

The Causes and Consequences of Civil Conflict



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I. Introduction

Civil Wars related to ethnic conflicts and economic factors are becoming alarming more common in many parts of the world. These conflicts leave long lasting human, social and economic scars. This paper presents an economic analysis of civil conflicts focusing on four issues: economic causes of civil conflict, economic cost and consequences of civil conflict, the vicious cycle of civil conflict and methods of escaping the cycle. The methods of estimating the costs of civil conflict are exemplified with a case study of Sri Lanka.

The following 6 sections of the paper will address each of the above issues. Section one defines a civil war. Section two looks at some common misconceptions about the causes of civil conflict and presents the actual economic reasons leading to conflict. Section three will focus on methods used to calculate the cost of a civil conflict, emphasizing on calculating the indirect costs. It will present the economic analysis of the consequences of a civil conflict on the economy during and after the conflict. Section four introduces the concept of the vicious cycle of civil conflict and studies the causal relationship. Section five presents an economic solution to escape the vicious cycle. Section six summarizes and concludes.

A civil war is defined by certain criteria, and its most applicable definition comes from Collier and Hoeffler (1998) and by Elbadawi and Sambanis (2000). In a civil war: The stronger force must suffer at least 5% of the number of fatalities suffered by the weaker force. One of the primary parties must be a national government and its sovereignty must be challenged. The war must also have caused more than 1,000 deaths per year. The war must be internal to the country (Elbadawi and Sambanis 2000). In addition, Collier and Hoeffler also include in their definition of civil conflicts, any conflict in which the opposition is striving for a separation from a state (1998).

II. Causes of Civil Conflict?

a. Common Causes of Civil Conflict.

Enumerating on the causes of civil conflict, the obvious cause offered is ethnic and linguistic diversity. As one looks at many of the countries where civil wars are taking place today or have occurred just recently, it is notable that in almost all the cases the conflicts are between two ethnic groups. In Sri Lanka, for example, the majority Sinhalese and the minority Tamils are fighting amongst themselves; in Rwanda, the war was between the Tutsis (11%) and the Hutus (88%); in the former Yugoslavia the Serbians and Croatians were engaged in civil conflict, and the list continues. The first assumption, therefore, is that ethno-linguistic fractionalization is the cause behind these civil conflicts. This assumption seems reasonable considering that many (perhaps all) of the rebel movements are ethnically divided.

Another reason for civil conflicts is differences in religion as "religious diversity leads to greater political instability" (Easterly 2001). In India, there are many sporadic outbursts of communal violence between Muslims, Hindus and Christians. One can look to Indian Kashmir (though, this is technically not a civil conflict) for evidence of this where the Muslims are fighting for independence. Similar situations are occurring in Northern Ireland with opposition between the Protestants and Catholics. This, indeed, is one of the longest civil conflicts in Europe. These examples seem to lead to the belief that religious diversity and intolerance are also leading causes of civil conflict.

Africa forms an ideal example for the above arguments. Africa is a continent overwhelmed by civil strife. The high level of civil conflict in Africa is once again attributed to ethnic and religious diversity. The ethnic and religious diversity that is prevalent throughout Africa is blamed for Africa's poor growth and economic troubles. Meles Zenawi, the president of

Ethiopia, writes, "ethnic, religious, and other sources of diversity are hallmarks of African societies"(Qtd. in Easterly 2001). Understandably, ethnic groups work towards their own self-interest and seem to identify themselves with their ethnic or religious group instead of their nation. Therefore the natural tendency is to blame the diversity for the civil conflict prevalent in Africa.

b. (Economic causes of civil conflict.

This paper aims to show that there are more significant factors other than ethno-linguistic or religious diversity causing civil conflict, factors such as bad economic policies, unrepresentative governments and low natural resources. Evidence that these factor dominate can be seen by an in-depth analysis of countries with civil conflicts that are attribute solely to ethnic, linguistic ad religious diversity. These factors are present in all the examples given above, the Sinhalese and Tamils, the Serbians and the Croatian, Tutsis and Hutus. An in-depth study of the how these factors impact the possibility of civil war could be done as follows.

