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# The Role of Aid on Peace Consolidation in Postwar Sri Lanka

**Abstract:** The three-decade war in Sri Lanka left the northern and eastern regions severely destroyed. Those regions are populated by minority and marginalized ethnic groups. The expectation is that aid flows to those regions to rebuild after the war as they need the aid more than other places. Nonetheless, the regions are underdeveloped, and the underlying issues which caused the war are yet to be addressed. Hence, the research question this paper aims to answer is, ‘Are conflict-affected districts a priority in aid allocation in postwar Sri Lanka?’ This paper is primarily concerned about the aid allocation post-conflict. However, since Sri Lanka was hit by the tsunami in 2004, we use the aid allocation from the post-disaster environment to reveal aid patterns and potential biases. The paper uses GIS geocoding, mapping, spatial analysis, and econometric analysis to understand whether: (i) tsunami-affected districts received more aid than others (ii) war-affected districts received more aid than others (iii) economically developed districts receive less aid than others. The paper uses AidData on World Bank, Chinese, and the author’s collected data on the ADB aid projects, 2002-2015. The study finds that donors do not respond to the needs of the recipient country. The maps and the analysis show that aid projects are predominantly in southern regions of the country and not in the war-affected districts.

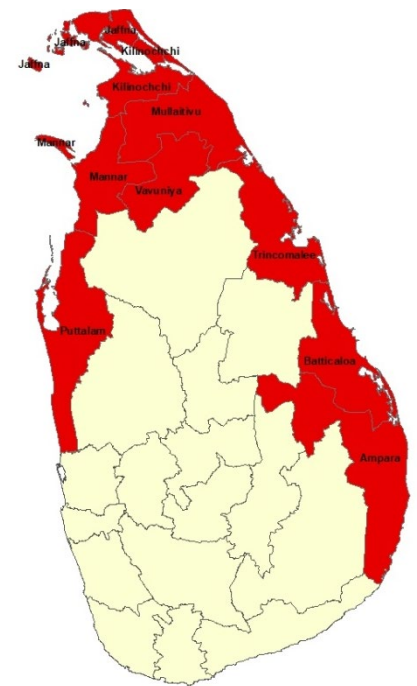
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## 1. Introduction

Whether foreign aid is helpful or not in promoting economic growth and development is a much-heated debate amongst economists and development practitioners. It is also contested whether aid combined with aid conditionality can bring about peace or sustain peace in conflict areas in the longer run. For instance, Boyce (2002) argues that there is a need for a complete restructuring of aid conditionality for it to be successful in peace consolidation, whereas Sindre (2014) argues that aid conditionality works as long as donors include the rebels in the decision-making process. One thing most economists and politicians agree on is that aid rushes to countries after a natural disaster in order to give humanitarian relief (Rodella-Boitreau & Wagner, 2011 and Strömberg, 2007). The objective assumption is that following a natural disaster, aid is allocated to the places most affected. For example, in January 2010, Haiti's capital Port-au-Prince was destroyed by an earthquake, and the aid allocated to this natural disaster was focused on rebuilding the most affected regions (Soden & Palen, 2014). Similarly, one would assume that following a conflict, aid donors prioritize rebuilding the conflict-affected areas. Is this true? Does it hold true regardless of the ethnic composition of those affected areas?

**Map of Sri Lanka with highlighted conflict districts**

This paper uses Sri Lanka as a case study to investigate whether 'within a country, aid is allocated to places that need it the most'. Sri Lanka, an island off the southern tip of India, saw a protracted ethnic and territorial conflict from 1983 to 2009. The Sri Lankan 20 million population can be sub-grouped into 75% Sinhalese, 11% Sri Lankan Tamil, 9% Moors, and 4% Indian Tamils (Census 2011)<sup>1</sup>. The national liberation struggle was primarily fought between Liberation Tigers of Tamil Eelam (LTTE) and the Sri Lankan government. The conflict was about the independence of the traditional Tamil homelands in the northern and eastern parts of the island and horizontal inequality. The major causes of the Sri Lankan conflict were inequality in terms of access to education, employment opportunities,



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<sup>1</sup> The rest of ethnic groups are usually lumped into a category called 'others'. The group includes Burghers (Eurasians), Sri Lankan Malays, Indian moors, and indigenous groups.

disparities in urban development, distribution of benefits from agricultural development, and political exclusion of Sri Lankan Tamils<sup>2</sup>.

The conflict ended in 2009 when the Sri Lankan military defeated the LTTE. Subsequently, the government focused on rebuilding and developing the entire island with help from international loans and donors<sup>3</sup>. However, the country still deals with many of the issues which existed in the pre-war period and during the war, such as high youth unemployment and Sinhala resettlements to the Tamil Homelands. In 2018, nine years after the violent conflict ended, around 8,000 Sri Lankans applied for asylum in other countries<sup>4</sup>. A deductive estimate would be that more than 200,000 Sri Lankans (mostly Tamils and Muslims who were targeted) left their motherland during this 26 year-long violent conflict, and that is a low estimate<sup>5</sup>. More than 40,000 civilians died<sup>6</sup> during the last two weeks of the Sri Lankan conflict, which is now being called a genocide (see 'Tamil Genocide by Sri Lanka' by Francis Boyle). The end of the war also caused an additional 300,000 Tamils to be internally displaced and detained in camps<sup>7</sup>.

Given the nature and scale of the conflict, the role of international aid in rebuilding the Sri Lankan economy became pivotal. In light of this, an empirical analysis in the spatial distribution of aid and its allocation across regions is important for many reasons. First, the Sri Lankan conflict did not end with a

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<sup>2</sup> The political tension between the Sri Lankan Tamils and Sinhalese escalated in 1983 when the LTTE ambushed a government military convoy. Anti-Tamil riots and killings followed this attack. The anti-Tamil riots took place all over the country in July 1983, but they were especially extreme in Colombo. Sinhalese would search minibusses for Tamils, destroy Tamil businesses, raping Tamil women, and much worse (Tamil Guardian, July 23rd, 2019). These riots caused thousands of Tamils to flee the country in a hurry, while it also radicalized a big part of the Tamil youth who went and joined various Tamil nationalist militant organizations. July of 1983 is known and remembered amongst Sri Lankan Tamil diaspora, in particular, as Black July [Karuppu Yūlai]. The death casualties from the three decade conflict is estimated to be 80-100,000 (Al Jazeera, Nov 28, 2013).

<sup>3</sup> One of the biggest donors in Sri Lanka at the moment is China. Other donors include World Bank, Asian Development Bank, OECD, Iran, and India. The more 'traditional' donors from the West have some economic performance, governance reforms, and human rights conditionalities, whereas donors like China have no aid conditionality. This makes aid conditionality less effective on the global scene.

<sup>4</sup> <https://www.worlddata.info/asia/sri-lanka/asylum.php>

<sup>5</sup> The estimate is the author's estimate based on the 8,000 Sri Lankan asylum seekers in 2018 multiplied by the years of conflict (26) gives 208,000. A realistic assumption is that during the height of the conflict a lot more than 8,000 Sri Lankans sought asylum in other countries.

<sup>6</sup> This number may vary depending on different estimations.. There are no official numbers. The estimate ranges from 1,000 to 40,000. UN estimates 40,000 (Al Jazeera, Nov. 28<sup>th</sup> 2013).

<sup>7</sup> Amnesty International, Aug 2009: <https://www.amnesty.org/en/documents/asa37/016/2009/en/>

negotiated peace settlement. It was a ‘winner-take-all’ end to the conflict, which is not a common scenario. Most contemporary conflicts see an end with a negotiated peace. For example, Zambia, Namibia, and El Salvador ended with a negotiated peace. Second, in December 2004, during a ceasefire, Sri Lanka, along with several South Asian countries, was destroyed by a tsunami<sup>8</sup>. This offers the opportunity to use the aid allocation post-tsunami as a natural experiment. If aid is not allocated equally across the affected areas regardless of ethnic composition, it could be an indication of a pre-existing political/ethnic bias in the aid allocation. Third, the Sri Lankan conflict was extremely contained to particular geographical areas of the island. Hence, the districts affected by the conflict are easy to determine, which makes our identification strategy easier for empirical analysis<sup>9</sup>. Fourth, the majority of the marginalized ethnicities are also contained in precise geographic locations that mostly overlap with the geographical locations affected by the war. All these aspects make aid to Sri Lanka a useful case study.

