

**Expensive and Dangerous**  
**Revisiting the role of natural resources on conflict in Indonesia**

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ABSTRACT

Indonesia has been renowned as one of the countries that manage to have escaped the natural resource curse (Rosser 2007). This paper presents an analysis of the six Indonesian high-conflict provinces utilizing the recently acquired ViCIS dataset. Preliminary findings from the qualitative case studies challenge the extent of the argument: even though natural resources by itself do not lead to inevitable conflict, it holds an important role in Indonesia's development. Its complex interaction with other socio-economic factors such as inequality, poverty, ethnic or religious grievances, and political instabilities should be given closer scrutiny. Recent increases in the global commodity price trends present a growing challenge in better management of these resources. Furthermore, this paper concurs with Bertrand (2004) in the importance of the New Order legacies in characterizing conflict in Indonesia today.

*Keywords:* Indonesia, conflict, high-conflict provinces, natural resources, commodity management

## Table of contents

1 Introduction .....	1
2 Link between natural resources and conflict .....	3
3 Theoretical framework .....	6
4 Application: The case of Indonesia .....	9
4.1 Indonesia's resource-based development.....	9
4.2 Indonesia's resource-driven conflict.....	11
4.3 Choice of methodology.....	14
4.4 Case studies.....	17
4.4.1 Aceh: exploitation and secessionist insurgencies.....	17
4.4.2 Papua and West Papua: exclusion and minor secessionist insurgencies.....	20
4.4.3 The Malukus and Central Sulawesi: changing balance of power and religious wars .....	24
6 Discussions and recommendations for future researches .....	28
7 Appendix .....	29
7.1 Spatial distribution of the high-conflict provinces .....	29
7.2 Ethnic diversity measure .....	29
7.3 Ethnic polarization measure .....	30
7.4 Ethnic dominance .....	30
8 References .....	31

## List of figures

Figure 1 – The evolution of oil and gas revenue as a percentage of domestic revenue

Figure 2a and 2b – Conflict dynamics in the six high-conflict provinces

Figure 3 – The evolution of resource dependence, 1998-2007

## List of tables

Table 1 – Socio-economic indicators to explain conflict in Indonesia

Table 2 – The resource rich regions: characteristics of resources and conflict

Table 3 – Growth of regional GDP and population

Table 4 – Changes in inequality and poverty between rural and urban areas in 2002-07

Table 5 – Ethnic and religious measures of diversity, polarisation and presence of dominance

## 1 Introduction

Over the last decade, there has been a rich addition in the literature of conflict with greater attention put towards headline conflicts and civil wars. The emerging field studying the microeconomics of civil wars emphasized the need towards understanding the conditions and underlying factors to better explain conflict. A country classifies to be in a civil war when it records at least 1,000 battle-related deaths per year (Collier and Hoeffler 2004). However, in most developing countries conflict does not escalate to that scale. Localized, lower intensity conflicts are more commonly observed (Ayres 1998, Moser and Rodgers 2005). One perspective contends that conflict in itself should be considered as an integral part of the development process as the latter is inherently conflictual (Gleditsch et al. 2003). Bates (2000) argues that phenomena typical in development process – for instance weak institutional framework, realignment of power and resources, and changing values and interests – can lead to social tensions and conflict.

Internationally, the discussion on how natural resource wealth is linked to social unrest has been given more scrutiny. Cross country studies have dominated the literature, while the results have posed some implications to global governance and management of resources<sup>1</sup>. Admittedly, natural resources by itself are rarely the only source of conflict; interaction of more complex issues such as poverty, ethnic grievances or political instabilities can be the catalysts. But even after taking into account these factors, studies have found that mismanagement of natural resources tend to be associated with the civil wars. Countries that are dependent on natural resources tend to have a higher probability of a conflict outbreak, and furthermore it tends to prolong it (Collier and Hoeffler 2004). This ‘curse’ however is not an inevitably clear cut predicament, and its prevailing effect is conditional on several factors. Factors that are consistently found to be decisive are the presence of ethnic diversity, governance and institutional quality (Mehlum et al. 2006).

Due to its relatively lower magnitude in episodes of conflict, Indonesia rarely falls within the conventional study of resource curse and conflict. As a consequence, it has not been adequately incorporated into the comparative and theoretical studies on conflicts despite its relevance. Considering its diversity and richness in natural resources, the Indonesian material is too compelling to be left out. Indeed, ever since its independence in 1949, internal conflict has been marred throughout the archipelago (Mancini 2005, Barron et al. 2009). A recent World Bank report finds that the increasing trend in global commodity prices is associated with social unrests in Indonesia (World Bank 2010b). It presents a growing challenge for better resource management in diverse and resource-rich countries.

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<sup>1</sup> For instance the UN’s Kimberley Process to regulate the diamond market.

Until today, there is no theory that explains conflict in Indonesia. Instead, variations are found both in the focus and the underlying methodology. Excluding conflicts in Indonesia on this ground pose the risk of under estimating their impact on Indonesia's future growth. Failure to properly address the causes of conflicts presents a significant challenge in preserving human security, a crucial component of welfare, which in the long run constitutes a challenge for development. The objective of this paper is to firstly contribute to the variation in the Indonesian conflict literature by collectively studying the 'high-conflict' provinces. Secondly, to analyze the extent to which natural resources play a part in triggering and sustaining conflict in Indonesia. Potential mechanisms that link the two will be elaborated. Thirdly, to consider policy implications that should be taken into account for future conflict prevention and resolution.

This paper does so by firstly summarizing the international literature on natural resources and conflict, supplemented by an extensive study into the Indonesian-specific literature. This study contributes towards identifying and understanding the distribution and trends of violent conflict in post-Soeharto Indonesia. This paper then utilizes preliminary data from six high-conflict provinces piloted in the ViCIS dataset by World Bank Indonesia. These include the provinces of Nanggroe Aceh Darussalam, Papua, West Papua, Maluku, North Maluku and Central Sulawesi. Case studies accommodated by qualitative research are conducted to assess the relevant cause and drivers of conflict. To the extent of the author's knowledge, this paper is the first attempt to collectively assess the local factors that contribute to conflict in the high-conflict provinces. Studies directed specifically on high-conflict provinces have commonly been found in separate form<sup>2</sup>. Furthermore, an analysis of the implication for future government responses to help in preventing and resolving similar conflict follows.

The analysis of the case studies indicates that the exploitation of natural resources by itself does not lead to conflict. The management of natural resources however remains a significant challenge for most of the provinces. Furthermore, the case studies correspond to the argument of Bertrand (2004) that conflict in Indonesia today derives much of its cause to the policies pursued during the New Order. The feeling of exploitation and exclusion felt by the native community triggered separatist sentiments which broke into a civil war in Aceh and is ongoing in Papua. Mismanagement of natural resources through policies and changes that disrupted existing balances of power between groups enhanced tensions. This is especially the case for Maluku, North Maluku and Central Sulawesi. It calls for a better understanding of the violent legacies of the New Order to address the underlying factors that precipitate tensions.

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<sup>2</sup> For example see Van Klinken (2001) on Maluku and North Maluku, Acciaioli (2001) on Central Sulawesi, Reid (2006) on Aceh, and Chauvel (2005) on Papua.

Similarly, the case studies highlight the importance of natural resources in Indonesia's socio-economic development. The increasingly expensive global commodity prices present a growing challenge for diverse and resource-rich countries such as Indonesia. Unfortunately, Indonesia has not been able to acclaim the potential benefits of this long term trend (World Bank 2010b). Social unrests have accompanied continual mismanagement of resources. The case studies highlight similar trend: mismanagement is prone to exacerbate inequality between groups, contributing to grievances and tensions. Greed from historical patronage networks characterizing group relationships induced competition for power and influence for the control of resources. Grievances may lead to social tensions when the benefits of the increasingly valuable resources are not equally distributed. Furthermore, the intensity of conflict tends to be amplified when inequality between groups coexist with differences in identity. In Maluku, North Maluku and Papua in particular the competition for economic and political power is fundamental in explaining the religious wars. Preliminary findings of this paper challenge the extent of which Indonesia is claimed to have successfully escaped the natural resource curse (Rosser 2007).

This paper will be organized as follows: Section 2 reviews the international literature on resource-conflicts. Specifically, the Collier-Hoeffler model of predictors of civil wars will be discussed in section 3 as the underlying theoretical framework used to analyze conflict in Indonesia. Section 4 concerns Indonesia-specific literature on the role of natural resources in its development and conflict. Case studies on each of the six high-conflict provinces will be addressed. Section 5 concludes.

## **2 Link between natural resources and conflict**

The development economics literature prior to the 1980s was based on the belief that a country's richness in natural resources is beneficial in promoting development. However, later researchers reveal the contrary. Their findings suggest that natural resource abundance is more likely to be linked to negative development outcomes. Auty (1993) argues that the favourable impact of resource endowments is more detrimental in low and medium income countries. Sachs and Warner (1995) found that resource-rich countries, measured by the ratio of natural export to GDP, tended to grow relatively slower. In the literature, the channels by which resource abundance can give rise to negative development outcomes can be categorized economically, politically and socially. This paper focuses on the last channel.

Economically, the disincentive to productive entrepreneurship and the presence of the 'Dutch Disease' are often found. A resource boom can provide a disincentive to economic agents by reducing the returns to entrepreneurship as compared to rent-seeking. This process might result in the loss of productive human capital necessary for economic growth (Baland and Francois 2000). The 'Dutch

Disease' refers to the economic disruption in the tradable sector originating from an inflow of foreign currency due to a very productive export sector. In the case of the Netherlands, the discovery and subsequent export operation in natural gas contributed to changes in relative prices between the tradable and non-tradable sector of the economy (Neary and Wijngarden 1986). The change in relative prices allocates resources to non-traded goods, crowding out the tradable manufacturing sector. Overtime, the economy weakens as a result of the loss in the skills from these areas (Krugman 1987)<sup>3</sup>.