The only cause for a civil war would be if the rebel groups thought the gains from the conflict were worth the possible costs. The following quotes agree with this. "War occurs if the incentive for rebelling is sufficiently large relative to the costs"(Collier and Hoeffler 1999). Thinking along these lines in their paper "On the Economic Causes of Civil War", Collier and Hoeffler investigated the possibility of economic reasons behind civil wars. They used an empirical model and concluded that "initial income, ethno-linguistic fractionalization, the amount of natural resources and initial population size are significant ... determinants of the duration and probability of civil wars"(Collier and Hoeffler 1999). The most significant result they found was that civil wars and ethnic diversity have a non-monotonic relationship. That is

the chance of a civil war in an extremely fractionalized country is the same as that in a homogeneous society. On the other hand the probability was very high when there was an average level of fractionalization.¹

They concluded that it was in societies with middle levels of diversity that problems arose. They found a high chance of conflict if there are two large groups. They also showed that low levels of natural resources and unrepresentative, weak and undemocratic governments have a significant impact on the relationship between the possibility of conflict and ethno-linguistic fractionalization.²

Elbadawi and Sambanis obtained a similar result in a more extensive study of 161 countries. They found that

the relatively high incidence of civil war in Africa is due not to extreme ethno-linguistic fragmentation, but rather to high levels of poverty, heavy dependence on resource-based primary exports and, especially, to failed political institutions (2000).

They estimated the likelihood of a civil conflict using regressions on political, economical and social variables. Their studies also showed that a high degree of diversity has a low incidence of civil war. This was most probably because the high diversity would act as a safety net and prevent violent confrontation. Their results agree with the earlier analysis conducted by Collier and Hoeffler. In Asia, where there is heavy polarization of ethnic groups and low levels of government (unrepresentative, weak and undemocratic governments), their model predicted a 50% possibility of civil conflict in a five-year period.

¹They used a scale from 1 – 100 with 1 being a homogeneous society and 100 being an extremely fractionalized society – each person being of a different ethno-linguistic group. They found that countries with values around the 30's and 40's had a very high probability flaring into civil conflict.

²See Appendix A.

Therefore we can perceive that there are four reasons for the large number of civil conflicts throughout the world:

1. High dependence on natural resources and low level of natural resources. If there were an abundant amount of resources or lack of dependence on the specific resources then obviously it would be unnecessary to fight over them. Less importantly the rebel groups could use (loot) the resources to sustain their rebellion.
2. Low levels of GDP per capita (compared to other developing countries). This leads to the presence of uneducated poor youth, unhappy with the prevailing system and easily manipulated to take arms. The unemployment rates in Palestine for 15-19 year olds is 40.6% and for 19-24 year olds its 36.7%³. It seems hardly surprising that uneducated and unemployed youth with very little hope for the future would take arms in a false hope for a brighter future.
3. Lack of democratic institutions that would ensure fair representation for all ethnic groups. (Elbadawi Sambanis 2000). The possibility of the conflict “depends partly on the strength of the state A very repressive machine may prevent violence.”(Klugman et. al. 1999)
4. Ethno-linguistic fractionalization seems to act as a foundation on which the economic oppression and discrimination are built on, leading to the misconception that the ethno-linguistic diversity leads to the civil conflict. “Although diverse ethnicity per se did not lead to political instability, opposition groups ... exploited ethnic differences in the struggle for power”(Goudie and Neyapti 1999). If one ethnic group was in the government then the likely outcome if their self interested actions would marginalize the other ethnic group(s), leading them to revolt. This was evident from the cases of many of the countries with civil conflict in Africa.(Earterly 2001)

³PCBS- Palestinian Central Bureau of Statistics.