There are two aims of this paper. First, this paper investigates whether conflict-affected districts receive more aid than other districts. Second, this paper first investigates whether tsunami-affected districts received more aid than other districts. We use a newly added geocoded Official Development Assistance (ODA) dataset from the World Bank and China in combination with a new manually collected and

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<sup>8</sup> Because of the post 9/11 climate and the proscription of LTTE in many countries, disincentives for continued armed struggle arose. The LTTE and the government of Sri Lanka signed a formal ceasefire agreement (CFA) in February 2002 facilitated by Norway. There were many reasons as to why this happened. However, two primary explanations brought the LTTE to the negotiation table was that the Prime Minister at the time, Ranil Wickramasinghe, agreed to de-proscribe the LTTE as a terrorist organization and the LTTE saw being part of the negotiations as an opportunity to gain some legitimacy (Holt, 2011 and McGilvray & Gamburd ed, 2010). The peace talks ended in 2006 with killings on both LTTE and Sri Lankan government side. The negotiations were not going the way the LTTE wanted it to go, and the Sri Lankan government changed in 2005. The new government with Mahinda Rajapaksa as Prime Minister was campaigning from a pro-Sinhala nationalist platform which did not sit well with the LTTE. The Tsunami happened in 2004 in the middle of cease fire. Holt (2011) estimates that in 2004, before the tsunami, total foreign aid disbursement was USD805 million. In 2005 the development partners pledged approximately USD1,375 million for tsunami recovery activities, and around USD1,590 million was committed by May 2005. Arguably, this substantially changed the aid environment in Sri Lanka, and a threat of withholding aid in an ‘over-aided’ environment would have had minimal effect. Hence, aid conditionality could not help sustaining peace in Sri Lanka because aid conditionalities became obsolete in the post-tsunami environment. ‘ ”There was so much funding that it was economically overwhelming,” said one government official. “The tsunami brought in billions of dollars. It was too much to deal with. Not all can be spent, and not all has been spent on valuable things.” Given the massive global media coverage devoted to the tsunami and its effects, there was tremendous pressure to spend quickly and to show tangible results.’ (p. 32, McGilvray & Gamburd ed, 2010)

<sup>9</sup> The conflict districts are Ampara, Batticaloa, Jaffna, Kilinochchi, Mannar, Mullaitivu, Puttalam, Trincomalee, and Vavuniya.

geocoded dataset on aid from the Asian Development Bank. We use Geographical Information Systems (GIS) to geocode and to extract this geocoded data at the district level and map the projects visually and analyze spatial clusters. Additionally, we do econometric analysis to determine the validity of our visual maps. Unsurprisingly, we find that tsunami-affected districts, regardless of ethnic composition, received more aid than non-affected districts.

Next, we analyze the distribution of aid between districts affected by the conflict using the same methodology as we did to investigate aid after the tsunami, just for post-2009. The visual maps show a significant lack of projects in the conflict-affected districts, and the empirics show that the conflict-affected districts do not receive more aid than other districts. The results are not surprising given the existing narratives by Sri Lankan scholars, activists, and others. The paper then investigates whether economically developed districts receive less aid than other districts. The rationale here is that, if some districts (conflict-affected or not) are not receiving significant aid, it could be because those districts do not need it as they are already economically developed. For this purpose, we use several economic development indicators in addition to the district-specific aid data. The economic development indicators are the percentage of households owning computers and fridges, the Gini coefficients, poverty gap, daily calories, and percentage of females, which we extracted from Sri Lanka's National Statistical Bureau. Even when accounting for economic development, we do not find that conflict-affected districts receive more aid than other districts. Therefore, this paper argues that donors do not prioritize their aid to areas within a country that desperately needs it. This is important because donors decide that a specific country needs aid, but they do not diligently research the country and decide where that aid could be most helpful. It would seem, based on the Sri Lankan case, that donors tend to take the path of least resistance, which ends up marginalizing the people they might have intended to give relief.

The contribution of this paper is both in the aid literature and literature on the conflict in Sri Lanka. It has been more than a decade since the conflict ended in Sri Lanka, but few studies on aid and donors after the tsunami exist. Additionally, it is commonly known by activists, Sri Lankan Tamil residents in northern and eastern parts of the country, and Sri Lankan scholars in various fields that the northeast has not been a priority in terms of rebuilding or reconciliation (Goodhand 2010, Ruwanpura et al. 2020, Tantrigoda 2017,

Kadirgmar 2017 and many more). Using visual and empirical evidence, this paper fills the lacunae in the existing literature to show that systematic bias existed in the allocation of aid post-2009.

The methodology used for this study is another contribution to the aid literature. The interdisciplinary approach, using methods from economics and geography, has allowed us to visualize and investigate the aid projects allocated within a country, an approach most aid studies have not used. For instance, Gounder (2005), Nkurunziza, and Collier & Hoeffler (2014) focus on the importance of economic growth through aid after a conflict. Pritchett et al. (2012), Bohnke & Zurcher (2013), Kadirova (2014), and Ndikumana (2015) focus on how aid can increase government capacity and the importance of capacity building post-conflict. This paper underlines the importance of the geographical allocation of various aid projects. Finally, this paper urges aid donors to spend some more time learning about a recipient country's internal history, especially in a post-conflict situation, to ensure that the aid actually goes to the places that need it the most.

The rest of the paper is structured as follows: section 2 reviews the literature on the effect of aid in conflict countries and the impact of aid in post-conflict countries, section 3 gives an overview of the role of aid in Sri Lanka during 2002-2006, section 4 states the research design, section 5 describes the data, section 6 discusses the empirical methodology and identification issues, section 7 presents the results, and section 8 gives concluding comments and further research considerations

## **2. Literature review on aid effectiveness**

Peacebuilding through aid can come about in various ways. Some will say economic growth and development are crucial. Some will say that capacity building is a cornerstone, and yet others may argue that aid conditionalities determine successful peacebuilding. The truth behind the financial aspect of peacebuilding may be a combination of all the mentioned ones. Hence, this section explores the literature on these topics.

### **2.1. The effects of aid in conflict countries**

In a probability analysis of the role of aid on ongoing conflicts in 39 Sub-Saharan African countries, de Ree and Nillesen (2009) find a statistically significant and economically important adverse effect of foreign aid flows on the probability of ongoing civil conflicts to continue. Hence, they find that increasing aid flows tend to decrease the duration of civil conflict. One issue here is that the analysis needs to be qualified better.

The conclusion reached by de Ree and Nillesen (2009) suggests that the civil conflicts came about mostly due to lack of monetary resources and thus could be resolved with an injection of monetary funds. Ishihara (2012) reaches a different conclusion. Through an analysis of aid effectiveness in 78 countries using a survey monitoring the Paris Declaration (the PD survey), Ishihara finds that the aid performance of fragile and conflict-affected states is significantly worse than non-fragile and conflict-affected countries. Although the analysis suffers from some uncertainty<sup>10</sup> due to the chosen methodology, the results tell us that in a state of conflict, countries are less efficient in the use of received aid. In that case, increasing aid to try to resolve a conflict is an ineffective strategy. However, fragile and conflict-affected countries perform worse than their counterparts are not surprising since those countries are often in utter political chaos without a credible, legitimate functional state.

It would seem that there is room for a more significant donor role here. A donor could improve aid effectiveness by making aid conditional on specific performance goals. However, there are limitations to the effect of aid conditionality during a conflict. For example, Sindre (2014) point to the fact that any kind of aid conditionality (political or economic) is inefficient in controlling destructive rebel behavior and in encouraging peace settlements. Ofstad (2002) argues that an aid program, similar to the "principled common programming" implemented in Afghanistan, should be implemented during any conflict. The aid program in Afghanistan intended to support the peace process, human rights, and humanitarian concerns. Thus, for Ofstad (2002), aid assistance should not give any direct political or military advantage to any of the warring parties and should be conditional on political goals. This seems somewhat unrealistic as the aid has to go through one or the other agent. In conflict, aid necessarily means it is granted to or through one or more parties engaged in armed conflict with another. Logically, then, it can alleviate the pressure a party has on delivering on economic development to its base and reallocating expenditures to military means, thus potentially prolonging the conflict. This, in turn, needs to be weighed against potential deaths of civilians, lack of livelihood opportunities, and the draw of the violence-related activities

It is then worth asking whether aid, conditional on political goals, or economic goals, is useful in moving a country from conflict to peace. Imagine that you are a donor country and that you are conditioning your aid

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<sup>10</sup> The author had to create standardized scores to be able to compare the index values across countries.

on human rights not being violated - how do you monitor whether this condition is being fulfilled amid a ravaging conflict where chaos is prevailing? How do you make sure that the assistance does not give a political or military advantage? Indeed, the task appears very difficult.

## **2.2. The effects of aid on economic growth**

Knight and Hodler (2012) find that aid is ineffective or even harmful in ethnically fractionalized countries, most of which are located in Sub-Saharan Africa. The authors argue that their findings are consistent with the hypothesis that there is a direct positive effect of foreign aid on economic growth, which is offset in fractionalized countries in which aid may provoke damaging rent-seeking competitions. Knight and Hodler (2012) suggest that aid to ethnically fractionalized countries should be conditional on the degree of integration of distinct groups in a country, and it should be monitored closely. One could argue that in ethnically fractionalized countries, the state may have less legitimacy. A more capable state that can accompany and mediate the wishes of different ethnic groups may ensure that foreign aid promotes economic growth. Hence, this alludes to the facts that even in countries with no conflict, the capacity of the state and possibly aid conditionality on political and economic performances are essential in aid effectiveness.

## **2.3. The effects of aid on economic growth in post-conflict countries**

In a case study of post-conflict Fiji, Gounder (2005) finds that the segregation and discriminatory policies in Fiji led to poor economic performance and high financial cost. Gounder (2005) argues that the role of aid for development and sustain peace should implement projects that can improve horizontal and vertical inequalities by, for example, improving poor health and housing conditions. Gounder (2005) emphasizes that conflict and low economic growth is a complicated two-way street, where low economic growth can lead to conflict and conflict can lead to low economic growth.

Nkurunziza (2015) also emphasizes the importance of economic growth for peacebuilding to be possible.