Politically, countries abundant in natural resources are often linked with proneness to institutional failure and often lacking in democracy. Mavrotas et al. (2006) argue that countries reliant in point-source type of natural resources suffer from lack of governance quality and democracy, which in turn hinders growth. Furthermore, Ross (2001, 2004) found that revenues for governments in resource-rich countries tend to be dominated from resource rents and less from taxes. The imposition of low taxes reduces the incentive for governments to be representative and accountable, the two keys for effective and responsible governance (Collier 2010).

Socially, the role of natural resources in fuelling conflict is focused on in this paper. Since the late 1990s, scholars have tried to analyze the relationship between natural resources and civil war. The links between them are generally analyzed in terms of motive and feasibility. In terms of motive, *grievance* and *greed* is most commonly found in the literature. Grievance includes discontent from inequality, political rights, ethnic polarization and religious fractionalization. It deals with the sense of injustice in the way a particular group is treated, and often has a historical background. Greed refers to the ability of state or non-state actors to control and exploit resource-rents. Natural resource abundance offers the incentive for some groups to resort to violence in fighting for control. Resource rent can also provide the financing required for rebel groups.

Collier and Hoeffler (2004) analyzed greed and grievance in predicting civil wars and concludes that greed is the more significant predictor to its onset, duration and intensity. Their threshold of civil war is 1,000 battle-related deaths per year. Collier (2001) found that countries with a larger share of their GDP deriving from primary commodities are significantly more at risk of conflict, especially when the rent is easily controllable. He concludes that "the true cause of much civil conflict is not the loud discourse of grievance but the silent force of greed" (Collier 2001). Moreover, primary resource dependence is also associated with poor public service provision, corruption and economic mismanagement (Sachs and Warner 2001). Analyzing specifically on the case of Indonesia, Tadjoeidin (2007) argue that grievance is however more relevant. Both will be analyzed further in the next sections.

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<sup>3</sup> The term 'Dutch Disease' was coined by *The Economist* in 1977 in describing the decline of the manufacturing sector in the Netherlands following the discovery of natural gas in the North Sea in the 1960s.

Further researches have extended the focus in differentiating between different types of commodities and their respective impacts. Auty (2004) distinguished between point-source (oil, gas, minerals) and diffuse resources (timber, cocoa, opium, diamonds). Addison and Murshed (2001) argue that point-source has a higher risk in fuelling unrest. Ross (2003) differentiated resources on the degree of lootability. With a series of case studies, he found that lootable natural resources tend to ignite local conflict as they can be extracted by local unskilled labor. Resources that are non-lootable tend to breed separatist conflicts due to the fact that these resources tend to be controlled by the central government and/or foreign firms with respect to the degree of capital and skills involved in extracting them.

A short summary of the resource-conflict literature found that: (1) oil dependence is mostly linked to the onset of civil war and is strongly correlated with separatist movements (Collier and Hoeffler 2002); (2) lootable resources is believed to affect the duration of civil war (de Soysa 2002); and (3) there is no robust link between conflict and primary commodities (Fearon and Laitin 2003). Le Billon goes even further by incorporating distance: regions which are rich in point-source resources and close (distant) to the capital is prone to conflict over state control (separatist conflict), diffuse resources that are close (distant) to the capital are involved in rebellions and rioting (warlordism).

A number of studies have also focused on a more dynamic version of the literature, notably asking what happens when the prices of these commodities were to change. Guenther (2008) argues that resource conflicts are a function of price and the rent it generates. The effect of the price function affects the share of commodity sector on GDP, the variable most commonly used to measure dependence. Higher commodity prices therefore are associated with higher dependence on the primary sector as the *value* or the share of the net export in the economy increases. Goldstein et al. (2006) found that China and India's contribution in driving up commodity input prices has dramatically increase the commodity dependence of conflict-ridden, developing countries in Africa.

A recent report by the World Bank (2010b) identified main factors that drive these increases in commodity prices. Majority of the rise (approximately 70%) was derived from policies toward the adoption of biodiesel introduced in the EU (2001) and the US (2004). This policy provided an incentive for wheat-producing countries to dedicate their land to produce oil seeds for biodiesel, constraining wheat supply globally. The upward trend in the price of rice was found to be an indirect spill over effect of this policy; speculation rather than actual shocks played a higher role in the price increase. As a result, rice-producing countries like Thailand and Vietnam employed export bans on the ground of self-sufficiency, exacerbating the rise. Other cited costs include the increase in the cost of energy, fertilizer, natural disasters, declining value of US\$ and higher investors' involvement in commodities.

Theoretically, increases in the price of commodities should have a positive impact on countries rich in natural resources such as Indonesia. Indeed, this positive relationship through the country's commodity export is highlighted by (Deaton 1999). In a recent research, Collier and Goderis (2009) found evidence for a *conditional* resource curse, where the effect of commodity boom on growth differs in the short and long run. In the short run, they confirm the existence of the positive relationship while in the long run an adverse impact especially from high-rent, non-agricultural commodities are recorded. Their findings follow the growing conclusion in the literature in the importance of governance (Mehlum et al. 2006). The difference between countries rich in natural resources which are 'growth winners' and 'growth losers' lies in the quality of their institutions. Countries with a more 'grabber-friendly' system are more prone to conflict. It highlights the crucial importance of a country's government to be able to foster an open system that encourages productive activity for its citizens in order to fully benefit from its natural resource abundance.

To summarize, the effect of natural resource abundance on the economic development of a country depends on a number of factor, most notably income and institutional quality. The natural-resource curse proclaims that countries that are dependent on natural resources in fuelling its growth are often associated with detrimental economic performances. Resource dependence may bring about economic disruptions either economically, politically or socially. Recently, these resources are becoming increasingly more expensive, posing a growing challenge for conflict management in resource-dependent countries.

### **3 Theoretical framework**

This paper analyzes the role of natural resources in explaining conflict in Indonesia through the conventional Collier and Hoeffler (CH) model (2004). Understanding the extent of its impact is crucial in order to further study the growing challenge for managing these increasingly expensive resources. Not all factors that are present in the original model will be analyzed in this paper. A review will precede the selection and justification of relevant factors and proxies for the case of Indonesia. This paper will utilise these relevant factors to explain conflict in the high-conflict provinces in Indonesia (Table 1). Although this framework will be the main underlying analysis, other relevant factors will be discussed whenever necessary.

The main argument made by the CH model is that the probability of the outbreak of civil war depends on motivation and *feasibility*. Motivation can either be in the form of *greed* or *grievance*. Different proxies are used to measure these three main factors:



**Greed** refers to the ability of a state or non-state actor to exploit rent derived from resources especially when it is used to finance rebel organizations. Three proxies of sources of income to finance rebel activities include profitability of extraction, diaspora funding and hostile government financing. Firstly, the possibility of financing from *diasporas* is measured by the share of emigrants from the US. Although this argument seems to be relevant, and the lack of data on diaspora transfers in Indonesia hinders further analysis. However, several authors have noted the importance of financing from diasporas in sustaining GAM in Aceh. This highlights the relevance to incorporate diaspora in future researches. Secondly, another potential rebel financing is derived from another country's *hostile government*. So far, no evidence can be found that another province or country was supporting conflict financially, and therefore this factor will be excluded. Thirdly, the proxy used to measure profitability is *resource dependence*, measured by the share of revenue derived from primary commodity exports to GDP. Hirshleifer's (2001) 'Machiavelli Theorem' contends that no rational agent will pass up a profit opportunity even when they have to resort to exploitation or violence. A higher dependence on primary commodity sector will be associated with a higher incidence of conflict. As this paper is done on a provincial level, the proxy of resource dependence will instead be the share of primary commodities in the regional GDP.

**Feasibility** refers to opportunities of conflict that can be derived from either lower direct cost or opportunity costs of undertaking rebellion. Firstly, the *mean income per capita* can be a proxy of income from the productive sector in the economy. Lack of *education* in terms of secondary schooling can also help to explain the outbreak of conflict. Unfortunately, both are prone to be correlated with a number of different things, and direct interpretations will be spurious. As no significant relationship is procured, this study will exclude these factors. Secondly, the availability of *cheap conflict capital* such as guns and other weaponry can provide further incentive. Couple with a *weak government military* force, conflict outbreak is almost certain to be present. The difficulties in measuring these, along with data constraints however prevent further analysis of these factors. Thirdly, lower *growth in GDP per capita* will lead to lowers the foregone earnings; consequently reducing the required benefit of engaging in a conflict activity. Indeed, CH found that conflict activities are more likely when preceded by lower growth. This paper will combine the analysis of GDP growth with other grievance variables discussed below.

**Grievance** refers to the feeling of discontent of the community either from inequality, political rights, ethnic (or religious) polarization or fractionalization. It deals with the sense of injustice in the way a treatment received by a particular group, either historically or when recently propelled by an event such as commodity boom. Firstly, the discussion of *relative deprivation theory* will be elaborated. Relative deprivation theory relates psychological discontent and aggression, resulting from the comparison of material well-being in relative terms. While the majority sees their land's richness

being degraded yet they became relatively worse off, this might give rise to grievance. Indeed, Gurr (1993) agrees by stating that relative deprivation is a pre-condition for any civil strife to occur. The growth of the regional economy can lead to the deprivation of certain groups when it is accompanied by a similar increase in inequality and poverty. Sen (1973) writes that “the relation between inequality and conflict is indeed a close one”. Increasing inequality and/or poverty accompanied by a positive GRDP growth will affect the incidence in conflict positively. The use of Gini coefficient as a proxy of inequality between groups will be used in this paper.

