted agricultural land into non agricultural use, and mining areas reflects villages or neighborhoods with villages with people reciding near slum areas, near converted agricultural land into non agricultural use, and the presence of mining areas which a density of competition over natural resources with in those villages. By calculating dummy indicator 1 for villages with people reciding near slum areas and 0 for villages with none, We found that village with people reciding near slum areas varies within 5% of total villages. By using some dummy indicator for converted

agricultural land, We found that villages with agricultural land converted to non agricultural land use (industry and settlement) varies within 25% (about N=17.500 villages and neighborhoods) with standard deviasi 43 % of total villages. Likewise, villages with mining areas are one fourth of the total villages. It is about as same number as villages with converted agricultural land into other uses.

Television in Indonesia has reformed into commercial television in two radical waves years, 1989 and 2002 (Hollander, et.al, 2009). Television has changed into commercial television. After decentralization era, not only national television (TVRI) and local television but also private national and foreign television television aired and penetrated to villages and neighborhoods. In the period of 2008 to 2014, by calculating dummy indicator 1 for villages with people reciding near slum areas and 0 for villages with none, We found that in average 71 % villages with aired public and national television, local television, and broadcasted television on foreign channel. We adjusted that this density of television channel in the villages and neighborhoods are related to its violence contents, e.g: violenced and rated R tv serries, prime time film tv, breaking news, crimes film, and criminal news.

Villages and neighborhoods experienced daily crimes as measured by density of theft, robbery, gambling, heist, lynching, raping/sex abuse, drug abuse, and firing. Those low level violence may turn into riots in villages. For Instance, Osterwal (1964) in "Masjarakat Desa Indonesia Masa Kini" told about little dispute between wife and husband turned into villages dispute in Muremarew villages in Mambaramo regency in Papua Provinces. In other case, Scambary

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(2009) found that violent between gangs in East Timor in the period of 2006-2007 could escalate into communal conflict due to overlapping of their identities and membership in the communities. By developing dummy indicator 1 for villages with daily crimes and 0 for villages with none, We found that the percentage of villages with daily crimes were in average 47 % from total villages and neighborhoods.

When a village or neighborhood experienced long natural disaster, e.g: long drought , community in the villages could be harmful. For instance, a little dispute may be occured in competing fresh water. By developing dummy indicator 1 for villages with drought and 0 for villages with none, We found that the percentage of villages with drought were in average 3 % (It is about N=2.100 villages) from total villages and neighborhoods.

Villages people may recide in mountainous area, flat land, valley, and seaside. By constructing dummy indicator on this topoghraphy areas of village (reciding in flat land are excluded), We presents that the percentage of villages or neigborhoods with people recide in mountanous valley and seaside, respectively 21%, 5 % and 15 % from the total villages and neighborhoods.

4.1.2 Geographical Distribution of Communal Conflicts and Three Type of Decentralization

In this section, geographical distribution of communal conflict and three types of decentralization (administrative decentralization, fiscal decentralization, and political decentralization) presented the figures respectively.

Figure 4.1 describes geographical distribution of communal conflict in Indonesia. The highest incidence shows at regencies accross Maluku, Sulawesi,