In an empirical analysis of aid and policy reform, Collier and Hoeffler (2004) have two overall conclusions. Firstly, they find that aid is much more effective in promoting growth in post-conflict countries than in other developing countries. Secondly, the pattern of aid payout should gradually reduce back to lower levels by the end of the first post-conflict decade. The reason for this is that aid has a more significant effect later on in post-conflict countries than immediately after a conflict. Hence, less money is necessary later in post-



conflict countries. This could be since the state of the country is less chaotic many years after a civil conflict, which implies a stronger state that can use the received money more efficiently. Collier and Hoeffler (2014)'s results also seem to indicate that it is hard to evaluate how effective aid is in the early years post-conflict because the government and the country are not yet capable (again underlying the importance of a capable state).

#### **2.4. Capacity building and aid**

Pritchett et al. (2012) refer to a fourfold transformation of the state's functional capacity in that economic development contains advancement in a nation's ability to manage its economy, polity, society, and public administration. This understanding of economic development underlines the crucial role of the state. Pritchett et al. (2012) argue that international interventions (aid) can "hinder the emergence of domestic, organically-evolved functional organizations" (p.9), because they might be pushing too hard too soon, and that ruins the state's capability. How, then, can aid help in improving the state's ability? According to a micro-level longitudinal study by Bohnke and Zurcher (2013) of 80 communities in Northeast Afghanistan in the years of 2007-2009, foreign aid has a significantly positive effect on state legitimacy, and they underline that it is not the sheer amount of aid that determines aid effectiveness, but the visibility and perceived usefulness of the given aid. On a similar note, Kadirova (2014) used data from personal interviews, estimated a linear additive model to test project aid effectiveness in Afghanistan from 2002 to 2008 supplemented by macro data analysis. They find that a high level of cooperation and support from the national government, combined with strong leadership in the international project implementation, ensures highly successful projects. Kadirova (2014) found that help from the federal government to aid projects is reciprocal. The federal government was only willing to be cooperative if their sovereignty was respected and if they were included in the plans, one way or the other. The international teams can enhance this through capacity building interaction and support. Hence, the significance of state cooperation and the capability of the state are crucial elements of peacebuilding.

Ndikumana (2015) underlines the importance of a strong state, as well. They argue that donors need to prioritize state capacity building, as the state needs the capacity to mobilize domestic revenue. The key to a successful post-conflict reconstruction would be precisely that.

## **2.5. Aid conditionality and donors**

Sindre (2014) argues that peace conditionality may be an efficient tool in ensuring peace in the post-conflict period. They find that in the stage of peacebuilding, it is crucial to include the rebels in decisions regarding aid distribution, as it may encourage a transformation from militarist structure to secure political stability. On a similar note, Boyce (2002) also argues that peace conditionality can make aid a more effective instrument for peacebuilding, but for that to be correct, reconstruction of aid itself is necessary. In particular, Boyce argues that donors need to cooperate and agree on conditions for aid for it to be successful. Nevertheless, is a cooperation between the donors enough to ensure success through peace conditionality? Peace conditionality means that the donors can push their political agendas, and what if the recipient does not agree with it? Without respecting the recipient country's sovereignty, and without their cooperation, aid conditionality can be highly inefficient. Especially, now that the "traditional" donor powers are becoming less relevant as more non-traditional powers emerge, such as China and India. These do not subject aid to traditional policy conditionality. China's conditionality is usually associated with commercial policy. That means that recipients who do not want to deal with political conditionalities can choose another donor - China provides an excellent alternative option. Thus, in any post-conflict situation, the existence of multiple uncoordinated donors (be they China or otherwise) allows for weakening aid conditionality.

Ndikumana (2015) argues that donors in post-conflict countries should prioritize peace consolidation and prevention of recurrence of conflicts. In addition, power-sharing among the different social groups, in particular the groups involved in the conflicts, must be prioritized.

## **3. Peace talks during the war period – with a focus on 2002 to 2006**

In order to understand what kind of role aid plays in the aftermath of the war in Sri Lanka, it is crucial to comprehend the role of aid during the most recent peace talks in 2002-2006.

In 2002 an opportunity opened up for international aid to create peace in the Sri Lankan civil war. This was not the first time Sri Lanka was in peace talks. However, this one was different from previous talks in that

‘money mattered more than democracy’ (Thiranagama, 2019<sup>11</sup>). In order to explore this, this section takes a look at what happened in the years between 2002 and 2006.

Due to international pressure, the LTTE and the government of Sri Lanka (from now on referred to as GoSL) attended peace negotiations in 2002. Because of the post 9/11 climate and the proscription of LTTE in many countries, disincentives for continued armed struggle arose. The LTTE and the GoSL signed a formal ceasefire agreement (CFA) in February 2002 facilitated by Norway. There were many reasons as to why this happened. However, two primary explanations that brought the LTTE to the negotiation table was that the Prime Minister at the time, Ranil Wickramasinghe, agreed to de-proscribe the LTTE as a terrorist organization and the LTTE saw this as an opportunity to gain some legitimacy (Holt, 2011 and McGilvray & Gamburd ed, 2010).

From February 2002 until the peace talks took place in September 2002, the two sides aired their expectations; the LTTE wanted three core principles to be acknowledged: the concepts of Tamil Homeland, Tamil Nationhood, and the right of the Tamil people to self-determination. The GoSL did not recognize any of those core principles making it hard for Norway actually to get the two parties to attend peace talks. Norway was seen as a neutral third party by the international community, but that stance of neutrality has been called into question. While Holt (2011) argues that Norway was a foreign credible outsider-neutral country to take the role as the peace negotiator in 2002, Harris (2010) points out that Norway has a large diaspora consisting of Sri Lankan Tamils, who potentially influenced Norway’s position in the negotiations. Höglund and Orjuela, (2012) and Harris (2010) write about the diaspora’s close link to Western intervention. During the last phases of the war, the Tamil diaspora (approximately 1 million people) mobilized massive demonstrations. For instance, in London, rallies went on for seventy-three days on Parliament Square, which contributed to extensive media coverage that resulted in a trip by the UK foreign secretary to Sri Lanka in an attempt to talk them into a ceasefire a few weeks before the end of the war. The GoSL has never been oblivious to the influence of the diaspora on the Western governments’ politics regarding Sri Lanka. This notion has caused the GoSL not to trust the Western governments. This is seen by the fact that the GoSL and the Sri Lankan media often cite examples of the Tamil diaspora’s influence on

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<sup>11</sup> Professor Sharika Thiranagama used this phrase in a conversation with me about my work at The Annual South Asian Conference, 2019.

Western governments as proof of donor support for LTTE objectives. According to Harris (2010), this undermines the Western government's attempts to help humanitarian, peace, governance, and human rights issues with the GoSL. In this context, it should be noted that many Western governments pledged money to the mentioned causes with a double agenda. Although they officially took a stand against the human rights violations, they also wanted to stop the flood of thousands of Tamil refugees from Sri Lanka going to the West and perhaps even motivate some to return (Frerks & Klem, 2006).

From September 2002 to early 2003, the two parties went through six rounds of peace talks. The height of peace talks came about in December 2002, where the 'LTTE agreed to explore a political settlement along the lines of the federal political system within a united Sri Lanka' (p.21, McGilvray & Gamburd ed, 2010). The details of this political settlement will be explored in section 2.3.1.

In 2003 the LTTE withdrew from peace talks, but the Tokyo Declaration Conference on the reconstruction and development of Sri Lanka took place in June without the LTTE. This donor meeting was co-chaired by Japan, Norway, the European Union, and the United States (McGilvray & Gamburd ed., 2010). The amount pledged from the donor governments came to USD4.5 billion over four years, 2003-2006. The donor countries insisted that their assistance had to be contingent on keeping the peace (Holt, 2011).

In 2005 Mahinda Rajapaksa won the presidential election. He campaigned from a Sinhala nationalist platform and narrowly defeated his opponent, Ranil Wickramasinghe (who enjoyed the support from many minorities). Many Tamils in the North-east, under pressure from LTTE, refrained from voting, which cost Wickramasinghe the position. Nonetheless, on Martyr's Day, a holiday in the North-East, LTTE's leader Prabhakaran seemingly reached a hand out to Rajapaksa by saying that the LTTE would be willing to resume talks, but if the negotiations did not lead to anything, they saw no other way than return to war (Frerks and Klem, 2006). However, these somewhat hopeful words were followed by massive killings from both parties, and the escalation died down in February 2006 with a ceasefire agreement in Geneva, which ended the same year in June. When the peace process of 2002-2006 broke down, many Western donors implicitly demonstrated support for the GoSL's "war against terrorism", while simultaneously calling for respect of human rights (Höglund and Orjuela, 2012).

### **3.1. The specifics of the peace talks of 2002**

During the first round of peace talks, the parties agreed that a joint task force for humanitarian and reconstruction activities was needed. In the second round, three subcommittees were set up: the Subcommittee on Immediate Human and Rehabilitations Need in the North and East (SIHRN), the Subcommittee on De-escalation and Normalisation, and the Subcommittee on Political Matters (Holt, 2011). The joint task force was made up of equal parts GoSL and LTTE representatives with the aim of 'normalizing' the livelihoods of Tamil civilians caught in the war in the Vanni region through aid (McGilvray & Gamburd ed., 2010).