Secondly, the effect of distinction in group identities will exacerbate any inequality that occurs. This is especially vital when group identity is marked by distinction in race, ethnic, religion or class. In this paper, both ethnic and religious distinctions will be taken into account. A province that is more heterogeneous would be associated with a higher incidence of conflict. However, diversity can also make it harder to organize unrest. Indeed, several authors agree that it is indeed polarisation rather than fractionalisation that is more significant in explaining conflict. A province that is more polarised would be associated with a higher incidence of conflict<sup>4</sup>. Another possible channel is through the existence of ethnic dominance. Following CH, ethnic dominance is defined when an ethnic group constitute 45-90% of the composition of a province, for instance the Javanese. The violence exerted by the dominant ethnic group towards the minority in the province will be analyzed. An interesting extension would be to see whether the existence of a *market-dominant* minority, for instance the ethnic Chinese, also contributes to conflict (Chua 2000). Due to lack of data in distinction of income by ethnic groups, restricted analysis will be undertaken. Thirdly, the political exclusion or repression by the government towards a particular group will also potentially contribute to grievance. In this case, this paper will only refer to studies that record such an occurrence. However, it should be noted that the wave of decentralisation of provincial autonomy since 2002 was introduced in Indonesia to address this particular issue.

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<sup>4</sup> The measurement of diversity and polarisation can be found in Appendix 2 and 3.

Factor	Proxy	Source
Resource dependence	Share of primary commodities in the regional GDP	BPS
Economic growth	Economic growth adjusted for population growth	BPS
Ethnic (religious) diversity	Ethnolinguistic Fractionalization index (EFL)	Own calculation; data from Suryadinata et al. (2003)
Ethnic (religious) polarisation	Polarisation index (POL)	Own calculation; data from Suryadinata et al. (2003)
Ethnic dominance	An ethnic group constitutes 45-90% of the population	Suryadinata et al. (2003)
Economic inequality	Gini index	SUSENAS
Poverty	Share of the population in poverty	SUSENAS

*Table 1 – Socio-economic indicators to explain conflict in Indonesia*

#### **4 Application: The case of Indonesia**

This section reviews and discusses the Indonesian-specific literature on the history of development and conflicts. The role of natural resources in explaining unrests will be analyzed using the socio-economic indicators presented in Table 1. Preliminary data from the World Bank's ViCIS dataset focuses the analysis on the six high-conflict provinces. Initial findings indicate that the extraction of natural resources does not by itself give rise to unrests. The competition for control of these resources, rather than its presence, is inherent in all provinces. Indeed, conflicts stem from complex interactions between historical socio-economic and political factors. Understanding of local factors in group relations is crucial for effective conflict prevention and resolution. The increasingly expensive commodity prices present a growing challenge, highlighting the findings of Mehlum et al. (2006) for better resource governance for preventing and resolving conflict effectively.

##### *4.1 Indonesia's resource-based development*

Indonesia is an archipelago comprising of five major regions and approximately 18,000 islands. Stretched between the strategic coastal lines between the Indian and the Pacific oceans, it is characterized by significant diversity in its regional, ethnic, linguistic and religious features. After three centuries of Dutch colonialism, Indonesia gained independence in 1949 and has afterwards been marred by internal conflict. Rebellions by the Indonesia's outer islands to secede were brutally suppressed by the first president Soekarno. A failed coup by the communist party in 1965 paved the beginning of the New Order under president Soeharto which lasted from 1967-1998 (Mancini 2005).

Under Soeharto, Indonesia’s economy enjoyed a period of stability, complemented by social and economic developments from the centralized national control and strong role of the military. Between the 1960s-1990s, Indonesia’s legislation was focused on promoting national development. The economy was largely controlled by Soeharto’s cronies, including the military, family members and elite business men (mostly Chinese-Indonesians) (Kuncoro and Resosudarmo 2006). In the early 1980s, the burst of the oil price boom had severe consequences on the stability especially because oil, through the state controlled firm Pertamina, had been the major source of the government’s patronage revenue (Figure 1). This external shock propelled reforms to reduce the reliance on resource-driven development. Reforms were enacted to competitively diversify the economy by promoting the commodities, manufacturing and banking sectors.

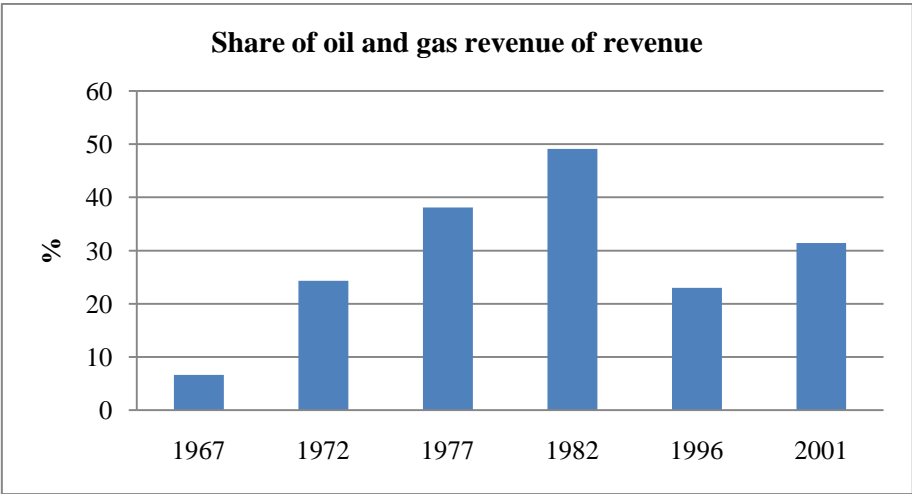


Figure 1 – The evolution of oil and gas revenue as a percentage of domestic revenue  
 Source: World Bank data (as shown in Tadjoeeddin 2007)

Economic deregulation was implemented in structural adjustment packages that aimed to liberalize trade, deregulate its financial sector and encourage foreign investment. Tariffs and incessant custom requirements were significantly cut down. However, manufacturing and FDI remained concentrated only in Java and Sumatra, leaving the outer islands to be more relatively dependent on the primary agricultural sector (Sjöholm 2002). By mid-1990s, Indonesia had become the largest exporter of LNG and timber, the second largest of tin, and third largest for thermal coal and copper worldwide. On the other hand, it became a net importer of basic agricultural items such as staple rice, maize and soya bean (Resosudarmo 2005). The positive outcome of the reform also contributed to the tradable sector, and the combination sustained economic growth. Indonesia’s social and economic development was commended with praises from the international community: growth averaged between 6-7%, poverty headcount dropped from 70% to 30%, vertical inequality measured by Gini index was stable around 0.32-0.35 (UNDP, BAPPENAS and BPS 2001).

These developments were abruptly halted during the Asian financial crisis in 1997 and the subsequent fall of the New Order in 1998. The staggering decrease in the value of the Rupiah rapidly spread into the economy through the surge in inflation. Poverty rate increased from 15% in 1997 to 33% the next year, real GDP fell by 14% and inflation rose by 78% (Mancini 2005). The most dramatic was perhaps the rise in food prices, of which Indonesia is a net importer. Domestic rice price rose by approximately 200% and has remained above world price ever since (Friedman and Levinsohn 2001; World Bank 2010b). The increase of staple food price had a disproportionate impact on the poor as it constitutes a higher share of their expenditure. Ethno-communal conflict similarly appeared to erupt throughout the archipelago (Bertrand 2004). Protests and inter-group conflict accompanied Indonesia's transition to democracy, while separatist movements broke in Aceh and Papua. The collapse of the New Order left violent legacies that characterize conflict in Indonesia today.

Recently, different authors have argued that conflict in Indonesia was not in fact caused by the fall of the New Order, but it was inherent even during this period. Even though conflict roots in Indonesia's history stems further before the New Order, Soeharto's centralized, patrimonialistic and authoritarian regime's failure in creating a pluralistic society to reflect the diversity of the archipelago has been cited as one of the major contributors (Mancini 2005)<sup>5</sup>. Bertrand (2004) found that the New Order regime itself was pillared by violence. It was not the consequent fall of its 'disciplinary mechanisms' that erupted conflict, but rather the New Order is in itself the cause of conflict (Bertrand 2004). Contrary to previous belief, Indonesia before 1998 was not relatively more peaceful. Varshney et al. (2008) found evidences of the use of state-penetrated violence to suppress growing tensions between groups. A historical understanding of policies pursued during the New Order is therefore crucial in order to analyze its violent legacies that characterize Indonesia today.

#### *4.2 Indonesia's resource-driven conflict*

Today, despite its abundance in natural resources, Indonesia is regarded by international standards as one of the countries that managed to avoid the resource curse (Rosser 2007). However, this does not mean that natural resources do not play an important role in Indonesia's development. A qualitative study over the causes of local conflict reveals a commonality in the importance of natural resources in triggering, amplifying and sustaining conflict. The feeling of injustice felt by the resource-rich provinces (Aceh, Papua, Riau and East Kalimantan) over distribution of resource-rents is often regarded as the driver for flaring separatist insurgencies (Table 1). The discovery and extraction of natural resources lead to ethno-communal conflicts in Maluku, Kalimantan and Central Sulawesi<sup>6</sup>. Lastly, disputes over natural resources and regulations are often linked in explaining the cause of

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<sup>5</sup> The often cited example is the regime's SARA policy which prevents discrimination on the basis of one's *Suku*, *Agama*, *Ras dan Antar-golongan* (ethnicity, religion, race and inter-group). Soeharto's different treatment in privileging certain ethnic groups propels discontentment among the marginalized groups.

<sup>6</sup> Interested readers can consult Klinken (2006), Wilson (2005) and Peluso and Harwell (2001).

conflicts inter-district, between the community and the company but also between the state and the community itself (Tadjoeddin 2007).