Papua Provinces, and West Java Provinces. Communal conflict occured mostly in Papua Provinces particularly in Tolikara, Yahukimo, and Jayapura rather than in other regencies in Papua Provinces. High density of communal conflict also occurs accross regencies and cities in North Maluku Provinces such as Ternate City, North Halmahera, South Halmahera. Tolikara, Yahukimo (in Papua Provinces), and North Halmahera, South Halmahera (in North Maluku Provinces) respectively are new created regencies which area established following decentralization period. Likewise, communal conflict densely occured in Karawang Regency and Bogor Regency.
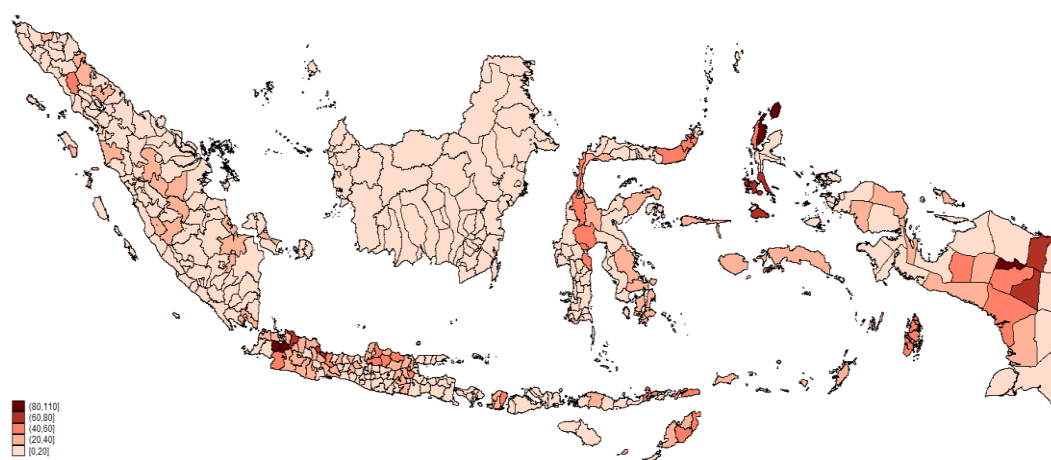

Figure 4.1. Geographical Distribution of Communal Conflicts in Indonesia (2008-2014)
Source : PODES 2008,PODES 2011,and PODES 2014. Communal conflict data calculated by author

Figure 4.2 presents the geographical distribution of administrative decentralization. From the map, we found that the lowest density of administrative decentralization were at regencies across East Nusa Tenggara

Timur, Central Kalimantan, and Papua Provinces. In those provinces, the

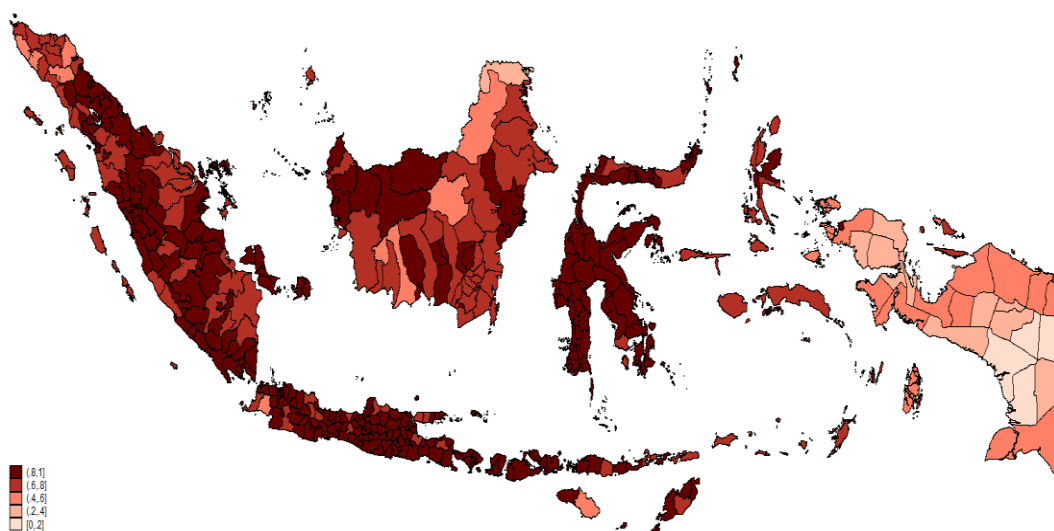proportion of the better competency of street level bureacracy who attained high

Figure 4.2. Geographical Distribution of Administrative Decentralization (2008-2014)
Source PODES 2008,PODES 2011,and PODES 2014. Level of education of chief of
village data calculated by author

education ranged to 0 % to 40 %. This means that in those three provinces, there

are regencies and cities with less than 50 % high level educate the villages head.