It seems that, though we associate these conflicts with ethnically diverse groups, the groups might also represent the exploited members of society. In Europe the proletariat uprising against the bourgeois was caused by the exploitation and oppression of the proletariat and the economically disadvantageous situation they were in. If the proletariat were ethnically different, then their uprising might be mistakenly associated to ethno-linguistic reasons instead of the underlying economic issues. The case in Africa might be similar. Though the rebels might belong to one ethno-linguistic group, the underlying cause for their rebelling might be their economic oppression, (which might be related to ethno-linguistic difference). I think this is what the authors are trying to highlight as well. It might be interesting to see if it is possible to compare the oppression that existed in Europe and the situation in Africa.

The four reasons mentioned above are also related to each other and can influence each other. Easterly states that, "ethno-linguistic fractionalization in the cross-country sample adversely affects income, growth and economic policies, which is one explanation for Africa's poor growth performance"(Easterly 2001). Consequently the poor growth performance would lead to the oppression of one (or some) of the ethnic groups finally resulting in civil conflict.

III. Cost and Consequences of Civil Conflict

a. Measuring the consequences of a civil war.

To measure the full consequences of a civil war is an extremely difficult, almost impossible task. The loss of human lives and the impact on battle-scarred children whose lives will forever be traumatized by horrific nightmares can never be measured. The long term effects of the conflict on the economy and society will echo throughout decades and perhaps centuries. The only measure possible is the pure economic costs and the consequences associated with any given conflict, done by measuring the underdevelopment as a result of the conflict. We must however keep in mind that this is not by far a measure of the cost to human lives.

b. Development and Underdevelopment.

The development of a nation refers to attaining a better life for all residents of that nation. The term development consists of both economic development and the development in other social indicators and institutions. Economic growth can be measured in term of an increase in GDP per capita PPP. Unfortunately, this increase does not imply a better life for all residents. The growth could be centered on a small elite upper class while a vast majority of the country could be in absolute poverty. Therefore more and more frequently economists look at social indicators such as income inequality, life expectancy, infant mortality, birth rate, number of doctors per 1,000, number of telephones over a thousand, and the GDP. All these indicators allow economists to obtain an overall idea of a nation's level of development (Perkins et. al. 2001).

In the context of civil conflict, underdevelopment can be simply stated as the missed opportunity due to the conflict. It cannot, however, be so easily measured. Measuring economic underdevelopment is in fact very difficult, much harder than measuring economic development because economists have the task of estimating precisely what is absent rather than measuring what is present. A description then, of the method used to calculate the economic cost of a civil conflict is necessary.

c. Measuring the cost of a civil war.

The cost of a civil war to the people involved in terms of human lives, loss of loved one, and psychological trauma can be very difficult to measure. However it is possible to measure the pure economic costs of a civil war. The following paragraphs will attempt to analyze the cost of the war in Sri Lanka. It should be noted that any analysis of a cost or the consequences of a war is usually uncertain because parties involved have a tendencies to exaggerate figures to their benefit and record keeping is not through during times of conflict.

i. Direct Costs of the War in Sri Lanka

The costs usually associated with a conflict are usually classified into two categories: direct and indirect costs. These may be further subdivided into short term and long term costs. The direct costs are those resulted from a direct impact of the conflict. That is damage to infrastructure and capital assets, increase in military spending, and cost of refugee care (Arunathilake 2001), and disruption caused by warfare – (i.e., some roads become unsafe and extra costs are incurred in transportation and security.) The direct

costs can easily be measured, as evident from "the direct costs to the Sri Lankan economy due to the LTTE [the major rebel group involved Sri Lanka's conflict] military expenditure is the value of local funds spent on the war that could have been spent on consumption and investment" (Arunathilake et. al. 2001). Since it is sometimes hard to get data on the actual damages caused by the war, certain proxies are used to capture the figure. "We used the expenditure incurred by the Sri Lankan government in reconstruction and rehabilitation as a proxy for the costs of damages" (Arunathilake et. al. 2001).