Province	Main resources	Conflict level	Conflict manifestation
Aceh	Natural gas, timber	High	Secessionist insurgency by an organized rebel group (GAM)
Papua	Oil, copper, gold, natural gas, timber	Medium	Fragmented and less articulated secessionist insurgency
Riau	Oil, natural gas, minerals, timber	Low	Minor secessionist sentiment
East Kalimantan	Oil, natural gas, minerals, timber	Low	Minor secessionist sentiment

Table 2 – The resource-rich regions: characteristics of resources and conflict

Source: Tadjoeddin (2007)

This paper argues that it is not the presence of natural resources but rather its management and the competition for control of resource rents that contributed to social unrests. National development policies pursued by the New Order left lasting legacies in the dynamics of conflict in Indonesia today. Firstly, the promotion of national goals decreased the importance of traditional regional customary rules and community land ownership. The state’s centralized control of resource rent led to growing grievances in the resource-rich regions (Table 2). In 1960, the Basic Agrarian Law ceded customary land ownership (*tanah adat*) under the control of the state for “potential development purposes” (Aragon 2001). The control of forestry laws (HPH) puts most of Indonesia’s forest land under ownership and concession of the state. New investment laws finally opened Indonesia to foreign companies to operate in the extraction of resources<sup>7</sup>. Foreign companies were given concessions to operate in these provinces under the protection of the military, while native population were excluded from the benefits of their land (Tadjoeddin 2007).

Secondly, the 1973 Presidential Decree no. 2 provided privileges to promote transmigration from the labour-rich Java to the resource-rich outer islands. The initial aim was to “stimulate more profitable outer island agriculture and national development” (Babcock 1986). These benefits disrupted the existing balance in the group relations in the communities. Unequal treatments and competition for economic and political power led to tensions in the ‘native-settler’ relationships, also seen next in the high-conflict provinces. These tensions are aggravated when the settlers were seen to be from a different identity group. Furthermore, the Regional (1974) and Village (1979) Government Law removed legal control from customary (*adat*) appointed elders to be centralized by the national

<sup>7</sup> The US-mining company Freeport-McMoran became the first foreign, and the most controversial, resource company who signed a contract with the government. It operates in Papua until today.

bureaucracy in Jakarta. These disruptions in the existing balance of economic and political power, especially between the indigenous and the outsiders, ignited tensions that were suppressed by the military (Kato 1989).

The fall of the New Order was accompanied by, and helped trigger, large-scale incidents of deadly conflicts throughout the archipelago. Thousands died in ethnic riots in West and Central Kalimantan and Jakarta in the riots of May 1998. Inter-religious and ethnic violence broke out in Maluku and North Maluku from 1999 onwards. After a period of *détente*, separatist conflicts in Aceh escalated to a period of civil war until a peace agreement was reached in 2005. Until today, separatist conflicts continue in Papua despite its lower intensity compared to Aceh (World Bank 2010a, Varshney et al. 2008). Such outbreaks stemmed from what Bertrand (2004) described as Indonesia's 'critical juncture' that follows from post-Soeharto's transition to a new, more open system. The political vacuum propelled groups to stake their claims, often with violent means, for influence in a new and democratic Indonesia. It highlights the importance of a political break as an *instrument* to erupt long term, 'primordialist' tensions and grievances in the society (van Klinken 2002). Understanding the legacies of policies pursued during the New Order is therefore crucial in explaining the historical causes of conflict.

Today, no generalized theory explains conflict in Indonesia due to the varieties in economic structure, resource richness, political systems and population diversity. Variations are found not only in the focus, but also the underlying methodology and choices of level studied. Varshney et al. (2008) seek to record the distribution of collective violence in fourteen provinces by relying on provincial newspapers between 1990 and 2003. Their dataset ascertains that violence in Indonesia is locally distributed, with 15 districts consisting of 6.5% of Indonesia's population accounting for 85.9% of all deadly violence. This choice of level has been critically assessed by Barron et al. (2009) who argue that this kind of provincial study undermines the intensity of conflict. Using a qualitative study from East Nusa Tenggara (NTT) and East Java for 2001-2003, they found evidence for a more widespread violence. Variations are apparent in the pattern of distribution on conflict in Indonesia, with more *concentration* associated with larger scale violence (riots and pogroms) and more *wide spread* with lower scale violence (lynching and inter-village brawls). The consensus has been that the level that one chooses should depend on the nature of the conflict to be studied (Varshney 2008).

### 4.3 Choice of methodology

Studies focusing on explaining conflict in Indonesia often utilizes case studies and mostly purposely exclude ‘conflict-provinces’ due to lack of reliable data<sup>8</sup>. Welsh (2008) studied lynching in four relatively peaceful provinces, of Indonesia’s current thirty six provinces. “These provinces were selected because they were seen as less violent than others” (Welsh 2008). The same reasoning can be found in the decision of Barron et al. (2009) for their qualitative study on East Nusa Tenggara and East Java. Their study was followed by a quantitative analysis that explicitly excluded the high-conflict provinces. The UNSFIR dataset compiled by Varshney et al. (2008) tries to address this by including Maluku, North Maluku and Central Sulawesi. However, it is temporally limited as it covers only the period of 1990-2003, whereas as mentioned above, it would be more relevant to study conflict in Indonesia after its ‘critical juncture’ (Bertrand 2004).

The use of case studies of violence has been contended to be inadequate in providing a general theory of conflict (King et al. 1994). The lack of comparability of case studies would hinder proper understanding of conflict in Indonesia. On the other hand, case studies have been cited as a more valid approach as it allows the understanding of causal mechanism of local factors (Varshney 2008). Even a robustly done statistical analysis might potentially exclude a more complex and intricate nature of conflict itself. Case studies would allow for the finding of commonalities in order to understand, and help to explain, conflict better. Inherently theories cannot be generalized on the basis of case commonalities alone, as the study might potentially be biased. Studies focusing on only low conflict provinces might prevent the understanding of relevant factors on conflict, for arguably these factors might also be present in the high conflict areas. Indeed, one cannot ascertain that the commonalities are the factors that explain conflict unless we study *both* conflict and peace to see which factors differentiate them. Ideally, a large panel that takes into account all provinces in Indonesia would therefore allow for a more comparable and valid analysis on the predictors of conflict.

Data issues however remain prominent, and given these constraints this paper contributes to the literature by specifically focusing on high conflict provinces and several socio-economic variables from the CH model (Table 1). Resource dependence is defined as the percentage share of primary commodities in the province’s GDP from Indonesia’s Central Bureau of Statistics (BPS). Poverty is defined as the share of the population below the poverty line from Indonesia’s socio-economic research SUSENAS. Inequality is measured by the conventionally used Gini index from SUSENAS. A problem that is worth mentioning here is that the Gini index tends to *underestimate* the actual inequality in Indonesia. This problem is present because SUSENAS excludes the income of the

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<sup>8</sup> The conflict-provinces are Maluku, North Maluku, Papua, Central Sulawesi and Nanggroe Aceh Darussalam (NAD).



highest earners as outliers, and therefore understate the actual inequality (Sudjana and Mishra 2004). However, the usage of the Gini index in this paper is seen as a prudent approach. Data for ethnicity and religious indices is from the recently gathered census 2000 from the BPS as published in Suryadinata et al. 2003. To the author's knowledge, this is the first attempt to incorporate and analyze this dataset. Measurement of indices can be found in Appendix 2-4. Conflict data is acquired from the ViCIS dataset from the World Bank Indonesia.

The Violent Conflict in Indonesia Study (ViCIS) is a joint collaboration between the Indonesia's National Development Planning Agency (BAPPENAS), JRI-Research, the USAID-SERASI program and the World Bank's Conflict and Development Program. The project attempts to provide the most comprehensive and extensive dataset on conflict in Indonesia (World Bank 2010a). It will cover sixteen provinces for 1998-2008, accounting for half of Indonesia's population. The ViCIS database includes all incidents of violent conflict and crime reported in local newspapers. Following previous researches, newspapers have been utilized as the source, selected and assessed based on the availability of archives, geographic coverage and conflict reporting policies<sup>9</sup>. The ViCIS dataset is different from the dataset compiled by Varshney et al. (2008) with the inclusion of the high-conflict provinces and their general definition of conflict. Violent conflict is defined widely: consisting in all conflicts between individuals and/or groups that result in physical impacts such as deaths, injuries or property destruction. The database therefore includes *both* episodes or large scale communal violence (Varshney et al. 2008 on provincial level) and incidents of routine violent conflict with low per-incident impacts (Baron et al. 2009 on district level). The ViCIS dataset itself will be publicly available as of next year.

Hitherto, the pilot has covered first the high-conflict provinces and is currently expanding to the other provinces. With the consent and permission of World Bank Indonesia, this paper will *preliminarily* describe some of the early findings of ViCIS in these provinces to add to the variations in the literature (Figure 2). However, the previously mentioned bias problem exists in this type of case study that only takes into account high-conflict provinces. Further exploration should therefore be conducted following data availability to see whether factors important in triggering and sustaining conflict are also found in relatively peaceful provinces.

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<sup>9</sup> The method of using newspaper to map violence was initiated by UNSFIR (Varshney et al. 2008), and has since then found on researches of conflict in Indonesia (see for example Barron et al. (2009)).