This represents the competency of bureacracies in delivering public services and

resolving communal conflict in those areas.

Figure 4. 3 describes geographical distribution of fiscal decentralization in

Indonesia. The highest density of fiscal decentralization, which is measured by

the number in millions rupiah of IDR spending in order and peace function key,

shows at regencies accross Riau, Kalimantan Barat, and Papua Provinces. The

transferred block grant which was spent for peace and order function in those

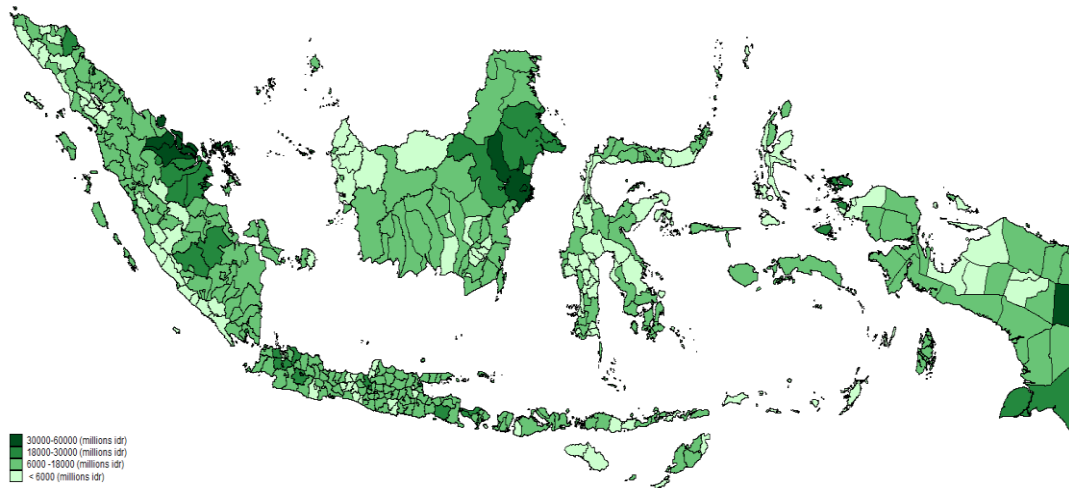regencies ranged from 30.000 Millions IDR to 60.000 Millions IDR

Figure 4. 3. Geographical Distribution of Fiscal Decentralization in Indonesia (2007-2013)
Source: Local Government Financial Information System SIKD MoF 2007,SIKD MoF
2010,and SIKD MoF 2013

Figure 4.4 describes geographical distribution of political decentralization
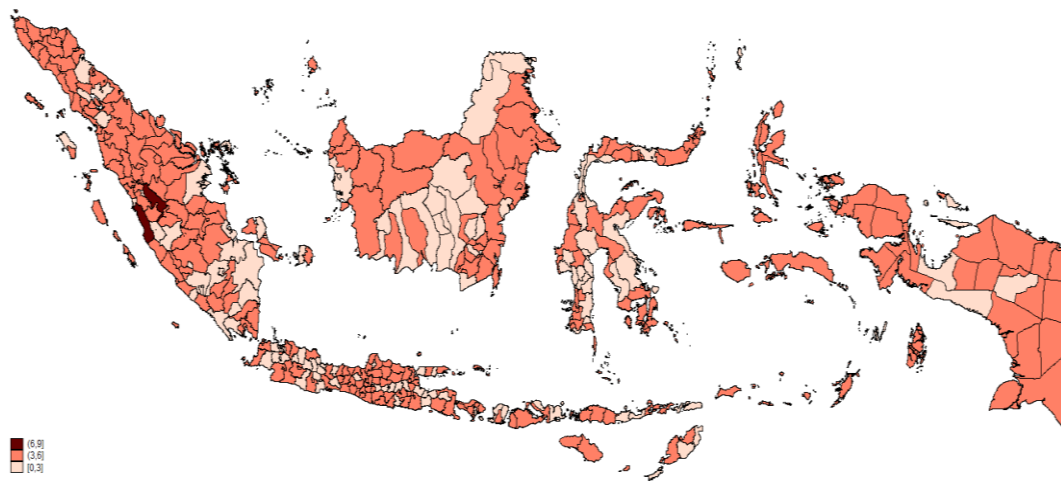

Figure 4.4 Geographical Distribution of Political Decentralization (2008-2014)
Source : The First Mayor Election in Regency/City, Database of MoH 2008

in Indonesia. Political decentralization refers to citizen's participation directly on

election the mayor in their regencies, not be appointed by central govenment.