From estimating the direct costs in Sri Lanka, it is evident that "the conflict has brought about a sharp escalation of defense expenditures" (Arunathilake et. al. 2001). The size of the armed forces increased by nearly 2000% since 1982: exemplifying the significant increase in defense spending. Defense spending grew by nearly 29% from 1995 to 1996 (Rotberg 1999). Also the ratio total defense/ government spending (percent) rose from 3.1 in 1982 to 21.6 in 1996. Similarly total defense/GDP (percent) rose from 1.1 in 1982 to 6.0 in 1996 (Rotberg 1999). The results of the analysis conducted by Arunathilake et. al. showed that the government's military expenditure was negatively correlated with government spending. They also found that the relationship was an elastic relationship: "a 1% increase in ... military expenditure ... reduces government spending by more than 1 %" (Arunathilake et. al. 2001) unfortunately indirect costs are much harder to calculate.

ii. Indirect Costs of the War in Sri Lanka

"Capital flight, loss of potential foreign capital and tourist inflows and immigration of skilled labor"(Arunathilake et. al. 2001) are some indirect costs of war. The flight of capital and human labor will play a significant role in reducing the current and future (after peace) growth possibilities. Measuring these is a tedious process as can be seen from what follows.

1. Lost income due to forgone investment.

Understandably this is very hard to calculate. One has to take into consideration those changes in the global economy/society that would have changed investment patterns and trends in the country. There is an easy method available in some cases, a counterfactual investment-growth scenario, which can be used to estimate the loss by comparing the counterfactual with the actual. But it is necessary to have acceptable trends and patterns. This was not possible in the case of Sri Lanka due to the change in the global environment. As an example we can show the method used by Arunathilake et. al. They used a model affected by government military investment, foreign capital and examined the time series properties of the data.

2. Lost income due to forgone foreign investment.

Again the problems of changing world trends and internal policies make it hard to calculate the values if there had been no war. Naturally violence in a country makes foreign investors are going to be reluctant to invest. Fortunately in the case of Sri Lanka since most of the violence was isolated in the north, more

investors were willing to take the risk. Unfortunately, in many African countries, the violence is not centered in one locality, and foreign investors are extremely reluctant to invest. Due to the lack of a better method in their study of Sri Lanka, the authors assumed that the flow of investment would have remained constant from the pre-conflict times⁴ They used the difference between the actual and calculated amounts to capture the loss due to the conflict. This seems to be an acceptable method though there are more accurate methods⁵ that are also more expensive and time-consuming.

3. Lost income due to loss human capital of dead or injured persons.

Usually the figures available for deaths and injuries are not reliable. From personal experience in Sri Lanka I have seen the government broadcasting one set of figures, the LTTE responding with a different set of figures and the sometimes the Red Cross and other organizations responding with differing numbers. Therefore it is usually better to obtain figures from a third party that has no bias. Also it is fair to assume that at least some of the wounded will go back to their previous jobs or other jobs. But this number is depended on the severity of the

⁴they would have used the same fixed amount as the previous years. A better method might have been to consider, the amount received as a share of the regional FDI and to keep that ratio constant to account for the increase in investment.

⁵The Stewart Model – Which divides the cost into two, the immediate human costs and the longer term development costs. The human cost is again divided into 5 entitlements. (It gets more complicated than method mentioned in text.) (Stewart et. al. 2001a, and Harris 1999)

injuries and the particular situation. In Sri Lanka Arunathilake et. al. "assumed that the country lost only the productive capacity of half the wounded individuals"(Arunathilake et. al. 2001). Here they are using 50%, but in general the situation should be studied and the number calculated by sampling from a simple random Sample (SRS). If there were many serious casualties, then the percentage would be lower. When calculating the loss from the deaths it is necessary to calculate the average ages of the victims and calculate the amount of time they would have contributed to the economy. Arunathilake et. al. assumed that the real wages remained constant after 1996. It might actually be appropriate see about the possibility of incorporating a wage inflation factor into the wages as well.