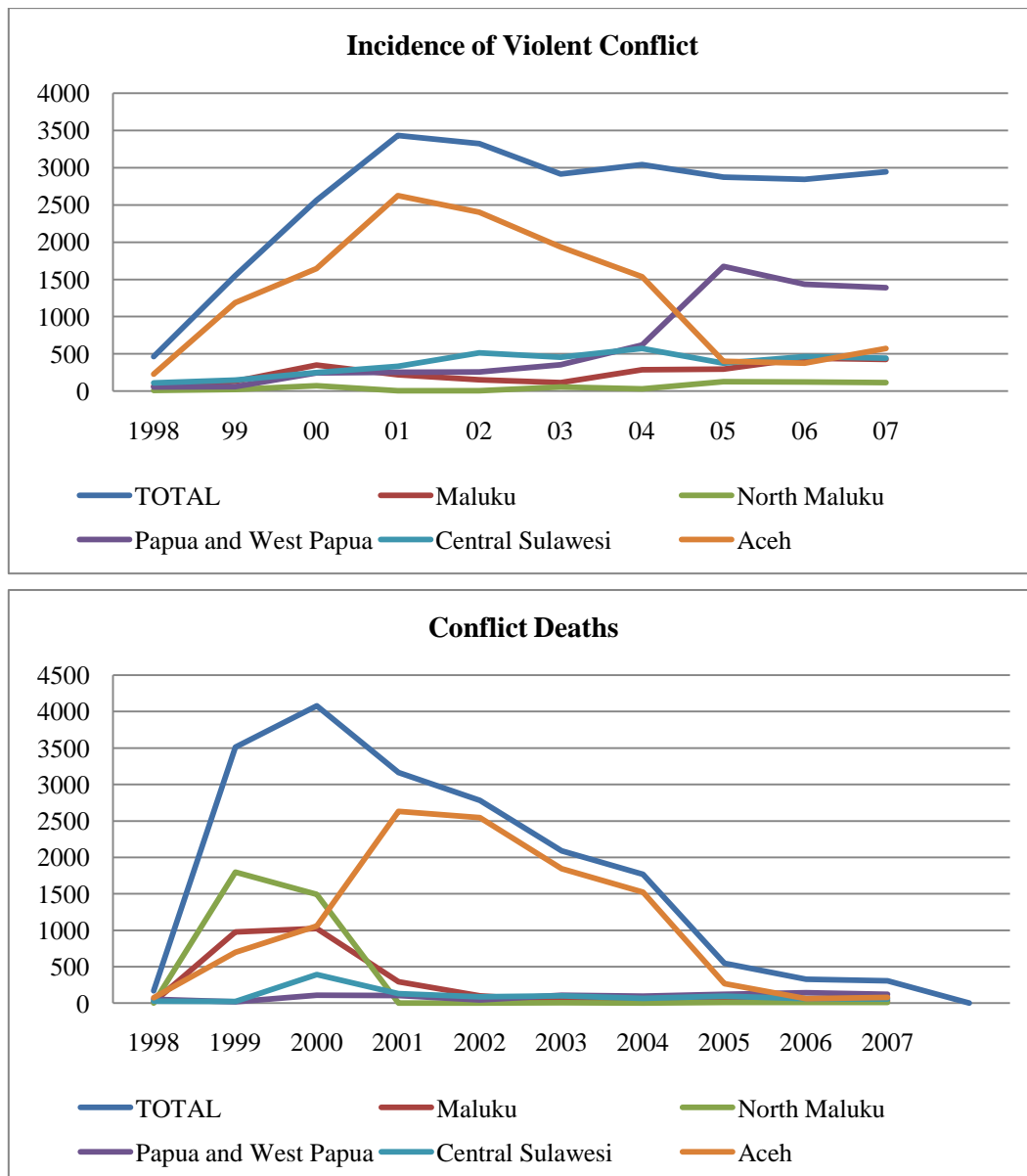


Figure 2a and 2b – Conflict dynamics in the six high-conflict provinces

Source: ViCIS

The qualitative study conducted in this paper showed some commonalities in the role of natural resources on conflict, especially regarding its rent distribution as an underlying cause of grievances in most of the conflict-provinces but Maluku. The latter however deals heavily with disruptions in the balance of economic and political power between groups, which is also apparent in North Maluku and Central Sulawesi. The fall of the New Order propelled groups to (re)stake their claims, often through violent means. The government response for this outbreak was the initiation of decentralisation in legislative power: regional redistricting and shift in the control of funds to a more regional and district level was initiated in the early 2000s. As a result, the stake became higher and distinction between groups intensified in the perceived zero-sum competition for control (Aragon 2001). Indeed, in all six provinces incidence of conflict has been increasing since 1998 (Figure 2a). The main driver however

seems to be Aceh, which fell into high casualty secessionist insurgency. Violent conflict incidence relatively stabilized at a higher level even with the 2005 peace deal in Aceh. Papua suffered from higher incidence which peaked at 2005 and has remained high. Conflict incidence in Maluku and Central Sulawesi seems to also remain high despite the peace agreement in 2002. These trends present a continual challenge for the government to effectively intervene in conflict prevention and resolution.

Death rates brought about by the incidence of conflicts are depicted in Figure 2b. The secessionist insurgency in Aceh claimed significantly more lives than the less organized movement in Papua. The signing of the peace agreement in Aceh has shown to be very relevant in containing conflict in Aceh. Resolution of the conflict in Papua should be a priority before the opposition force should gain momentum and repeat the history as in Aceh. The periodic outburst of religious conflicts in Maluku, North Maluku and Central Sulawesi claimed most lives in its initial years. Resolution of the underlying cause of grievance should moreover be a priority to prevent outbreaks triggered by an instrument in the future. In 2006-08, the main causes of conflict deaths are popular justice and identity-based (World Bank 2010a). Due to the absence of a common legal rule, competition of land and resource rents and justified by social norms specific to a particular group. Clashes of social norms in what constitute as 'fair' distribution are prone to ignite conflict (Barron et al. 2009). This type of violence often is aggravated when it occur between ethnic groups or other identity-based classifications, expressing identity-based tensions. This follows the finding of Varshney et al. (2008) that identity-based communal conflict tends to be highest claimant of lives.

#### *4.4 Case studies*

Even with the success of the 2005 peace deal in Aceh, there is an overall increasing trend of conflict incidences in the high conflict provinces (Figure 2a). This section combines a historical overview from the literature to build context and an analysis utilizing recent data to assess the current situation. In each province, the extraction of natural resources tends to be accompanied by conflict. However, the role of resources is found to exacerbate existing tensions in the existing balance of economic and political power. Identity by ethnicity or religion seems to amplify the intensity of conflict. Some policy recommendations follow.

##### *4.4.1 Aceh: exploitation and secessionist insurgencies*

In August 2005, the signing of the peace agreement between the government and the incumbent rebel group *Free Aceh Movement* (GAM) marked the end of the war for independence. The secessionist insurgency lasted for about thirty years and claimed approximately thirty-three thousand lives from both sides (Aceh Reintegration Agency 2007). The economic impact of this conflict has been devastating, while recovery efforts are still undergoing. Aceh is one of the resource rich provinces; its

substantial reserve of oil and gas has been one of the main sources of government revenue during the New Order. Grievances that propelled the secessionist sentiments were derived from the unequal sharing of the resource profits. The monopoly control of the government in Java over resource rents contributed to the feeling of exploitation by the Acehnese and the GAM. Economic growth after peace has consequently been negative, averaging to (5.14%) while the population grows on average by 2.36% (Table 3).

The roots of Aceh's 'resource conflict' started in 1971 with the discovery of oil and gas in Arun, North Aceh, by MobilOil Indonesia and the subsequent creation of Free Aceh Movement (GAM) in 1976 (Ross 2004). Generally, the literature divides the conflict into three periods: GAM I in 1976-79 with merely 100 members which was quickly repressed by the Indonesian security forces, GAM II in 1989-98 which launched a guerilla attack and prompted oppressive response from Soeharto and GAM III in 1998-2005 with the secessionist insurgencies until a peace deal was finally brokered. This paper however will refrain from dwelling upon these trends, focusing on major events and factors crucial in explaining the conflict in Aceh.

Economically, Aceh enjoyed a strong growth in all its sectors between 1979-1989 following its oil and gas (LNG) boom. Real GRDP growth in the agriculture sector averaged by 6.2% and manufacturing grew more by 10.8%. None however compared to the rapid growth of the LNG, which constituted 17% of Aceh's GRDP in 1976 to 69.5% in 1989 (Ross 2004). Poverty itself was very low – only two other provinces had a lower poverty rate than Aceh. By the late 1980s, Aceh by itself generated 30% of Indonesia's oil and gas export (Kell 1995). Socially, however this rapid growth was accompanied by growing social instability in the province. During 1980 to 2002, Indonesia as a whole managed to decrease poverty by 47%. During the same period, poverty in Aceh however increased by 239%. This is especially the case in the rural areas which did not receive benefits from the increasing exploitation of natural resources in the province (Brown 2005). Consequently, grievances directed towards the central government in Jakarta and foreign immigrants from other provinces and countries followed the discovery and growing dependence on oil.

The New Order government's response to the oil discovery was to tighten its grip on rent and legal control over the province. This centralized control over resources contributed to discontentment derived from the feeling of oppression by the disadvantaged local community. Dawood and Sjafrizal (1989) note that "virtually the entire oil and gas revenue from Aceh accrues to the central government" while the expenditure to Aceh "has not been markedly above average". Despite its contributions towards national wealth, Aceh itself was inflicted with a process of impoverishment. The resentment towards Java materialized through locally-ignited conflicts directed towards foreign workers in the gas-fields for them to pack and leave immediately "for your safety" because their employers are "co-

conspirators with Javanese colonial thieves in robbing our unrenowable gas resources for their mutual advantage” (di Tiro 1984). Even after the fall of Soeharto in 1998, exploitation of natural resource rents in Aceh was used by GAM as the claim for independence. Aceh was said to only receive approximately 1% of its resource wealth that produced “trillions of rupiah” for Java (Aspinal 2007).