The more mature regencies and cities in democracy are indicated by the older

age in implementing first direct mayor election (PILKADA). Regencies and Cities

Across Lampung, Kalimantan Barat, NTT, Sulawesi, and Papua Provinces experiences less mature democracy (the age of first mayor election ranged from 0 to 3 year old until 2014) rather than other provinces.

4.1.3 Multilevel Regression Result

Table 4. 2 presents regression result of the one level logit and multilevel logit, and shows the standard error for the one level logit is lower than the multilevel logit coefficient. However, the multilevel logit is more robust estimation rather than single level logistic regression due to its obeidance the nested structure of the data. By considering the nested structure of the data, estimation may accomodate the contextual effect of variances between all level and reduce bias estimation due to 'ecological falacy" or robinson effect

Administrative decentralization could decrease communal conflict in Indonesia. It is negatively associated with communal conflict (-0,47, p < 5 %, -0,86 < Confidence Interval 95% < -0.83). The higher competency of local bureacracy (as measured by the proportion per regency of the high level education attained by village and neighborhood heads) may deflate communal conflict in the period of 2008 to 2014 in Indonesia. In contrast, fiscal decentralization and political decentralization have no association with communal conflict. The association of fiscal decentralization and communal conflict and political decentralization-communal conflict nexus appears not to be significant (-0.09, p < >5%, -0,28 <Confidence Interval 95%<0,11; -0.00, p > 5%, -0.05<Confidence Interval 95%<0.04 respectively. This result shows that fiscal decentralization and political decentralization seem not to be significant factors in reducing communal conflict in the last 10 years of decentralized Indonesia.

Table 4.2 Result of Logit and Multilevel Regression of Communal Conflict

	Logit				Multilevel Logit			
	Coef.	SE	CI 95%		Coef.	SE	CI 95%	
Regency								
Administrative Decentralization	-0.63*	0.11	-0.86	-0.41	-0.47*	0.20	-0.86	-0.83
Fiscal Decentralization	-0.02	0.04	-0.10	0.07	-0.09	0.10	-0.28	0.11
Political Decentralization	-0.02*	0.01	-0.05	-0.00	-0.00	0.02	-0.05	0.04
EFI	0.42*	.07	0.29	0.55	0.59*	0.17	0.26	0.92
GRDP	-0.05*	0.02	-0.10	-0.00	-0.08	0.05	-0.17	0.02
Gini Ratio	0.03	0.36	-0.67	0.74	1.32*	0.50	0.35	2.29
NGO	0.00*	0.00	0.00	0.00	0.00	0.00	-0.00	0.00
Poverty	-0.12	0.23	-0.58	0.34	1.71*	0.48	0.76	2.65
Eastern Indonesia	0.89*	0.05	0.80	0.98	0.11	0.08	-0.05	0.27
Teritorrial force officers	0.00	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00
Village								
Local Traditional Leaders	6.84*	0.07	6.71	6.98	6.96*	0.07	6.82	7.11
Community Group Social Capital	0.19*	0.04	0.11	0.28	0.20*	0.04	0.12	0.29
Slum Areas	0.51*	0.06	0.39	0.62	0.37*	0.06	0.24	0.49
Converted Land Use	0.17*	0.04	0.10	0.25	0.19*	0.04	0.11	0.27
Mining Areas	0.17*	0.04	0.10	0.24	0.17*	0.04	0.10	0.25
Television	0.25*	0.05	0.16	0.35	0.28*	0.06	0.17	0.39
Daily Crimes	1.24*	0.04	1.17	1.32	1.21*	0.04	1.13	1.29
Drought	0.20*	0.09	0.04	0.37	0.34*	0.09	0.17	0.51
Mountain	-0.10*	0.05	-0.19	-0.00	-0.18*	0.05	-0.28	-0.08
Valley	-0.00	0.08	-0.16	0.15	0.03	0.08	-0.13	0.19
Seaside	0.40*	0.04	0.31	0.48	0.28*	0.05	0.18	0.38
Years								
2011	-0.51*	0.05	-0.61	-0.41	-0.50*	0.09	-0.68	-0.33
2014	-0.67*	0.07	-0.81	-0.54	-0.66*	0.16	-0.97	-0.36
Constants	-3.05*	0.82	-4.65	-1.45	-1.81	2.00	-5.74	2.12
N villages(2008-2014)		234.717			234.717			
N regency(2008-2014)					510			
sigma_u			0.79	0.95	0.87*	0.04	0.79	0.95
Rho			0.16	0.22	0.19	0.01	0.16	0.22
Likelihood-ratio					1.291,2*			
LR chi2(23)					25.519*			
Pseudo R2					41.28%			
reported *p<0.05								