The North East Reconstruction Fund (NERF), which was established at the Oslo Peace Support Meeting (Nov.25, 2002), was administered by the World Bank. NERF would then fund the projects identified by SIHRN. Holt (2011) writes: "The idea that 'tangible improvements to the daily lives of the people' would 'underpin' political progress was a core approach to this peace process and demonstrated an early commitment to the importance of economic recovery issues in this peace-making process" (p.80). Hence, during the first couple of rounds of talk, all parties agreed that improving the situation of the war-affected areas of North and East had to be a priority. The idea was that these activities would create some support for a more political process of finding a solution to the war and that through the recovery of the North and East, the GoSL would gain trust in Tamil majority areas. For this idea to succeed, peace dividends were needed. Holt (2011) emphasizes that peacebuilding was focused on economic liberalization and growth and did not pay attention to reconciliation in the form of addressing issues regarding language and education or democracy.

### **3.2. Why peace talks and aid did not work**

On June 10, 2003, the international society, donors, and the GoSL attended the Tokyo Declaration Conference. The objectives of the conference were to provide the international community with an opportunity to demonstrate its commitment to the reconstruction and development of Sri Lanka and to encourage the parties to redouble their efforts to make further progress in the peace process. However, without the LTTE present, the struggles and the pledges were fruitless.

First of all, the question arises of why the LTTE withdrew from the peace talks. According to Frerks and Klem (2006), there were three main reasons why they withdrew. First, the LTTE were excluded from a pre-

donor meeting in Washington DC (April 23, 2003) because, as members of a US proscribed terrorist organization, the LTTE delegates were ineligible for visas. They argued that it was a deliberate move to exclude them from the peace process. This pre-donor meeting was in preparation for the big donor conference in Tokyo later that year. The second reason was the failure of the government to address the humanitarian violations caused by the High Security Zones (areas occupied by the military). The third reason was the development policy of the government failed to address the distinctive grievances of the war-torn North and East. Holt (2011) writes that Rajat Ganguly<sup>12</sup> suggested the LTTE's withdrawal was an attempt to pressure the GoSL to leave the High Security Zones so the LTTE could regain control of Jaffna. With the departure of the LTTE, the following peace talks and the donor conference in Tokyo (where the Tokyo Declaration was signed) do not make much sense; the idea of peacebuilding is to build a bridge between two or more parties somehow, but without one of the parties, you only have a half bridge which cannot stand by itself – it will eventually fall apart.

Chief political strategist and chief negotiator of the LTTE, Balasingham said the following about the Tokyo Declaration:” The Colombo government, with the active assistance of the facilitator and its international ‘tactical allies’, has formulated this strategic paper to super-impose its agenda on LTTE. This is unacceptable to us” (Balasingham 2004: 460). Furthermore, a highly placed Tamil officer is quoted in Frerks and Klem (2006) saying that despite the collapse of the peace process, the government still benefits from the donor funds, and there are no real conditions attached: “They may spend the money on war” (Frerks and Klem, 2006; p.65).

The GoSL was hoping that rebuilding the North and the East would make the Tamil population trust in their government and let the LTTE see that GoSL was interested in a peace negotiation. However, several Sinhala nationalist parties and many average Sinhalese resented the peace process, and it only grew with LTTE's many violations of the CFA through killings of prominent Tamil and Muslim intelligent officers and the LTTE's smuggling of weapons and illegal taxations of businesses in their controlled areas (McGilvray & Gamburd ed., 2010). The fact that Norway and its mediators did not respond adequately to these violations made the mediators seem impartial and undermined the entire peace process. Besides, the Sinhalese

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<sup>12</sup> Professor at Murdoch University, Australia specializing in conflict, security, and international development.

population intensely disliked their country's sovereignty being called into question since the political settlement legitimized the LTTE and their control over the northern and eastern regions. Sinhala nationalist and average Sinhalese felt that the GoSL was slowly giving in to the LTTE's demands of a separate state. The CFA gave LTTE exclusive access to large parts of the North and East, and these LTTE controlled areas came to be known as Tamil Eelam – an authoritarian state which had its own courts of law, police, tax systems, and other public departments. However, the GoSL was the one providing money for this. McGilvray & Gamburd ed, 2010 write '... the central government continued to provide large amounts of humanitarian assistance to the civilian population and to fund basic public services – schools, hospitals, state banks – managed by its own civil servants in a unique system of dual administration.' (p.21)

Nonetheless, a leading Tamil critic of the LTTE argued that accepting the LTTE as a legitimate partner and receiver of donor funds during the peace talks was a mistake because the funds would end up with the organization and not with the people in need (Frerks and Klem, 2006).

Goodhand (2006) and Frerks and Klem (2006) point to four main reasons as to why the peace process of 2002 fell apart:

1. Only the LTTE and the GoSL were included in the negotiations, and other groups such as the Muslims were excluded, and they were eager to ruin the process. McGilvray & Gamburd ed. (2010) explain that in addition to being left out of peace negotiations, through the CFA, the LTTE found ways of increasing taxation on Muslim businesses and appropriate traditionally Muslim lands. The Muslims were scared of what would happen to them if the peace process continued the way it had at that point.
2. The Tokyo Declaration was nothing more than rhetorical posturing – immediately after the event, the donors began to undermine their own declared positions (this can be interpreted in two ways, either as a failure of aid conditionalities per se or as a failure to implement conditionalities in practice). Moreover, following the tsunami of 2004 and the massive international response, the idea of peace conditionalities became worthless because of the massive inflows of unconditional aid. Holt (2011) estimates that in 2004, before the tsunami, total foreign aid disbursement was USD805 million. In 2005 the development partners pledged approximately USD1,375 million for tsunami recovery activities, and around USD1,590

million was committed by May 2005. Arguably, this substantially changed the aid environment in Sri Lanka, and a threat of withholding aid in an 'over-aided' environment would have had minimal effect.

3. Though the donors did adjust their aid for peacebuilding, a large part of the aid programs in the south remained as development assistance, whereas the aid programs in the North and East were conflict-sensitive. According to Holt (2011) that meant that the donors treated aid conditionalities as 'add-ons' rather than making sure that all their activities were sensitive to conflict and peace dynamics.
4. The donor countries were unable to create a united alliance. The US and India tended to support the GoSL's objectives, and the European donors tended to support LTTE's goals (although the EU countries did introduce a ban on the LTTE as a terrorist organization in 2006, which arguably changed their position significantly later on).

About the donor money in the North and East, several problems arose. First of all, the majority of the donor money went directly to the government and was then disbursed through the suitable government ministries, which added more layers of bureaucracy. So, for example, the World Bank funds intended for the LTTE-controlled provinces went from donor to government and the North East Provincial Council (NEPC). The projects managed by NEPC and GoSL bore the signs of two decades worth of war, with few (inexperienced) staff and minimal facilities (Holt, 2011). The LTTE furthermore hindered project implementation; it ran its own civil administration with a police force, border guards, and environmental protection officers. The LTTE ran health facilities, a university, and it trained doctors – it was operating a mini-state. The LTTE was trying to increase its legitimacy through the development of all these things such that it could show the people that it was able to meet their needs (Holt, 2011). However, the LTTE was unable to meet the needs of the population, and by hindering project implementation, the people in the Northeastern region suffered.

### **3.3. Evaluation of aid effectiveness during the war**

In evaluating the effect of peace negotiations and aid in the Sri Lankan war, we should remember that in the years 2002-2006, it was not a country at peace; it was a country under ceasefire trying to reach peace. Interestingly, the Tokyo Declaration was signed before any peace settlements, which is not very common. The intention was that the Tokyo Declaration would increase the stakes and inhibit a return to war. This,



however, failed miserably. As Nkurunziza (2015) informs us about the war in Burundi not ending due to the exclusion of the warring parties, so is the case with Sri Lanka. The Tokyo Declaration did not have the desired effect may be because the LTTE left the peace talks, and they were excluded from the peace negotiations. Similar to what Nkurunziza (2015) describes as the case in Burundi, the negotiated agreements at the peace talks of 2002 reflected the elite's preferences (the elite being the Sinhalese politicians wanting economic growth and development).

Another important reason for the complete collapse of the peace negotiations was the non-existing alliance among the donors. The donors were unable to show a united front in the peace negotiations as some supported the GoSL and some the LTTE. The donors had taken a political stand in the Sri Lankan war. The consequences were that the warring parties had little trust in the idea of negotiated settlements.

The international community proved to be ineffective in negotiating a peace settlement in the Sri Lankan civil war. Its requests for respect for human rights in Sri Lanka appeared hypocritical given the Western countries' involvement in Iraq and Afghanistan, where the Western nations were violating human rights every day. Furthermore, the international society advocated a negotiated settlement was hugely undermined by the number of European countries continuing to sell weapons to the GoSL. When the Western countries started to reduce their financial support, China stepped in and took their place. The role of the Western countries' aid diminished even further as the unconditional assistance for the tsunami recovery started to flow in. "There was so much funding that it was economically overwhelming," said one government official. "The tsunami brought in billions of dollars. It was too much to deal with. Not all can be spent, and not all has been spent on valuable things." Given the massive global media coverage devoted to the tsunami and its effects, there was tremendous pressure to spend quickly and to show tangible results.' (p. 32, McGilvray & Gamburd ed, 2010)

As Sindre (2014) theorized, aid conditionality proved to be inefficient in encouraging peace settlements.

Even though mistakes were made during the peace negotiations, it is essential to acknowledge when something good was done. One initiative that was a step in the right direction was the joint task force. The joint task force seemed like a good initiative because the committee would oversee and cooperate on a common goal, such as reconstruction and humanitarian aid. Nevertheless, due to the amount of money that

came in during the tsunami and due to the way that amount money was handled (see McGilvray & Gamburd ed., 2010 and Gamburd, 2014 for these details and discussion later in this study), this joint task force and its goal became obsolete.