The second source of grievance came from the impact of LNG production on the community. Disputes over the compensation of relocated families, distribution of highly paid jobs, official corruption and un-Islamic behaviour of foreign migrants were some of the arguments made (Ross 2004). Concerns over compensation for demolitions of hereditary lands and cemeteries were raised (Aspinal 2007). Locals were rarely employed directly by the LNG sector; instead the lucrative technical and managerial positions were generally given to foreign workers. By 1990 more than half of the Javanese who transmigrated into Aceh held the top strata jobs in urban areas, compared to only 30% of Acehnese who still is the biggest ethnic group (Brown 2005). Kell (1995) observed the creation of a ‘dual economy’ where the exclusion of the Acehnese from the LNG growth hampered social developments. Behaviour that offended local customs such as gambling and prostitution was sourced as the cause of conflict between communities. Furthermore, pollution in the environment which affected people’s water supply, health and livelihoods was also reported.

The fall of the New Order and the following independence of East Timor precipitated the outbreak of historical grievances of the community lead by GAM. A deadly rally for a referendum took place in the capital Banda Aceh in November 1999 as the province slips into civil war. Aceh was subsequently granted a Special Autonomy Law which allows the provincial government to receive more control of the resource rents. Unfortunately, the revenue from Aceh’s land was not passed on to the people and instead corrupted by corrupt officials still loyal to Java (Sherlock 2003). By then, the ongoing deadly conflict received attention from the international community. In 2002, a mediation by the Geneva-based Henry Dunant Centre for Humanitarian Dialogue (HDC) entered confidence building between GAM and the Indonesian government. A ceasefire was agreed and the ‘Cessation of Hostilities Agreement’ (COHA) was finally signed in Geneva. Both parties agreed that an election for democratically elected parliament in Aceh will be held in 2004. Unfortunately, the ceasefire was abruptly halted in 2003 when the Indonesian military launched another offensive attack following allegations of misconduct of COHA by GAM. It was not until 2004, when Aceh was hit by a devastating tsunami that a peace-agreement was finally broken in 2005. The signing of both parties without any external pressure marked the end of the civil war (Reid 2006).

The importance of greed from the role of the oil sector in financing the incumbent GAM however has rarely been documented in the literature where a diversity of sources was apparent. The re-emergence of GAM II in 1989 was said to be supported financially by the Libyan government under Muammar

Qadaffi. In financing its operation, GAM was said to benefit from almost all sources in the local economy, including villagers, officials and businessmen (Aspinal 2007). The importance of diaspora financing of Acehnese abroad was also cited. Predatory activities derived from natural resource financing claimed in the CH model are to be relatively irrelevant to conflict in Aceh. However, the perceived greed of the central government and foreign resource companies contributed to grievance by the community.

In conclusion, the driving forces of conflict in Aceh in the literature seem to be grievances brought about by mismanagement from unequal distribution of resource benefits during the New Order. Tensions built over the feeling of exploitation in terms of impoverishment and inequality of the Acehnese relative to the greater degree of development and resource extraction in the area. Periods after peace records negative growth, worsening inequality especially in the urban area, while poverty faced slight improvements between 2002 and 2007 (Table 3 and 4). The persistent high inequality should be handled with care to avoid any risk of potential grievances in precipitating outbreak following the recovery. Measures should be taken to ensure equal distribution of the peace dividend, institutional building of grievance mediation and the commission of programs to reintegrate GAM into the society (Barron et al. 2005). Moreover, Aceh is religiously the most polarized province out of the high-conflict provinces, with 97.3% of the population being Muslim<sup>10</sup>. The forceful implementation of the Islamic Sharia law in 2005 presents a growing challenge for Indonesia's secularism and pluralism (Jakarta Post 2009). Ethnically, Acehnese remains as the dominant ethnic group which comprises of 50.32% of the population. This has lead, in some instances, to political oppression of the minority (Jakarta Post 2009). The potential this dominance has in fuelling conflict and oppression against the minority group should be taken into account in any effort of conflict prevention by the government.

#### *4.4.2 Papua and West Papua: exclusion and minor secessionist insurgencies*

Papua is one of the resource-rich provinces in Indonesia that has been experiencing ongoing yet relatively lower scale secessionist insurgencies compared to Aceh. Papua is highly dependent on natural resources: primary commodities constituted 80% of Papua's GDP through 1998 to 2007, the highest in all other provinces (Figure 3). Economic growth has been rapid, averaging to 6.42% in 2006-08 (Table 3). Population growth is also the highest at 5.39%, with a majority being from migrant population (McGibbon 2004). The government's decision to divide Papua into three separate provinces in 2003 serves as an evidence of Papua's salient political participation in the national stage (Chauvel and Bhakti 2004). Conflict incidences have been increasing, peaking in 2005 until today (Figure 2a). Ethnic grievances of the native against the government and migrants have been fuelling

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<sup>10</sup> For more detailed figures and measurements of diversity and polarisation, readers should consult Appendix 1, 3 and 4.

the conflict. High poverty and inequality especially between natives who live marginalised in rural areas and migrants in the urban areas present a growing challenge of conflict resolution.

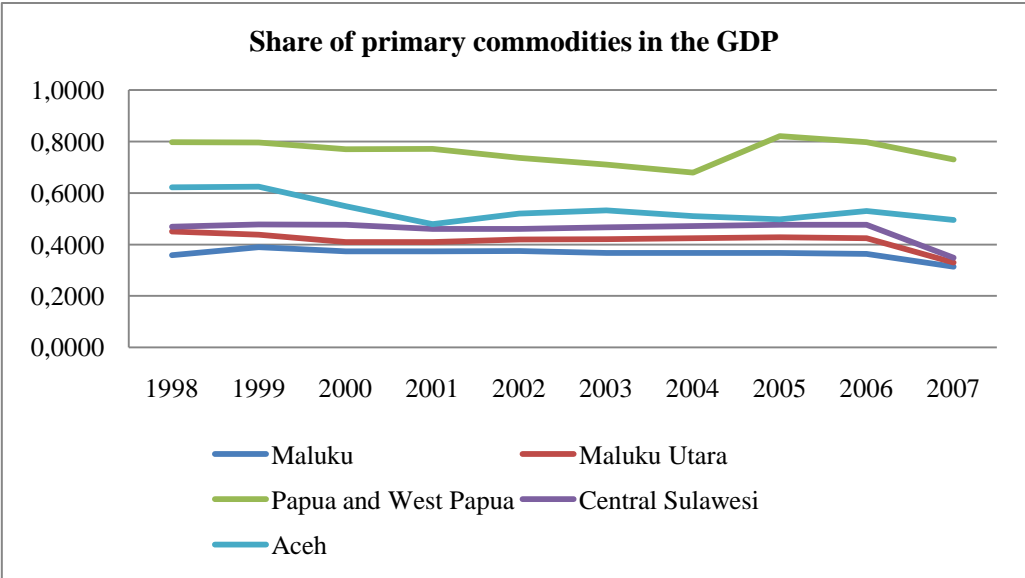


Figure 3 – The evolution of resource dependence, 1998-2007  
 Source: BPS

Historically, the annexation of Papua into the Republic of Indonesia in 1969 has been accompanied by resentments by native Papuans who felt excluded from this decision (ICG 2002). The nationalistic insurgency is characterized by sporadic violent clashes between security forces and scattered guerrillas of the Free Papua Movement (OPM) and a peaceful independence campaign by the Presidium of the Papuan Council. Papuans themselves constitute more than 310 ethnic-linguistic groups, which contributed to a lower scale conflict due to lack of organisation. The absence of a charismatic leader unlike Aceh is also cited as another reason (Tadjoeddin 2007). Discontentment is targeted towards the Indonesian military forces, market-dominant ethnic Indonesians and resource companies. The diversity of actors involved highlights the complexity of the factors contributing to conflict in Papua. Today, these nationalistic movements are shaped by ethnic grievances of the native Papuans and feelings of: (1) *colonialised* by Indonesia; (2) *exploited* of their resources; (3) *marginalised* by non-Papuans; and (4) *threat of extinction* in their own land (Chauvel 2005). Each will be explored below.

Upon inclusion, Jakarta held monopoly control over ownership of Papua’s land and forestry. The subsequent management of resource claims soon became the source of much of today’s conflict. The concessions of operation rights of coal and gold to US-based mining company Freeport Indonesia and the logging of timber by the New Order’s government are said to disregard Papuan’s customary rights (Leith 2003). The people of *Amungme* and *Komoro* who resided on Freeport’s potential mine were said to be intimidated, forcefully moved and even murdered (Chauvel 2005). Through the issuance of rights to the forestry (HPH) by the Soeharto’s regime, effectively 80% of Papua is designated as

national forest estate under state control. Considering that most Papuans live in rural areas and derive their livelihoods from the forest, they are now legally considered as illegal squatters (Kayoi et al. 2006).

The influx of voluntary and government-sponsored transmigration following the resource-driven growth brought socio-economic changes to the native Papuans. In 1971, there were only 5,000 migrants in Papua. In 1972, the number doubled to 10,000 or around 2% of the population (Garnaut and Manning 1974). This wave of transmigration contributed to Papua's population growth, which tripled the national average until today (Table 3). In 2004, migrants constituted more than half of the population, which totalled 2,352,518 (BPS 2004). This demographic trend quickly heightened the competition over land and resource control (McGibbon 2004). Giay (2000) argues that Jakarta-centric development policies have incapacitated and marginalised native-Papuans. The Indonesian government was accused of putting more value on Papua's resources with complete disregard on the indigenous people. The steady decrease of the native Papuan population led to the feeling of extinction in their own land.