4. Output forgone due to displacement of people.

A significant problem in many ethnically polarized civil conflicts is the huge exodus of refugees, as evident from the following numbers for 1999. Many of these counties have had ethnically polarized civil conflicts. The following numbers show how significant the problem is in recent civil war areas.

Afghanistan	2562000	Iraq	572500
Burundi	525700	Somalia	451600
Eritrea	345600	Bosnia-Herzegovina	448700 ³

³ Source UNHCR Report – Origin of Major refugee Population is 1999- see Bibliography

As evident from the UNHCR report many of these refugees have ended up in neighboring countries and much of their production is lost to the country. Arunathilake et. al. Looked only at the number of refugees remaining in Sri Lanka and they calculated the loss of output from the theoretical number of those who are no longer at work (Arunathilake et. al. 2001). They assumed that a given percentage would be working in new location. Again the percentage for every conflict would be different and would have to be calculated using a simple random sample (SRS) of refugees. But there are also a large number of refugees who have moved to Canada, India, and UK. The loss of production from these refugees should also be accounted for when calculating the total loss due to refugees. The authors argue that since it is difficult to differentiate between immigration motives and also since many have been sending money back to Sri Lanka, they did not take the human capital flight into account.

5. Output forgone in the surrounding areas.

It is also necessary to look at the output forgone in the area surrounding the conflict. It is most likely going to be difficult to get exact figures for the "war zone" and an ad hoc procedure might be necessary. One possible method is to use the cost to reconstruct as a measure of the loss. Arunathilake et. al. came up with Rs. 9 billion as the figure for the output forgone in the Northern Province.

There are also more substantial variables that are extremely hard to measure when trying to capture the costs of a civil conflict. These variables induce immigration of

skilled labor, reduced health stock, reduced efficiency of investments, and infrastructure bottlenecks caused by security measures (Arunathilake et. al. 2001). Arunathilake et. al. calculated the total cost of the war in Sri Lanka as being 20 billion US dollars⁶. While The cost of a civil war can be estimated using the above-mentioned methods, keeping in mind that the data might not represent the actual situation.

d. Economic Consequences of a Civil War

In his paper Collier presented four hypotheses about the consequences of a civil war that is tested using an empirical model. The four hypothesis are as follows: (I) Civil wars reduce the growth rate of GDP rather than its level. (II) Peace may not end the decline (because the adjustment of external factors may not complete). (III) There might be a peace dividend. (Capital that flew out flies back). (IV). The longer the duration of the war, the higher chance of a peace dividend.

i. Change in makeup of GDP

During a civil war, the production and manufacturing in a country will also change. The large number of people involved in the war effort would effectively reduce the labor force available for other tasks. Also non-essential personal might be conscripted to fight for either side. In Sri Lanka, the LTTE forcibly recruit for their cause, and much of the youth in other parts of the country join the army due to a lack of other opportunity.

⁶Refer to Appendix B for actual break up of values.

As a result it is possible that the service transportation industry will be reduced in size while essential agricultural production will remain constant. Also capital flight and lack of foreign investment would cause much of the financial industry to contract. Consequently there should be a pronounced change in the make up of the GDP during a civil war. The analysis conducted by Collier proved this fact. The results clearly showed that the composition of GDP changes during the civil war. There was a pronounced increase in the percentage of GDP taken up by arable subsistence agriculture and a decrease in the percentage of the GDP taken up by construction, transportation, distribution, finance and manufacturing. When studying data for Uganda the result is clearly visible. The share of the war vulnerable sectors (construction, transport, distribution finance and manufacturing) went down from 42.5% to 24.0%. The share of the war-invulnerable sectors (arable subsistence agriculture) went up from 20.5% to 36.0% (Collier 1999). These figures only illustrate the change in the composition of GDP, but we also need to see how the growth rate is affected.

i. Change in GDP growth rate function of the duration of the war.