Besides decentralization policy, the characteristics of regency or city leads to communal conflicts in villages level. Those characteristics could be risk determinants of communal conflict, such as: Index of Heterogeneity (EFI), Gini Ratio, Poverty, Gross Regional Domestic Bruto (GRDP), Number of NGO, Number of Territorial Force Officers, and Eastern part of Indonesia. EFI shows possitive association with the presence of communal conflict (0,59, $p < 5$ %). The result means that the more heterogeous of ethnicity in a regency, the higher the potential risk of communal conflict could be escalated in that regency/city. In other case, GRDP is negatively associated with communal conflicts (-0.08, $p < 5$ %). This indicates that communal conflict likely occurs in poor regencies rather than in rich regencies. Likewise, Gini Ratio and Poverty show possitive association with the presence of communal conflict (1.32, $p<5\%$ and 1.71, $p<0.5\%$ respectively). This result meaning the vertical effect of regency's economic inequality and poverty on communal conflict in village level. Those village with higher gini index (wider economic inequality gap) and higher proportion of poor people in a regency may leads to communal conflict. The density of Non Government Organization (NGO), number of territorial force officers, and eastern part of Indonesia are likely risk to communal conflict. However, results show the relationship is not significant (0.00, $p>5\%$;0.00, $p>5\%$;0.11,$p>5\%$ respectively). The number of NGOs, number of territorial force officers, and eastern part of Indonesia seem not to be risk factors of community conflict in villages, which is nested in each regencies.

The lower part of the estimation shows villages coefficient. Local traditional leaders and community group social capital in villages increase the risk of

communal conflict (6.96%, p<5% and 0.20, p<5% respectively). This meaning that the villages with higher role of local traditional leader in communal conflict mitigation leads to communal conflict. Likewise, villages with rich group social capital when individual providing channel in peace and order (for instance by creating self community security system) increase the potential risk of communal conflict. Villages with slum areas, converted agricultural land into non agricultural use also lead to communal conflict (0.37, p<5% and 0.19, p<5% respectively). Likewise, villages with mining areas also have possitive relation with communal conflict (0,17, p<5%). Those indicators present that communal conflict is often a manifestation of competition over convenient settlement, spatial planning, and scarce economic resources and the access to power to control them. Small disputes are more likely to turn into explicit communal violence conflicts if the expected economic gains from engaging in conflict exceed the potential negative consequences

Television on communities and daily crimes in villages possitively associated with communal conflict (0.28, p<5% and 1.21, p < 5% respectively). Drought, a natural disaster which is related to climate change, has significant association with communal conflict (0.34, p<5%). Likewise, reciding within villages at mountainous areas make people less experience of communal conflict (-0.18, p<5%). In contrast, villages with people reciding in seaside are proned to communal conflict (0.28, p<5%). Living within village in valley areas leads to communal conflict (0.03, p<5%), but the relationship is insignificant.