The wave of government-sponsored transmigration of Indonesians to Papua's "most fertile lands" have driven native Papuans to live marginalised in the rural areas (Chauvel 2005). Native Papuans now constitute only half of the population, living in subsistence as hunter-gatherers in rural areas. They consequently become the ones facing the environmental and social consequences of the state's decisions regarding the logging of timber. Manning and Rumbiak (1989) found that migrants who dominate the urban areas and resource-jobs are the main beneficiaries of Papua's resource richness. Furthermore, rivalries for jobs between education Papuans, Indonesians and Eurasians aggravated the feeling of marginalisation. Natural resources in Papua do not by itself give rise to grievance, but what is more relevant is the inequalities and injustices that it give rise to. Although little evidence is found on the role of natural resources in financing the conflict, the possibility of greed in fuelling grievances is noted. A report by the International Crisis Group (2002) highlights the role of the Indonesian security force in resource extraction in Indonesia. Their involvement in ethnic marginalisation of native is said to be derived from financial interest deriving from direct logging operation and 'protection fees' paid by resource companies (ICG 2002). As in Aceh, it highlights the possibility of greed by the government in fuelling grievance by the community and its role in sustaining conflict should be given closer scrutiny.

Even though instances of violence based solely on race has been rare, diversity of ethnic groups do bring about challenges in managing conflict in Papua. It was noted that: "the presence of settlers has created a colonial economic structure, where only the traditional sector is run by the indigenous people" (Wanane 2000). Resentments derived from inequality and existences of a market-dominant



minority are prone to give rise to conflict (Chua 2000). Despite the high growth, inequality increased in both in urban and rural areas (Table 3 and 4). In 2007, 50.5% of the rural area where most native live was considered to live below the poverty line (Table 4). Native Papuans in urban areas also face intense rivalries for employment compared to the foreign and Indonesian migrants (Chauvel 2005). Hirshleifer (1995) noted the importance of *perception* in explaining conflict, which allows for the relationship between the actual and perceived cause and impact. The growing inequality and poverty felt by the Papuans can lead to grievance when they are *relatively deprived* and colonised by the Indonesians.

The proposal for Special Autonomy Law in 2001 was initiated as a response to these growing secessionist sentiments. The main demands were increased provisions for protection and representation of traditional institutions to cater to the interests of native Papuans, the advocacy of human rights and the promotion of sustainable developments (Bonay 1984). The failure of implementation by the government in Jakarta was said to be due to the perceived fear of empowering “untrustworthy Papuan elites in Jayapura” (Chauvel 2005). The government’s decision to separate Papua and West Papua in 2003 indicates the continually salient political participation of Papua in the national government. Even today, both provinces are still suffering from conflict waged for independence.

In terms of the CH model, the arguments of greed and grievance are both relevant in the case of Papua. Greed by the government officials directly involved in logging operations and their protection of the interests of resource companies contributed to the ethnic grievance felt by native Papuans. The interplay of these factors caused feeling of colonisation, exploitation, marginalisation and a threat of extinction by the native Papuans. Indeed, the data confirms this. Even though resource-driven growth has been rapid, inequality and poverty especially for native Papuans in the rural areas, led to relative deprivation and grievance against non-Papuans. Papua’s own ethnic diversity increases the difficulty of organisation and contributed to lower scale of conflict (Table 5). However, the growing share of migrants in the population lead to more grievance as native Papuans feel marginalised and excluded. Current challenges include increasing political representation and participation of native Papuans and programs dedicated to reduce inequality and poverty. The inclusion of rural areas and natives is crucial in achieving this. Further scrutiny should be put in analysing the role of Indonesian security forces in conflicts in Papua. Attention should be put in accommodating Papuan interests and values to be able to build a future prosperous Indonesia.

#### 4.4.3 *The Malukus and Central Sulawesi: changing balance of power and religious wars*

In January 1999, a minor incident between a native Ambonese bus driver and a migrant Bugis passenger precipitated the breakdown of the hitherto silent economic and political grievances between the equally dominant Christian and Muslim groups (Wilson 2005). Soon, a deadly inter-religious strife commenced, spreading to other plural societies such as North Maluku, Central Sulawesi and Lombok. In 2000, the Muslim organization *Laskar Jihad* arrived in Maluku to “wage a *jihad* war” to “defend their brothers” in the fight against Christians (Schulze 2002). A state of emergency was declared in both Maluku and North Maluku. A government-brokered peace deal was finally brokered in 2002. However, legacies of the conflict are still present and outbreaks are frequent. Authors argue that the agreement fails to address the underlying economic and political factors that initiated the conflict (Sterkens and Hadiwitanto 2009). This section presents a historical overview of the evolution in the group relationships and recent evidences after the peace deal.

Historically, the relationship between the government and the community has always been characterized by a patron-client relationship. During the colonial Dutch time, villages in Maluku were separated based on their religion. Christian villages were privileged with public jobs such as priests and teachers, and often awarded with government contracts. Muslim villages however were left out and had to rely mostly on the private sector (Sterkens and Hadiwitanto 2009). Economic competition has facilitated growing resentments between the groups since the colonial time. During the New Order’s, the patronage was destabilized and the situation was reversed. The transmigration of Muslims into Maluku propelled accusations of the government to intentionally reduce Christian dominance in the region (Bertrand 2004). Economic competition was intensified with the arrival of ethnic Bugis and Butonese from Sulawesi: “Moluccans have difficulty competing with people from outside... all the commerce was controlled by the Butonese and people from other regions...” (Bertrand 2004). Muslim migrants were given government-created jobs that were historically controlled by Christians. Native Christian Mollucans therefore related their decline in relative power to a deliberate government policy (Bertrand 2004). Van Klinken (2002) argues that these changes in the balance of power and economic privileges are the actual long term ‘primordialists’ cause of grievance which erupted after the fall of Soeharto.

A similar situation, where one group becomes relatively deprived after the arrival of another group, was experienced in North Maluku and Central Sulawesi. Transmigration of Muslim Makians to the sub-district of Malifut due to a volcanic threat was initially welcomed by the people of Kao. The vast majority of the Kao are Christians, with a small minority of Muslims. Soon after, however, the Makians became a market-dominant minority. Inequality in income and access to resources, political representation and social influence was said to fuel grievances between the native Kao and the migrant

Makians (Wilson 2005). The Makians were allegedly accused of receiving more of government funding, proven by the existence of an electrical supply company (PLN) in their district. The situation was aggravated in 1999 with the opening of PT. Nusa Halmahera Mineral, an Australian-Indonesian joint venture that was the biggest single employer in the province. Inequality in the access of jobs was apparent by the decision to employ mostly Makians. With the discovery of mineral richness in Malifut, unequal funding into the community schools and healthcare further worsened.

In Central Sulawesi, Muslim settlers from other ethnic groups who quickly became market-dominant minorities bred grievances from native Ambonese living in the area. Transmigration of Javanese and increased government control of the province's ebony plantation was enhanced following the increase in the world price of timber. Migrants from ethnic Butonese, Bugis and Makassarese began to "dominate small scale retail trading and transportation network" (Acciaioli 2001). After 1997, the increasing value of commodity crops such as cacao, cloves and coffee attracted Bugis landowners while native Ambonese remained primarily "subsistence rice farmers" (Aragon 2001). Inequality remained high, while improvements in poverty were confined to the urban community. As in Maluku and North Maluku, the religious distinction intervenes with the boundary between 'native' and 'settlers'. The migrants' economic dominance was soon accompanied by increased political power, which contributed to growing resentments. While migrants claim that they "work harder", the perception of natives is their lower relative population and economic power, while the increasingly Muslim government is benefiting and favored by Jakarta.

The mounting grievances derived from the shifts in the balance of power and inequalities are crucial in explaining the outbreak of conflict. The fall of Soeharto was a 'critical juncture', and the political vacuum that follows triggered rational actors to stake their claims for control often through violent means (Bertrand 2004). The minor brawl between a native and a migrant in Ambon was the catalyst which led to the subsequent conflict. It soon escalated in intensity, releasing the 'snowball effect' to North Maluku, Lombok and Central Sulawesi. Religious differences were claimed as a legitimating rationale (Bertrand 2004). The Muslim organization *Laskar Jihad* and other Christian groups mobilized themselves to these provinces to "defend their brothers" (Schulze 2002). A ceasefire agreement was finally brokered by the government in 2002. The legacy of this short, yet deadly, conflict left a more segregated community, leaving hundreds of thousands as refugees (ICG 2000, van Klinken 2002). Subsequent attempts to reconcile the religious groups were made by the government and NGOs to facilitate dialogue. Outbreaks have unfortunately been frequent, notably in 2004 and 2008, due to prevailing inequalities and poverty while incidences continue to increase in Central Sulawesi. It presents a challenge for the government in addressing the long term 'primordialists' grievances stemming from these relative economic deprivations in order to effectively resolve the conflict.

Both greed and grievance seem to be mutually reinforcing in triggering conflict in these provinces. Unlike the other provinces, religion became the amplifying factor that enhances grievances from competition for economic and political powers. The historical patronage networks created a zero-sum condition between religious groups to retain control and dominance. These unequal treatments contributed to grievances of the relatively deprived group. Furthermore, grievances were enhanced especially in the presence of different group identities (Gurr 1993, Huntington 1993). It was not in fact under particular religious grounds that the conflict was waged in the first place but religion became an amplifying parameter for conflict. The presence of Muslims in the native population itself raises certain questions regarding religious intolerance. In fact, sharp distinctions between religions were intensified *through* the conflict itself (Tanamal and Trijono 2004). The phenomenon of ‘depersonalisation’ occurs in times of conflict where differences and prejudices are emphasized while similarities ignored (Tajfel 1984).

The role of natural resources also seems to be relevant as it enhanced the stake for control. Incidences of violent conflict seems to highlight a stable trend for all provinces (Figure 2a), while collected data presents a mixed picture. These provinces are rather similar in resource dependence: primary commodities constituted approximately 40% of their regional GDP (Table 3). Growth rates were higher than the Indonesian average between 2005 and 2008. Central Sulawesi seems to manage in reducing poverty while keeping inequality stable. Inequality rose in North Maluku, while poverty decreased. Maluku fared worst, increases were present both in inequality and poverty (Table 4). These mixed findings call for a more extensive and robust study on factors that contribute to conflict. Further studies should also be conducted to assess the role of religious polarization in amplifying conflict. The presence of equally dominant and polarized Christian and Muslim groups remains as a potential threat (Table 5). Focus should be put in addressing the competition for power and influence. The government should put extra attention in remaining neutral to prevent the appearance of preferring a particular group.