Collier's study found that "during civil wars GDP per capita declines at an annual rate of 2.2% relative to its counterfactual" (Collier 181). They also found that the longer a war lasts the higher the possibility of stability and growth after the war finally ends⁷. His studies showed "that if a civil war lasts only one year ... it will cause a loss of growth during the first five years post-war years of 2.1% per annum". This statistic shows that even after the war ends, the repercussions linger on. If the war was a longer war, then capital stock would adjust at a lower level and capital flight would stop. In this situation

when the war ends, the economy will grow strongly because of capital repatriation. This change can also be explained by taking into account peoples' expectations. If the war lasts only for a short time, then the possibility of violence in the future will be high. There would be higher tensions in society and investors would be afraid to return. On the other hand after the end of a prolonged conflict, it would seem that an acceptable solution was reached. Though there is still a chance of violence, it is lesser than with a short war. Society would look towards a long period of peace, which would drive development and growth as well and give a positive outlook for investors. This growth pattern would agree with the Solow model (Perkins 2001) and is similar to the growth patterns of Japan and Germany after World War II.

The results of the analysis "are consistent with the war overhang effect predicted for short civil wars and with the potential for rapid growth after long civil wars." (Collier 1999). As a result after short wars the loss of capital will continue. A clear consequence of a civil war is economic underdevelopment and the decrease in per-capita GDP. These are significant factors leading to the civil war in the first place.

⁷This is not implying that it is better to prolong a war. If the war was longer then the growth rate would have stabilized at a lower level and there would have been a significant destruction on infrastructure. When the war finally ends the returning capital, investment would drive growth at a faster rate than if the war was shorter. Unfortunately though the growth rate is longer the absolute level of growth (GPD etc) would be far lower than after a short war.

IV. The vicious cycle of civil conflict.

While reading the source material for this paper a noticeable and pronounced fact was that most analysis was done solely on the causes or the consequences of civil conflict. There seemed to be a lack of literature dealing with both. One finds it very difficult to find the exact cause and effect relationship leading up to and from a civil conflict. The lack of a causal relationship led to the formation of an idea of a cycle of civil conflict. A cycle of conflict that could explain the ongoing civil wars in many parts of the world.

The causes of civil war are economic oppression of ethnic group(s) by other groups, the self-motivated attempts by ethnic groups to succeed over other groups and low levels of growth. The oppressed will finally revolt, take arms and attempt to obtain a fair share in the economy. The consequences of civil war are increases in defense spending and destruction of infrastructure leading to underdevelopment, a lowering of the quality of life and per capita GDP. Summers supports this, "War stops development" (1992). The consequences of this are that the oppressed people will get more oppressed, or the oppressed will triumph and oppress the other groups, resulting in more violence in the future. Therefore it seems that the consequences fuel the fires of the future causes. Unless some means other than fighting is found there will be no development and therefore no long-term solution to the problem. The causes of civil conflict lead to the consequences, civil conflict, which will in turn increase the causes. This is the vicious cycle of civil conflict that will inhibit development and growth in many countries in Africa, Asia and in other parts of the world.

V. Breaking the cycle

Is it possible to find a common solution to solving these civil conflicts or at least to achieving significant development to lead to an increase in opportunity that would reduce the economic causes of conflict? Sri Lanka is frequently cited as country that has achieved significant growth while undergoing a civil conflict. But a factor that is overlooked is that Sri Lanka seems to be more fortunate than most countries afflicted with civil conflict. Though Sri Lanka has maintained a relatively stable economic growth level throughout its nearly 20 years of civil war, the stability is most likely due to Sri Lanka's unique position with the war being isolated to the north, where very little economic activity was taking place compared to the rest of the country. Since most of the rest of the country was left in peace (except for isolated incidents), the country was able to experience growth while fighting a civil war. Unfortunately, this is not possible for other countries where the conflict is more widespread and damages more universal.