Speculations claim that a bulk of the money was spent on the reemerging war (McGilvray & Gamburd ed., 2010). This is what Ofstad (2002) warned against when he wrote that donors should be careful not to give any direct political or military advantage to any of the warring parties.

#### **4. Research Design**

The sections on the peace talks from 2002-2006 showed that aid was ineffective in peacemaking and avoiding a relapse into conflict in Sri Lanka. That seems to be in line with lessons from reviewing the literature on the role of aid during a conflict.

The literature on the role of aid in sustaining peace after a conflict underlined the importance of economic growth, fixing horizontal and vertical inequality, and government capacity. On the side of the donors, it was highlighted that for aid conditionality to be successful, donors need to be coordinated.

In the case of Sri Lanka, the major causes of the almost three-decade-long conflict were inequality in terms of education, job opportunity, urban development, benefits from agricultural development, and political exclusion. Since the end of the war, the government focuses on rebuilding and developing the island with help from international loans and aid. However, the picture painted by global media, researchers, activists, and the Tamil diaspora is that the country still deals with many of the issues which existed in the pre-war period. This means that horizontal inequality seemingly is not corrected in the decade following the end of the conflict.

The conflict has left the northern and eastern regions severely destroyed. Those regions are predominantly populated by minority and marginalized ethnic groups such as Sri Lankan Tamils and Muslims (of which the majority's mother tongue is Tamil as well). Ideally, the expectation in such a scenario is that aid flow to those regions to rebuild after the conflict and to create initiatives to reconcile these war-affected minorities with the rest of the population. If aid plays a vital role in sustaining peace in a country, as the literature on aid suggests, then the distribution of aid within a country is important as well. The distribution of aid within a country is not something prevalent in the literature on aid. This study will give an example of how to study and evaluate the distribution of aid within a nation. If aid is not equally distributed across the

country and ethnic groups, then the gains from aid will be unequal. Unequal gains from aid undermine peace consolidation in a post-conflict country.

To understand whether conflict-affected districts are a priority in aid allocation in postwar Sri Lanka, we examine how districts were prioritized.

To investigate this question, we believe it is crucial to understand how districts were prioritized after a different kind of disaster. Because Sri Lanka suffered tremendously from the Tsunami in 2004, we can use that disaster to establish a baseline pattern of aid distribution. Thus, this study's research question is investigated by testing the following hypotheses through GIS mapping/analysis and econometric analysis:

- Hypothesis I: Tsunami affected districts received more aid than other districts.

One would expect that districts affected by a natural disaster such as a tsunami would receive more aid than districts not affected by the tsunami.

- Hypothesis II: War affected districts receive more aid than other districts.

Similar to a natural disaster, one would expect that districts affected by aid would receive more aid than districts not affected by the war. Money is needed to rebuild such districts and bring back internally displaced people.

- Hypothesis III: Economically developed districts receive less aid than other districts.

If Hypothesis II is rejected, then one could argue that the war-affected districts receive less aid than other districts because they are economically developed.

## **5. Data**

### **5.1. AidData World Bank**

The first dataset used in the analysis is AidData. This data is available online at <http://aiddata.org/datasets>. The data is referred to as 'World Bank Geocoded Research Release, Version 1.4.2'. The data was published in 2017 and covers the period 1995 to 2014. It includes all approved projects of the World Bank IBRD/IDA lending lines. The dataset tracks 5,684 projects across 61,243 locations. Moreover, it tracks \$630.2 billion in geocoded commitments and \$389.6 billion in geocoded disbursements. The amounts are deflated into constant 2011 dollars, except for transactions in 2013 and after. Those numbers are reported in current USD. For Sri Lanka, the dataset covers 2002-2015.

## **5.2. AidData China**

This is the first-ever dataset on Chinese investments on the global scale that has been geocoded. The dataset is available for download at <https://www.aiddata.org/data/geocoded-chinese-global-official-finance-dataset>. The dataset includes 3485 China-funded development projects implemented in 6190 locations in 138 countries from 2000 to 2014. In particular, this paper takes advantage of the dataset called 'oda-like\_flows.csv'. For Sri Lanka, this data covers 90 projects over the specified time. The amounts in this dataset are deflated into constant 2014 dollars.

## **5.3. Aid from the Asian Development Bank**

The third data set is constructed using the information on projects funded by the Asian Development Bank. The projects in Sri Lanka can be found at <https://www.adb.org/projects/country/sri>. There are projects from 1968 to 2017. Since this data is used in combination with Chinese and World Bank aid data, the relevant years are 2002-2014. That means that approximately 119 projects were extracted from the ADB's website and geocoded manually by the author. Following the AidData's methodology, which can be found at <http://docs.aiddata.org/ad4/files/geocoding-methodology-updated-2017-06.pdf>

The amounts are reported in current USD as far as one can tell from the website.

## **5.4. Economic indicators**

Sri Lanka's National Statistical Bureau made it possible to extract average economic development indicators on the district level, albeit only for three years; 2009/2010, 2012/2013 and 2016. There are statistics from earlier years, but unfortunately, the war-affected districts are not covered. Since those districts are essential in assessing the presence of positive peace, those initially surveys are not included in this study. The variables gathered as economic development indicators fall in the following categories; Gini, poverty gap, energy consumption, education, material things owned by the households, and gender.

It is worth noting that the units of observation are district averages. In 2010 there are 22 districts in the survey. However, in 2013, there are 25 districts. Mannar, Mullaitivu, Kilinochchi are added from the northern region. One can assume that those districts were excluded from the 2010 survey because of war vulnerability, but we were not able to verify this assumption from Sri Lanka's National Statistical Bureau.

## 5.5. Merging the data sets

Since all three data sets are reported in different prices (some in current and some in constant with different bases), the author deflated the current prices to constant 2014 USD prices, and the constant 2011 USD prices were rebased to 2014 USD prices. All of this was done using the ‘Gross domestic product (implicit price deflator), Index 2012=100, Annual, Not Seasonally Adjusted’ series from the Federal Reserve Bank of St. Louis. More details on how the data sets were merged can be found in the appendix.

The aid data and the economic development indicators were merged successfully using ‘year’ and ‘district’ as identifiers and using the many-to-many technique in STATA.

The final database spans from 2002 to 2015 and contains 25 districts and max 350 observations. It should be noted that there are some ‘aid’ observations, which are 0. In this study, those observations are interpreted as ‘the given district did not receive aid that year’ rather than a missing observation.

## 5.6 Summary statistics

This section presents descriptive statistics of the data used for regressions.

Table 1 presents the summary statistics of all the variables used in the model estimations.

**Table 1. Descriptive Statistics**

Variable	Obs	Mean	Std.Dev.	Min	Max
Aid (2014 USD, millions)	325	78400	133000	0	1120000
Computer (%)	47	12.08	7.18	1.4	38.8
No school (%)	47	4.13	1.84	.9	9.1
Kcal	47	2142.17	143.305	1825	2419
Poverty Gap	47	1.79	1.29	.3	6.2
Gini	47	.45	.045	.37	.57
Female (%)	47	52.57	1.11	49.7	54.5
Fridge (%)	47	34.71	15.56	3.2	74.7

A study on energy and nutrients amongst Sri Lankan adults by Jayawardena et al. (2014) finds that calorie intake by males was about 1900 compared to 1500 for women. Hence, the average across districts of 1541 seems very reasonable.

The poverty gap index is a measure of the intensity of poverty. It is defined as the average poverty gap in the population as a proportion of the poverty line. The poverty gap index estimates the depth of poverty by considering how far, on average, the poor are from that poverty line. According to the Department of

Census and Statistics the national poverty line in Sri Lanka in 2019 is Rs. 4849<sup>13</sup> per person per month, which is equivalent to approximately 27 dollars. A high poverty gap index means severe poverty.

A Gini coefficient of 1 (or 100%) expresses maximal inequality, whereas 0 expresses maximal equality. The national Gini coefficient was estimated to be approximately 0.4 in 2016<sup>14</sup>, which suits well with the summary statistics.

Table 2 presents aid by the three donors included in the data set and the average amount of money they have committed to over the entire time period (2002-2014).

**Table 2. Aid by donor over 2002-2014, in billion, 2014 USD**

	N	Sum	Mean	Std .Dev
Asian Development Bank	157	17100	109	151
China	26	2100	80.9	130
World Bank	156	6300	40.4	52.5
Total	339	25500	230.3	333.5

As can be seen in table 2, the Asian Development Bank is the biggest donor, which intuitively makes a lot of sense since ADB has had a longstanding relationship with Sri Lanka. Both the World Bank and Asian Development Bank have about the same number of projects during the selected time. It seems that the Chinese projects on average, are more expensive than the other two donors' projects, given the significantly lower number of projects but still high total amount.

Table 3 shows the average amount of aid committed to Tsunami affected districts all years.