	$\Delta$ GRDP (%)*	$\Delta$ Population (%)**	Adjusted growth
Maluku	5,17	2,80	2,37
North Maluku	5,32	2,47	2,85
Papua	6,42	5,39	1,03
Central Sulawesi	7,63	1,95	5,68
Aceh	(5,14)	2,36	(7,50)
Indonesia	5,17	1,49	3,68

\*Note: Average growth rate for 2005-08

\*\* Average growth rate 2000-2010, for Aceh 2005-2010

Table 3 – Growth of regional GDP and population

Source: BPS

	Gini (%)				Poverty			
	2002		2007		2002		2007	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Maluku	23,2	19,9	30,6	26,0	12,4	40,5	4,2	37,0
North Maluku	22,0	19,8	26,4	24,5	13,2	13,9	14,3	37,0
Papua	22,8	23,1	27,1	32,9	8,3	49,7	7,8	50,5
Central Sulawesi	33,3	25,8	33	24,4	17,5	24,4	12,8	24,9
Aceh*	26,5	23	30	23,4	19,4	33,6	18,7	29,9
Indonesia	35,2	25	32,3	25	14,4	20,1	12,3	20,3

Table 4 – Changes in inequality and poverty between rural and urban areas in 2002-0

Source: SUSENAS

	Diversity		Polarisation		Dominance	
	Ethnic	Religion	Ethnic	Religion	Ethnic	Religion
Central Sulawesi	0.8081	0.3544	0.5673	0.6349	No	Yes
Maluku	0.7795	0.5074	0.5772	0.9924	Yes	Yes
North Maluku	0.6817	0.2420	0.6486	0.5013	Yes	Yes
Papua	0.6833	0.3714	0.6512	0.7356	Yes	Yes
Aceh	0.7024	0.0527	0.6593	0.1044	Yes	Yes

Table 5 - Ethnic and religious measures of diversity, polarization and presence of dominance

Source: data from Suryadinata et al. 2003, elaboration on the calculation of the indices can be found in the

Appendix)

## **5 Conclusions**

The role of natural resources in triggering and sustaining conflict has been under closer scrutiny in the literature. Countries with high resource dependence tend to have a higher probability of a conflict outbreak, and furthermore it tends to prolong it (Collier and Hoeffler 2004). However, the presence of ethnic diversity, governance and institutional quality are found to be decisive (Mehlum et al. 2006). Despite its relevance, Indonesia has not been sufficiently incorporated into the literature. This paper fills the gap by analyzing case studies of the six Indonesian high-conflict provinces. In all of them, the exploitation of natural resources by itself did not lead to inevitable conflict. Complex local interactions with poverty, inequality, ethnic or religious grievances and political instabilities are crucial in understanding the role of commodities in explaining conflict.

It concurs with Bertrand (2004) that conflict in Indonesia today derives much of its cause to the policies pursued during the New Order. The feeling of exploitation and exclusion felt by the native community triggered separatist sentiments which broke into a civil war in Aceh. Inclusion of the native population in both political and economic settings is crucial in resolving the conflict in the ongoing separatist movement in Papua. Mismanagement of natural resources through policies that disrupted the existing balance of economic and political power between groups deepened tensions. This is especially the case for Maluku, North Maluku and Central Sulawesi. Priority should be put in structurally addressing the patrimonial relationships that induced zero-sum competition for control. A more equal treatment between groups and regional development focus should commence to prevent future outbreaks.

This paper presents preliminary findings that challenge the extent of which Indonesia is said to have successfully escaped the natural resource curse (Rosser 2007). Furthermore, recent increases in the global commodity price trends have been accompanied by social unrests throughout the archipelago (World Bank 2010b). It highlights both the importance and the potential role of better natural resource management in the elusive pursue of sustainable development in Indonesia.

## **6 Discussions and recommendations for future researches**

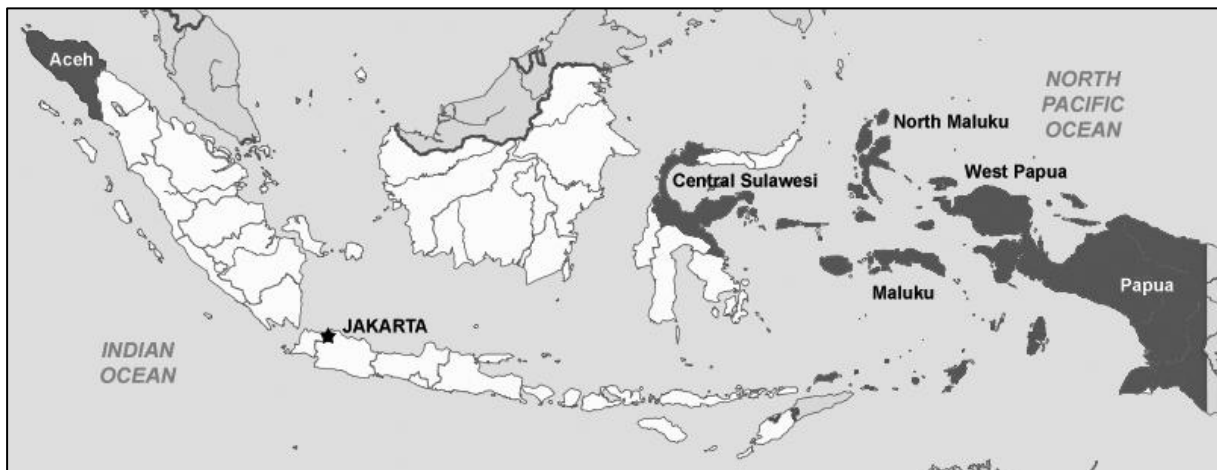
As previously mentioned, the analysis of case studies in this paper suffer from two limitations. Firstly, the focus on the high-conflict provinces is potentially biased. Ideally, an analysis of factors present in both high and low-conflict provinces is more valid in determining relevant factors that explain conflict. This bias is partly derived from the second limitation regarding data availability which remains a prominent challenge to researchers of conflict in Indonesia. The completion of the ViCIS

dataset by the World Bank has the potential to reduce this problem. Further analysis should therefore supplement this paper following data availability.

Furthermore, this paper presents preliminary findings on the importance of inequality in contributing to grievance and conflict. The exploitation of natural resources led to conflict when it enhanced inequality between groups; when the benefits are accrued by a group disproportionately. Due to data issues, this paper utilized the income inequality indicator: the Gini index from SUSENAS. As previously mentioned, this index suffers from severe limitations. Most importantly, it tends to underestimate the actual inequality by excluding the highest income group as outliers (Sudjana and Mishra 2004). However, the use of the Gini index was seen as a prudent approach in this paper. A possible extension of this paper would be to analyze the horizontal, rather than the vertical income, inequality between groups. As seen in all high-conflict provinces, growing inequality between groups tend to ignite tensions. Another potentially interesting factor to be included would be the presence and effect of a market-dominant minority (Chua 2004). Future researches would benefit from the inclusion of the complex interaction between social identity and economic variables in order to better understand conflict.

## **7 Appendix**

### *7.1 Spatial distribution of the high-conflict provinces*



### *7.2 Ethnic diversity measure*

To measure ethnic diversity, this paper applies the Ethnolinguistic Fractionalization (ELF) measure commonly used in the international literature (Alesina et al. 2003, Easterly and Hoeffler 2004). The measure equals one minus the sum of individual group shares, sometimes referred to as the inverse Herfindahl index.

$$ELF = 1 - \sum_{i=1}^N \pi_{ip}^2$$

where  $\pi_{ip}$  is defined as the percentage share of ethnic group  $i$  in the province  $p$  and  $N$  is the number of ethnic groups in the province.

ELF measures the probability of two randomly selected individuals in a province coming from the same ethnic group. ELF being 0 entails perfect homogeneity in the province, and the maximum of one entails that all individuals come from different groups (perfectly heterogenous). ELF calculation in this paper is derived from Indonesia provincial population shares in 2000 from Suryadinata et al. (2003). Ethnicity data is relatively rare and is not conducted periodically due to the New Order's SARA policy<sup>11</sup>. Ethnic groups in a province range from twelve to fifteen groups, although the existence of majority varies between provinces. In West Kalimantan, for instance, the majority of approximately 30% belongs to 'Others', highlighting its fragmentation. Conversely, in Central Java the majority is Javanese who constitutes 98%.

### 7.3 Ethnic polarization measure

To measure ethnic polarization, the Reynal-Querol (1998, 2002, 2005) index is calculated for Indonesia's 14 provinces. Formally:

$$EPOL = 1 - \sum_{i=1}^N \left( \frac{\frac{1}{2} - \pi_{ip}}{\frac{1}{2}} \right)^2 \pi_{ip}$$

$$EPOL = 4 \sum_{i=1}^N \pi_i^2 (1 - \pi_i)$$

where  $\pi_{ip}$  is defined as the percentage share of ethnic group  $i$  in the province  $p$ ,  $N$  is the number of ethnic groups in the province. Intuitively, this measure captures how far the distribution of the group is from a bipolar distribution. The interpretation is less straight forward, with values between 0 (the province is bipolar) and 1 (multipolar).

### 7.4 Ethnic dominance

Following Collier and Hoeffler (2004), dominance is defined when an ethnic or religious group constitute 40-95% of the society.

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<sup>11</sup> SARA is an anti-racism policy that prohibits discrimination on the basis of one's *Suku, Agama, Ras dan Antargolongan* (ethnicity, religion, race and inter-group). The Soeharto government is said to stop publishing SARA related statistics in 1980s (Kipp 1993).



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