Relative to year 2008, Dummy indicator year 2011 and 2014 represents Indonesia have experienced less communal conflict. Those said years are

negatively associated with communal conflict (-0.50, p<5% and -0.66, p<5%). It indicates that communal conflict currently experience less rather than violent conflict in the first year of the implementation of radical decentralization in Indonesia.

4.2   DISCUSSIONS

The question of what the nexus of decentralization and communal conflict has long been of interest to social scientists in developing countries. Likewise, the question of what contributes to communal conflict has long been of interest, too. However, this has rarely been explored in the context of Indonesia with comprehensive geographical coverage and simultanously long period of census dataset. Using the condition of radical decentralization in Indonesia, We examine simultaneously the effect of administrative decentralization, political decentralization and fiscal decentralization on communal conflict. The main results show that administrative decentralization significantly reduced communal conflict. While fiscal and political decentralization is not. The share of high level education of street level bueraucrates decreases communal conflict and have significant association in reducing communal conflict. In contrast, null findings are found both regarding the association of the local government's expenditure on peace and order function and communal conflict with the age of first direct mayor election and communal conflict nexus.

This contrasting result seem to signal that decentralization in Indonesia decreases communal conflict through the better capacity and competency on administrative aspect of regency government, rather than through financing

capacity in delivering public services and the enhanced opportunities in chanelling citizen participation in direct political participation. Both the significantly negative association of administrative and insignificance negative relationship of fiscal decentralization confirms the finding of Duncan (2007) and Ascher and Mirovitskaya (2016). However, these studies were examining the nexus between administrative decentralization and fiscal decentralization on communal conflict by quantitative study at regency and village level in Indonesia. Its findings are thus unique, in that they show that decentralization could decrease communal conflict because of high of capacity of local leaders rather than the limited authority and deficit fund, not only in qualitative study but also in quantitative study with the larger coverage and in Indonesian context. This interesting findings show that the limited finance still enables the emergence of local leader who have capability to enhance the unity. This competency and the the capability of the local leader could become the pathway to avoid small protests and demonstrations may end up in large communal riot .

Other main findings show that regency economic inequality and poverty increase likelihood of communal conflict. Decentralization allows local governments to increase government expenditure in escalating development in regencies/cities and spending government expenditure in increasing economic growth. However, this could create wider gap of economic inequality, and create more poor people in fulfilling their basic needs. This could leads to communal conflict. As consequences, this result confirms Ukiwo (2008), as mentioned on his manuscript studying nexus of horizontal inequality and communal conflict in

Nigeria, that if socioeconomic horizontal inequality and poverty are not high, then development policy in regency level not be sufficient to provoke communal conflict.

The result confirms that communal conflicts is strongly associated with ethnic heterogeneity. The significantly positive association of Index of ethnic heterogeneity (EFI) and communal conflict confirms the postulates of Hegree, et,al, (2001) that communal conflicts are rooted in the dynamics of difference within inter-group relations where groups saw themselves as different due to ethnic and culture background. Likewise, this result confirms the findings of Green (2008) that in developing countries, such as in Uganda, communal conflict that strongly associated to ethnicity. For Indonesian context, this result confirms the arguments of Klinklen (2007) that ethnic heterogeneity are the main determinants of communal conflict in Indonesia. Variation in ethnic diversity is seen across islands although provinces and districts in the Island of Java are more likely to be homogeneous, less fractionalized and less polarized than provinces and districts outside Java Island (Arifin, et.al, 2015). That is why communal conflict related to heterogeneity of ethnicity are commonly occured in provinces and regencies outside Java island (for instance, See Aragon, 2001 and Bertrand, 2016). This result also confirms the postulates of Nasikun (1993), who stratified the social structure in Indonesia as horizontal and vertical, that competing in heterogeneity communities could make cross cutting its social stratification and lead to communal conflict. Regencies and cities with more heterogenous ethnicity lead to likelihood of communal conflict. Hence, this findings mean that in Indonesia, communal conflict seems to occur commonly related to more heterogenous of ethnicity rather than decentralization policy.