**Table 3. Aid amount to tsunami-affected areas over 2002-2014, in billion, 2014 USD**

Tsunami affected districts (binary)	N	Sum	Mean	Std. Dev.
Not Affected	156	10400	66.4	118
Affected	169	15100	89.4	145
Total	325	25500	78.4	133
Tsunami affected districts predominantly Tamil (binary)				

<sup>13</sup> [http://www.statistics.gov.lk/poverty/monthly\\_poverty/index.htm](http://www.statistics.gov.lk/poverty/monthly_poverty/index.htm)

<sup>14</sup> <https://tradingeconomics.com/sri-lanka/gini-index-wb-data.html>

Not affected	260	21200	81.4	143
Affected	65	4310	66.3	85
Total	325	25510	78.4	133

Source: author's computations

Table 3 shows that tsunami-affected districts overall, on average and in total, received more aid than non-affected districts. However, when dividing into predominantly Tamil and non-Tamil Tsunami affected regions, the picture flips. The mostly Tamil tsunami-affected districts received less than other Tsunami affected areas.

Table 4 shows the average amount of aid committed to war-affected districts all years.

**Table 4. Aid amount to war-affected areas over 2002-2014, in billion, 2014 USD**

War affected districts (binary)	N	Sum	Mean	Std.Dev.
Not affected	208	17100	82.2	151
Affected	117	8360	71.5	95
Total	325	25460	78.4	133
War affected districts predominantly Tamil (binary)				
Not affected	247	20500	83	146
Affected	78	4970	63.7	79.4
Total	325	25470	78.4	133

Source: Author's computations

Table 4 shows that war-affected districts overall, on average, received less aid than non-war affected districts. The predominantly Tamil districts affected by war also received less assistance than other areas.

We defined predominantly Sri Lankan Tamil districts as districts with 60% or more Sri Lankan Tamils.

Table 5 below shows the means of the various variables for war and non-war districts and the differences in those means.

**Table 5. Difference in means of variables, war/non-war**

	Non-war districts	War districts	Difference
Computer (%)	13.647	8.740	4.907*
No school	4.491	3.347	1.144*
Kcal.	2160.000	2104.133	55.867
Gini	0.454	0.441	0.014
Poverty gap	1.472	2.460	-0.988*
Income	39351.219	30565.400	8785.819**
Fridge (%)	39.834	23.780	16.054***
Female (%)	52.719	52.253	0.465
Aid (billion USD)	38.37	36.37	2.00
Tamil share	0.030	0.586	-0.556***
Observations	47		

From Table 5 we can see that there is a significant difference in the means of six variables; computers, no schooling, poverty gap, income, fridge and share of Sri Lankan Tamils. In war districts, the share of households with computers is 4.9 percentage points lower than in non-war districts. It is not surprising that the poverty gap, on average, is higher in war districts. This is, similarly, true for income and percentage of households with fridges. It is also not surprising that the share of Sri Lankan Tamils is significantly higher, on average, in war districts. It is puzzling that average difference in means of no schooling is significantly higher in non-war districts. One plausible explanation for this could be that the non-war districts are also the southern districts which are still highly preoccupied with rural agriculture.

## 6. Methodology

The paper uses GIS analysis for geocoding, mapping, and analyzing spatial clusters in combination with econometric analysis.

### 6.1. Econometrics methodology

Because of the political situation<sup>15</sup> in Sri Lanka at the time of the tsunami in December 2004, NGOs and donors were faced with restrictions and difficulties in delivering aid to the Sri Lankan population. Even so,

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<sup>15</sup> The LTTE withdrew from peace negotiations in 2003 and was basically running the occupied districts as an independent state.

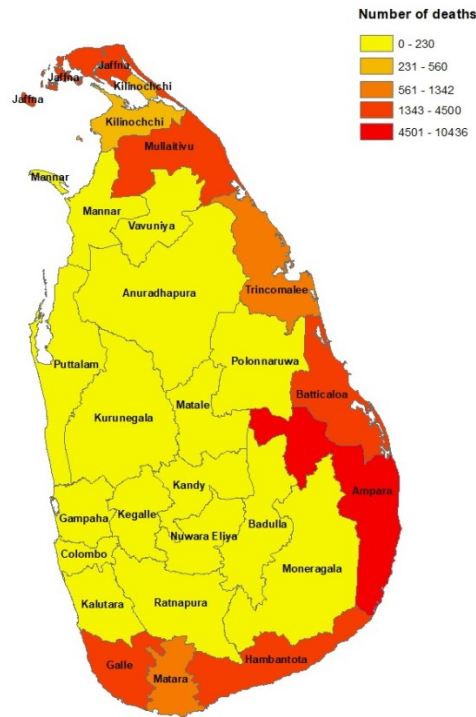


this study uses the tsunami as a natural experiment that investigates whether there was a bias in aid allocation. The expectation is that after a natural catastrophe, aid would be allocated to the most impacted areas. If this is not the case, then one can argue that aid allocation is politically biased. To determine this, the following model is estimated using ordinary least squares (OLS):

$$\log(\text{Aid amount})_{it} = \beta_0 + \beta_1 \text{tsunami\_affected\_areas}_{it} + \epsilon_{it} \quad (1)$$

For district  $i$  in year  $t$  the dependent variable ‘aid amount’ is the log of aid in constant 2014 USD, ‘tsunami\_affected\_areas’ is a binary variable taking value 1 if the district was affected by the tsunami and 0 otherwise, and the time is 2005-2009 (both years included) since the tsunami happened in December 2004 and the war ended in 2009. We were unable to include controls on economic development in this regression since national surveys were not conducted in the LTTE controlled districts during the war. some of the eastern and northern districts were not part of the surveys in the years of this regression (2005-2009). The districts included in this category were decided based on figure 1.

**Figure 1. Tsunami affected districts**



Source: Created by the author using GIS and data from Sri Lanka National Statistical Bureau

All the red and orange districts are included as tsunami-affected areas. The districts are Jaffna, Kilinochchi, Mullaitivu, Trincomalee, Batticaloa, Ampara, Hambantota, Matara, and Galle.

The model is also estimated with tsunami-affected districts interacted with the share of Sri Lankan Tamils in those districts. The information on the share of Sri Lankan Tamils in each district was calculated based on 2012 Census data. The alternate equation for estimation looks as follows:

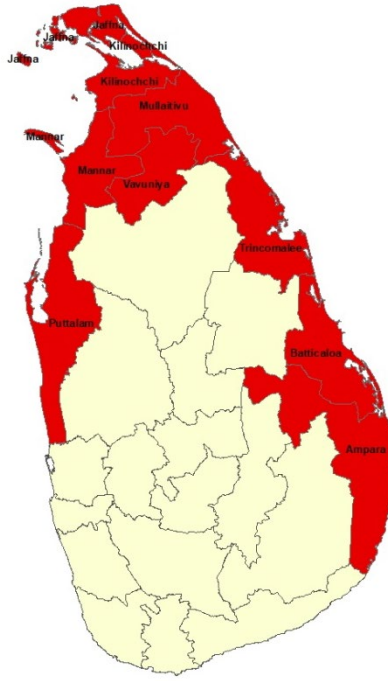
$$\log(Aid\ amount)_{it} = \beta_0 + \beta_1 tsunami\_affected\_areas_{it} * share\_Tamils + \epsilon_{it} \quad (2)$$

Similarly, one would assume that aid would flow to war-affected districts after a war. Thus, the same specification as in (1), where ‘tsunami-affected areas’ is substituted with ‘war-affected areas’, is estimated with the OLS procedure:

$$\log(Aid\ amount)_{it} = \beta_0 + \beta_1 war\_affected\_areas_{it} + \epsilon_{it} \quad (3)$$

The period is, of course, different. In this regression, the time period is post-2009. The districts affected by the war are shown in Figure 2 below: Ampara, Batticaloa, Jaffna, Kilinochchi, Mannar, Mullaitivu, Puttalam, Trincomalee, and Vavuniya.

Figure 2. War affected districts



Notes: Created by the author using GIS and data from Sri Lanka National Statistical Bureau.

As done with the tsunami-affected districts, we estimate equation (4) with an interaction between war affected districts and the share of Sri Lankan Tamils in those:

$$\log(\text{Aid amount})_{it} = \beta_0 + \beta_1 \text{war\_affected\_areas}_{it} * \text{share\_Tamils} + \epsilon_{it} \quad (4)$$

This study specifies a second model to be estimated to investigate any potential bias further. The reasoning is that districts that are already doing well economically (or development-wise) can be expected to receive less aid compared to other districts. The model is specified as follows:

$$\log(\text{Aid amount})_{it} = \beta_0 + \beta_1 \text{war\_affected\_areas}_{it} + \beta' \mathbf{X}_{it} + \epsilon_{it}, \quad (5)$$

where  $\mathbf{X}_{it}$  is a vector factor that includes development indicators such as education, poverty levels, and inequality,  $i$  indicate the districts,  $t$  indicates the year. The dependent variable 'aid amount' is the log of aid in constant 2014 dollars, 'war\_affected\_areas' is a binary variable taking the value 1 if the district was affected by the war and 0 otherwise. The districts included in that category are Ampara, Batticaloa, Jaffna, Kilinochchi, Mannar, Mullaitivu, Puttalam, Trincomalee, and Vavuniya.

In order to take time fixed effects and spatial correlation into account, all the models include year dummies and district clustering.

## **6.2. Endogeneity**

The econometrics in this study might suffer from some endogeneity problems. In particular, the models might have omitted variable bias since data is extremely limited. It would have been ideal to be able to add controls to the regression models on aid and tsunami affected areas but because of the conflict and LTTE's strong hold on the predominantly Tamil districts, there is close to no official data easily accessible from that time period. Additionally, the regressions on aid and war-affected districts include controls that are district averages instead of household level because this is the way the Sri Lankan National Statistical Bureau publishes their data. The endogeneity might cause somewhat biased results. This is why the GIS methodology adds a new layer of robustness to the results. Hence, even if we are suspicious of whether the results from econometrics are biased or not, the geocoding/mapping and visualization of the aid project reveals a pattern. If the pattern revealed by GIS and the results from econometrics are similar, we could conclude that the results tell a true story.