There is hope to break the vicious cycle of civil conflict. The economic sources of the conflict mentioned above are "high levels of poverty, failed political institutions and economic dependence of natural resources" (Elbadawi and Sambanis 2000). Therefore the solution for breaking the cycle could be found by addressing these issues. Though it is possible to address the issues of high levels of poverty or economic dependence on natural resources it seems more constructive and plausible in the authors opinion to attempt to change the political situation. Therefore if a country was to have long lasting, stable political institutions then this would be a method to break the cycle.

It seems that strong institutions and democratic governments have the ability to suppress the negative effects from ethno-linguistic fractionalization. In any multi ethno-linguistic society, ethnic competition and rivalries are a "natural phenomena". It is the inability of the governments

to manage these rivalries that lead to conflict. Therefore strong governments will be able to make a difference in the outcome of these rivalries (Harris 1999). In the case of Sri Lanka, the experience clearly indicates that “robust government institutions - by overpowering war-created economies ... are critical in mitigating the costs of the conflict” (Stewart F. et al. 2001b). From the studies conducted by Elbadawi and Sambanis the importance of strong institutions seems clear. Figure 2d in their publication illustrates this point⁷, At low levels of POLITY (their measure of the democracy in governance) the probability of war increases as the ethno-linguistic fractionalization increases and then decreases after a certain point. But it can be seen "that the probability of civil war at very high levels of POLITY⁸(i.e., strong democracies) is near zero"(Elbadawi and Sambanis 2000). The following data present further evidence on the importance of strong democracies. For 1960-98, Asia had an ethno-linguistic fractionalization index of 47 and a POLITY index of -2 giving them an estimated probability of an incident of civil war at .5624. For the data from 1980-98 the ethnic index remained at 47, POLITY index increased to 4.1 indicating an increase in presence of stronger democracies. The probability of an incident of war decreased to .313 (Elbadawi and Sambanis 2000). Though there were other variables⁹ which were not discussed due to space constraints, it was evident from the study that for a given level of fractionalization the change in government (increase in democracy) had a strong impact in reducing the probability of an estimated incident of civil war.

It must be emphasized that democracy is not the only solution. A pure democracy that represents all the parties involved will reduce the possibility of oppression by giving equal opportunity and treatment. On the other hand a strong government, similar to Taiwan or Korea, with an authoritarian rule or a dictatorship can succeed if the rulers have the foresight to work fairly and for the betterment of the whole country instead of a selective group in the country.

⁷. Appendix A for specific diagram. ⁸. Based on the Polity98 data set ⁹. There was increase in per capita GPD PPP.

VI. Conclusion

Though it is commonly assumed that ethno-linguistic fractionalization is a leading cause behind civil conflict, we find there may be more significant variables contributing to the conflict. Namely: low levels of natural resources, high poverty (low levels of GPD per capita), and lack of strong democratic institutions. The analysis conducted by economists clearly showed that strong institutions have the ability to decrease the probability of incidence of war, for a given level of fractionalization in a society. Additionally, high levels of fractionalization and high levels of homogeneity are negatively related to the possibility of civil conflict, while average levels of fractionalization increase the chances of civil conflict. Though it is difficult to calculate the costs and consequences of a war, it is possible if the necessary data is available. The paper studied the economic cost and consequences of civil conflict and did a case study by calculating the cost for Sri Lanka's war.

Furthermore, it is possible that strong government institutions have the ability to stop the oppression and any civil violence associated with it, effectively breaking the cycle. While evidence clearly supports the economic causes as significant causes leading to civil conflict it must be mentioned that there are very passionate and violent emotions that cannot be numerically accounted for in play as well. People's feelings of pride, patriotism and panic are beyond the reach of mere economic influences and play a big role in influencing the final outcome in these struggles.

Appendix A

Source : Graph obtained from Elbadawi and Sambanis 2000, pg. 257)

Appendix B – Cost of War in Sri Lanka

Source : Data obtained from Arunathilake et. al. 2001, pg. 1496

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