Some findings at village level contradict while others confirm prior studies. For instance, First, the result contradicts (McIlwaine and Moser, 2001; Galea, et.al, 2002) that in village level, community group social capital linked with communal conflict conversely. While in this study, the result shows that in a mostly proned areas to communal conflict, a density of social capital is high. Villages with more abundant community group social capital are possitively associated with communal conflict. How can we interpret this finding? It may be that community group social capital associated with ethnic diversity. In ethnic diversed communities, their bonding social capital are more powerful than their bridging social capital. Likewise, the same pattern is indeed found for the density of local traditional leaders. The presence of the role of local traditional leaders is associated with higher level of communal conflict. This finding contradicts Local traditional leaders have beneficial roles in resolving communal conflict (for example see Kingsley, 2012 and Brauchler, 2015). How can we interpret such findings? It may be that the local traditional leaders play some integrative role, even in areas with which are ethnically heterogenous. In more heterogenous areas, the role of traditional leader may possitively associated in communal conflict rather than in less homogenous ethnicity. However, this finding may reflect bias, in case that ethnic heterogeneity not yet be controlled by religious diversity. In previous study, Barron, et.al (2004) shows that in areas with great ethnic diversity, but relative religious homogeneity, such as NTT provinces, religious bodies are ofter the only authority that has the respect of all elements of society. To capture more robust finding, future study may operationalize religion heterogeneity in controlling communal conflict, besides ethnic diversity measures.

Second, the result confirms Barron, et. al (2009) that key determinants of communal conflict in village level related to competition to access limited natural resources, natural disaster and cropland's shrinking to non cropland use. In economic determinant perspective, the presence of mining areas and natural disaster related to climate (drought) in villages level shows the manifestation of competition over scarce and the access rights in controling them. Indeed, some research has shown that competing scarce natural resource and drought are associated with communal conflict such as in Indonesia and Syria (For example respectively see, Tadjoeddin, et.al (2001) and Gleick, 2014). For instance in Indonesia, Sukmawan, et.al (2012) shows by their qualitative study that competition over clean water could escalates to communal conflict between two villages in the border Boyolali Regency and Semarang Regency. The same pattern are shown by the nexus between converting land and communal conflict. In other case, The land conversion from agricultural use into non agricultural use are likelihood of communal conflict. In villages level when cropland, especially communal cropland is shrinking in availability and turn into non cropland use could trigger to communal conflict. Firstly, these conflicts emerge due to commonly reason that communal cropland represents unclear property right to whom the land belongs to (Barron, et.al (2009). Secondly, that main incomes of villagers is in agricultural sectors, conversion of cropland to noncrop land use makes the agricultural land is scarce resources (Lambin and Meyfroidt, 2011) and farmers looses their main income (Lambin and Meyfroidt, 2011; Fazal, 2001). For instance, in India, expansion of Saharanpur city emerges substantial loss of agricultural land and associated with urban expansion which is encroaching upon

fertile agricultural land. Thirdly, The unfair allocation of land and housing could lead to communal conflict (McIlwaine and Moser, 2001). While in Guaetamala, communal fighting commonly over land tenure due to the reasons that people felts unfairly dealt for the allocation of land and housing.

The also result confirm (Sanyal and Mukhija, 2001) that slum areas could be a latent factor in creating communal conflict related to mismanagement in housing allocation in Mumbai India. The variability of communal conflict is possitively associated with inequality in housing and living (as measured by density of slum areas in villages level). The presence of slum areas shows that development yet not fullfills economic equality and prosperity.