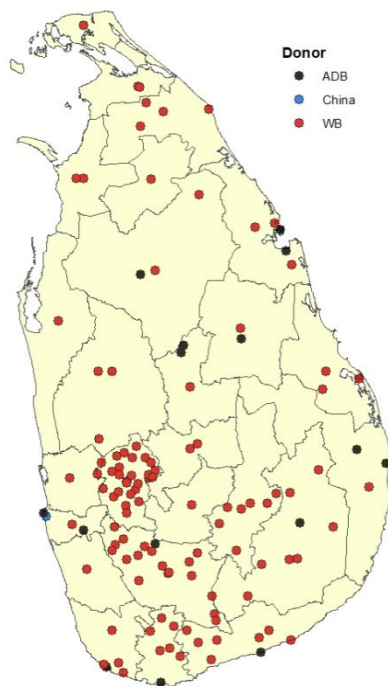
## **7. Results**

This section presents the findings from GIS and the econometric analysis.

### **7.1. The geographical allocation of aid projects**

The map in figure 3 shows the aid projects sponsored by the World Bank, China, and the Asian Development Bank from 2000 to 2004. These are projects approved/committed to before the tsunami in late December 2004.

**Figure 3. Project commitment, 2002-2005**



Source: Author's construction

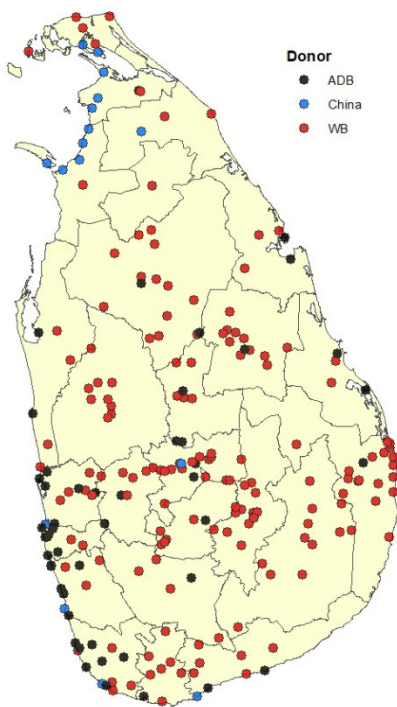
Note: Sri Lanka district boundaries and the geocoded aid projects before the tsunami in December 2004 are the layers in this map. Aid projects are mostly prevalent in the southern part of the country, and the most active donor is the World Bank.

The map shows the geographical distribution of aid historically. The points shown on the map are simply the geographical indication without considering the amounts of money committed. The different symbols indicate different donors. It is worth noting that there are no Chinese projects reported on this map. Chinese involvement in Sri Lanka only really started from approximately 2005 with President Mahinda Rajapaksa.

This map shows that most donor projects were allocated in the southern part of the country. There are very few projects scattered in the North, East, and Central regions.

One can explain this disparity by war. During this time period, the war in Sri Lanka was intense, and the LTTE had gained control over large parts of the northern and eastern regions. Aid could still come through to these areas, but because the LTTE wanted aid to go through them, the bureaucracy could have made those regions less attractive for aid projects from the donor's perspective. Furthermore, few NGOs would be interested in working in highly volatile war zones.

**Figure 4. Project commitments in the post-tsunami period, 2005-2009**



Source. Author's construction

Notes: The layers included here are Sri Lanka district boundaries and geocoded aid projects, 2005-2009. Number of projects on the island has increased and is more widely disbursed but still the southern part dominates the aid projects.

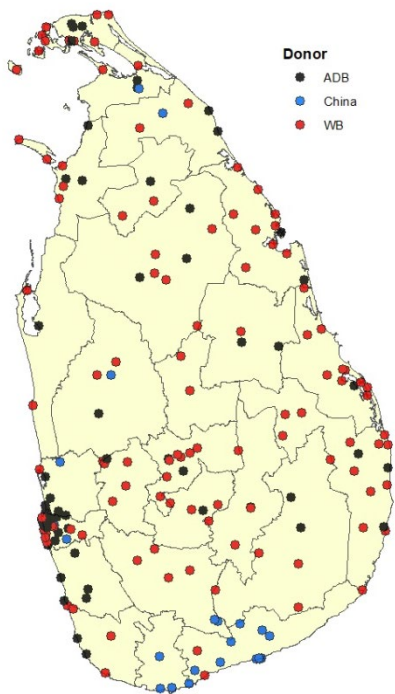
The map in figure 4 shows the location of aid projects from 2005-2009. These are projects approved/committed after the Tsunami until the year the war ended. This map serves as a 'natural experiment'. The general assumption is that aid is allocated to address the problems associated with a natural disaster. Thus, it is expected to the number of aid projects would be higher in coastal areas in this time period. After the Tsunami, we can see that China became more involved in the Sri Lankan aid environment. Most projects are still located in the South and the Southwest regions, but there is a definite increase in projects in the central part of the island and some Chinese projects on the northern coast. However, there are fewer coastal projects than one would have expected.

This is surprising given the massive inflow of aid during this time after the tsunami. Everyone wanted to help tsunami victims. As mentioned, Holt (2011) estimated that total foreign aid disbursement before the tsunami was USD 805 million, whereas, by May 2005, approximately USD 1,590 million was committed. However, McGilvray and Gamburd ed. (2010) support the notion that this seemingly unequal distribution of

aid could be due to what is popularly known as ‘tarmac bias’ in the development and disaster literature: “... the better roads and airport access meant that organizations and individuals with money – whether local or international – could more easily and quickly deliver aid to the south and west” (p. 29, McGilvray and Gamburd ed., 2010).

Additionally, patronage politics and corruption are essential factors in how aid was allocated during the post-tsunami period. Patronage and corruption continue to influence aid allocation even today. The Sri Lankan patronage political system allows powerful politicians to funnel money to where they want to. Since most Sri Lankan powerful politicians are Sinhalese, they assured that the majority of aid was allocated in the south and west of the country (McGilvray and Gamburd ed., 2010).

**Figure 5. Project commitments in the post-war period, 2010-2014**

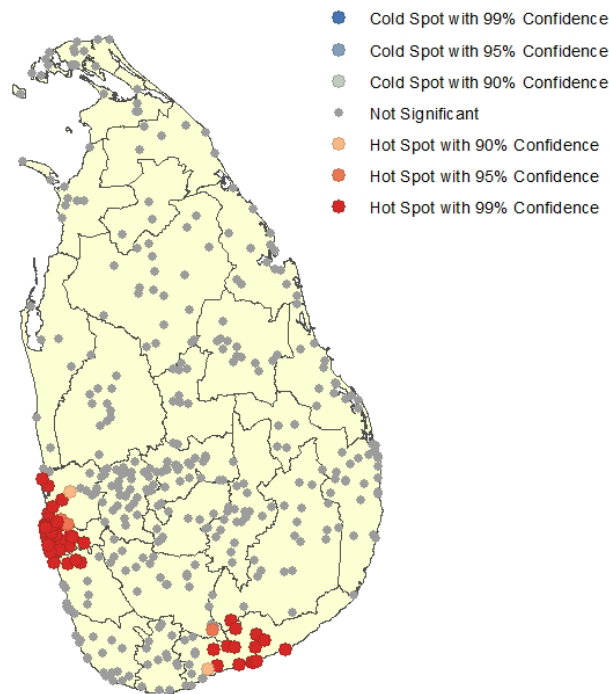


*Notes:* The layers included here are Sri Lanka district boundaries and geocoded aid projects. There is more activity from China and Asian Development Banks as donors and more projects seem allocated to the northern and eastern part.

The projects depicted on the map in figure 5 are the ones approved from 2010 to 2014. Similar to the maps in figures 3 and 4, the points shown are the geographical locations of aid projects, and the various symbols indicate donors.

It seems that projects are more concentrated in Colombo. From the map, an increase in Chinese projects in the South is obvious. Additionally, there are more projects in the North and the East compared to before and immediately after the tsunami. If one reason for this allocation is, in fact, tarmac bias, then one would expect to see a significant increase in aid projects in the north with the opening of the Jaffna train station in 2014 and the airport in 2019. However, the big highway from south to north (A9) reopened in 2009.