Moreover, two fruitful finding in village level shows the linkage of television and daily crimes and communal conflict respectively. First, the findings confirms that television includes prime times on cable television links to violent behavior which may be escalated to communal conflict (Sheehan (1991); Bridgman, 1996; Weaver, 1996; Smith, et.al 2002). For instance, Sheehan (1991) shows viewers on television were more prone to influence from real televised violence as opposed to fictional or unreal televised violence. Moreover, the results confirms (Osterwal, 1964 and Scambary, 2009) that daily crimes, as measured by low level violence may turn into riots in villages could predicts variability of communal conflict in villages. Likewise, redicing in villages within seaside much experienced in communal conflict rather than in mountainous areas.

This study has several limitations. First, because of its two level design (regency and village level) we have to be cautious about the possible causality of associations. The estimated coefficient should be viewed as a measure of

association, rather than causation. The reasons for decentralization have no associated with communal conflict (except administrative decentralization type) may be caused by the possibility of causality effect of decentralization and communal conflict. The causality make biased estimated wether decentralization effect communal conflict or communal conflict determined decentralization implementation. The causal effect on decentralization and communal conflict is something with future research, using panel data on communal conflict and the most appropriate method, should seek to establish. Second, the measurement of communal conflict in this study seems to be poor because of two reasons. First, communal conflict is measured by constructing only dummy variable. This method allow to identifying determinant of communal conflict in villages level only capture whether or not a determinant of communal conflict occured in the villages. More robust measurement of communal conflict should consider the number of communal conflict and number of death and material damage related to communal conflict. Indeed, PODES 2008 has measured the events of communal conflict, number of death and material damage which is related to communal conflict. However, two current PODES datasete (PODES 2011 and PODES 2014 respectively) yet no included those measurement anymore. Second, this communal conflict measurement yet no denying the ' recall bias". This bias is associated with key informants of PODES census who are village heads. The information of the presence of communal conflict by subjecting only to a key informant is less accurate because of their capacity of memory and less administrative capacity in administrating the real communal conflict. The measure may be over estimate or may be under estimate.   Third, the age of first mayor

election in Indonesia (which this study uses) is not only one in measuring the maturity of democracy as indicators of political decentralization. Maturity of democracy could be multidimensional indicators includes the age of the first mayor election .

Despite these limitations, this study has several important contributions on the literature and communal conflict management policy in developing countries which is very rare (For example see Sakai, 2002 and Brancati, 2006) . First, this study highlights that decentralization only work through better competency of bureaucracy in improving decentralization outcomes such as in respectively study on improving quality of citizen happiness, poverty reduction, and corruption erradication (for example see Sujarwoto and Tampubolon, 2014; Jutting, et.al, 2004; Kaufman, 1969). In this study, I found that through better competency of street level bureucracy could improve decentralization outcomes in communal conflict resolution in Indonesia. In terms of communal conflict reduction depends on the competency and the capability of local governments in controling how small protests and demonstrations not to end up in large escalated communal riot. Second, our findings suggest that the ultimate goal of decentralization should not necessarily to increase economic growth, but more importantly to improve economic equality and poverty reduction, and to do so through the provision of better policies and services. This policy make socioeconomic and political stability in delivering peace and order until lower administrative tiers level to succeed the sustainable development. Third, this study takes into account external determinant of communal conflict besides decentralization. For instance, This study shows that ethnic diversity in districts level could alleviate the risk

factor of some variability of communal conflict until lower administrative tiers, e.g: local traditional leaders, and community group social capital. Ethnic diversity may cause that local traditional leaders not effective in handling conflict in heterogeneous areas, even are associated with higher level of communal conflict. This same pattern are shown by community group social capital. The result shows that a area with more abundant community group social capital are possitively associated with communal conflict. This may be intrepreted that in more heterogenous villages, community group social capital are most strong in bonding social capital rather bridging social capital. Relative, that in more heterogenous areas, social cohesion is more fragile rather than in less homogenous areas. Future study could take this pattern into account in showing more robust finding. This study also shows other key determinants of communal conflict in village level, e.g: slum areas, television and daily crimes. This study contributes to Barron, et.al (2006) finding, that this variable could be additional key determinants in associating with communal conflict's variability in lower administrative tiers.