**Figure 6. Hot spot map of aid commitment amounts, 2002-2014**



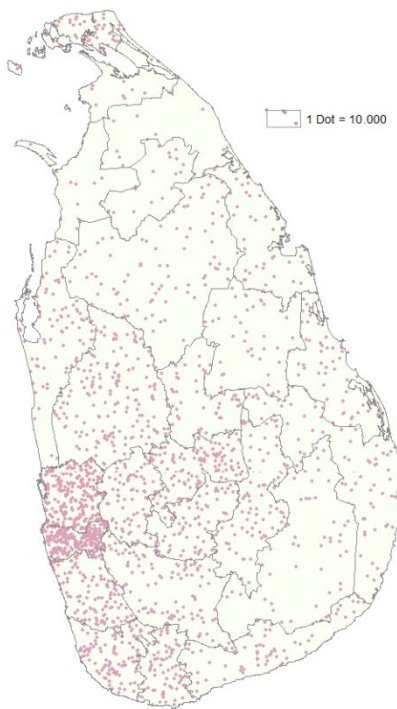
Notes: The layers included here are Sri Lanka district boundaries and geocoded project amounts analyzed into clusters. The ArcGIS website explains the methodology behind hot spot maps as follows “The [Hot Spot Analysis](#) tool calculates the Getis-Ord Gi\* statistic (pronounced G-i-star) for each feature in a dataset. The resultant [z-scores and p-values](#) tell you where features with either high or low values cluster spatially. This tool works by looking at each feature within the context of neighboring features. A feature with a high value is interesting but may not be a statistically significant hot spot. To be a statistically significant hot spot, a feature will have a high value and be surrounded by other features with high values as well. The local sum for a feature and its neighbors is compared proportionally to the sum of all features; when the local sum is very different from the expected local sum, and when that difference is too large to be the result of random chance, a statistically significant [z-score](#) results. When the [FDR correction](#) is applied<sup>16</sup>, statistical significance is adjusted to account for multiple testing and spatial dependency.” (source: <https://pro.arcgis.com/en/pro-app/tool-reference/spatial-statistics/h-how-hot-spot-analysis-getis-ord-gi-spatial-stati.htm>). We see there are no hotspots in the expected parts of the countries where a war happened. The aid hotspots are in Colombo and Hambantota which did not suffer through the conflict.

<sup>16</sup> FDR is an abbreviation of False Discovery Rate. It is the expected proportion of type I errors or so-called false positives. A type I error is where one incorrectly rejects a null hypothesis.



The map in figure 6 illustrates where there are clusters of projects in terms of the amounts approved/committed, both significant and insignificant clusters. Up until now, we have only looked at the location of projects. This map, however, is based on the amount of money in various places, and thus tells us a more vibrant story. The map shows that there are two highly significant clusters of projects throughout the 2002-2014 period, namely Colombo and Hambantota. The significant cluster of donor money in the district of Colombo makes sense since much of capacity building projects would be allocated to the public sectors. Most public sector headquarters are located in the capital city of Colombo. The money cluster in Hambantota is a little surprising. However, it is commonly known that President Mahinda Rajapaksa is from that district and had a personal agenda in wanting to develop the region. He was also the President who brought China in as a significant donor to Sri Lanka. Hence, he most likely played a role in influencing where the Chinese and other donations went.

**Figure 7. Population density map, 2012**



Notes: The layers included here are Sri Lanka district boundaries and population on districts from Sri Lankan Census 2012. The map is constructed by the author. The population is much denser in the southwest part of the country.

The map in figure 7 presents the population density in Sri Lanka in 2012. It might be that we see clusters of projects or the absence of projects in individual districts because of high or low population density. Each dot

in figure 7 is equivalent to 10,000. As can be seen from the map, there is a high population density in the district of Colombo, where there are also many aid projects. Another thing to note is how sparsely the Northern region is populated. This, of course, is because of internal displacement due to the war and the tsunami. Otherwise, this population density map does not help us understand more about why the aid projects are allocated the way that they are.

### 7.3. Regression results

Table 6 presents the results of the estimation of equation (1) specified in the methodology. There are four variations of equation (1) shown in this table.

**Table 6. Tsunami and war aid allocation**

	(1) Post-Tsunami	(2) Post-Tsunami	(3) Post-war	(4) Post-war
Tsunami	3.10* (1.67)			
Tsunami*share_tamil		5.81*** (2.13)		
War			-2.14 (1.95)	
War*share_tamil				1.42 (1.27)
Constant	23.37*** (0.92)	20.65*** (1.80)	15.38*** (2.43)	25.82*** (0.53)
Obs.	125	125	125	125
Year dummies	Yes	Yes	Yes	Yes
R-squared :				
Within	0.47	0.47	0.42	0.42
Between	0.13	0.18	0.05	0.03
Overall	0.42	0.43	0.36	0.36

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Note: The dependent variable is the log of real aid. (1) is the regression for the years 2005-2009. The binary variable Tsunami is significant. (2) is also for 2005-2009. The interaction term between the binary variable Tsunami and the share of Tamils in those districts is significant. (3) is the regression for the years 2010-2015. The binary variable War is not significant. (4) is also for 2010-2015 where the interaction term between the binary variable War and the share of Tamils in those districts is not significant. All regression include year dummies.

Column (1) presents results from a simple regression of tsunami-affected districts and aid commitments. In this simplified regression, the study tests the hypothesis that tsunami-affected districts received more aid than others.

The tsunami-affected districts are Jaffna, Kilinochchi, Trincomalee, Batticaloa, Ampara, Hambantota, Matara, Galle, Kalutara, Colombo, Gampaha, Puttalam, and Mullaitivu. The model is estimated for the years 2005-2009. To account for time fixed effects, the model includes time dummies for all years in the given period.

Column (2) presents the same regression as column (1). The only difference is that the Tsunami-affected districts are split into predominantly Tamil districts. The mostly Tamil tsunami-affected districts are Jaffna, Kilinochchi, Trincomalee, Batticaloa, and Mullaitivu.

In both regressions, the 'tsunami' effect is highly significant and positive, which implies that we cannot reject the null hypothesis. It is a little surprising that the coefficient is positive in (2) and more substantial than the coefficient found in (1) since that is not what we saw in the descriptive statistics. These results indicate that there was no bias in terms of allocating aid after the tsunami to affected districts. The interpretation of the coefficient in for example (1), is that tsunami-affected districts received, on average 3.1 times more aid than non-affected districts. One thing, this regression does not take into account, is that there was such an enormous influx of aid post-tsunami that it would make coefficients positive and statistically significant regardless of distribution. McGilvray and Gamburd (2010), furthermore, point out that even within those tsunami-affected districts with plenty of aid, people affected by the war and the tsunami were treated differently than people just affected by the tsunami by donors: "Many people saw those displaced by the tsunami as more deserving; they were viewed as victims of a purely 'natural' disaster, not parties to a longstanding, intractable political dispute with complicated and confusing causes" (p.29)

Column (3) presents results from a simple regression of war-affected districts and aid commitments. The regression helps answer the question: 'Did war-affected districts get more aid?'

War-affected districts include Ampara, Batticaloa, Jaffna, Kilinochchi, Mannar, Mullaitivu, Puttalam, Trincomalee, and Vavuniya. The model is estimated for 2010-2014, and it involves time fixed effects.

Column (4) is the same as column (3) – the only difference is that the war-affected districts are split into predominantly Tamil and predominantly other ethnic groups. The predominantly Tamil war-affected districts are Batticaloa, Jaffna, Kilinochchi, Mannar, Mullaitivu, and Vavuniya.

The results of regressions (3) and (4) show that war does not have a statistically significant effect on aid allocation. Hence, the null hypothesis II is rejected. It is surprising and not following the original hypothesis, which assumed that war-destroyed districts would receive more aid.

We did run a regression with an interaction between war and tsunami for the entire time period. This interaction was not significant.

Since hypothesis II was rejected, there is scope to test hypotheses III: Do developed districts receive less than others. It is unlikely that war-affected districts are more developed. However, for good measure, this study still tests these hypotheses in tables 7 and 8 (where table 8 is in the appendix).

Table 7 presents the results from estimating equation (2) specified in the methodology section. The table includes eight variations of equation (2).

Table 7 Aid allocation, war and level of development, post-conflict (2010-2015)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
War	1.42 (2.30)	2.45 (2.58) 0.31	-0.89 (2.41)	-0.31 (2.42)	1.08 (2.58)	0.91 (2.37)	0.04 (2.41)	3.83 (2.93)	0.15 (3.46) -0.24
Computer (%)		(0.20)							(0.37)
No school			-1.54** (0.70)						-0.87 (0.80)
Kcal.				-0.02* (0.01)					-0.01 (0.02)
Gini					20.80 (22.79)				30.06 (26.08)
Poverty gap						-0.11 (0.84)			-0.14 (1.58)
Female (%)							-1.49* (0.76)		-1.86* (0.82)
Fridge (%)								0.18* (0.10)	0.16 (0.26)
Constant	21.60** * (1.92)	17.84** * (3.41)	28.60** * (3.54)	64.87* (20.38)	11.89 (11.41)	21.55** * (2.78)	99.60* * (39.99)	14.44** * (4.75)	134.15* * (70.01)
Obs. Year dummies	50 yes	47 yes	47 yes	47 yes	47 yes	47 yes	47 yes	47 yes	47 yes
R-squared :									
Within	0.69	0.66	0.65	0.66	0.68	0.66	0.69	0.66	0.73
Between	0.01	0.17	0.25	0.20	0.10	0.10	0.06	0.21	0.27
Overall	0.49	0.49	0.51	0.52	0.47	0.46	0.48	0.51	0.58

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Note: Dependent variable is the log of real aid. Regression (1) through (9) are for 2010-2015 (post-conflict). The variable of interest is the binary variable War since we want to know if conflict-affected districts receive more aid than others. The variable War is insignificant in all nine iterations of the regression.

Table 7 shows an OLS regression of aid commitment on household-level development indicators for the years after the war (post-2009). The point of this exercise is to investigate whether some districts did not get aid because they were already well-developed. The indicators of development include owning computers, fridges, education, calories, poverty gap, Gini coefficient, and female percentage in the district. Because there are only about 47 observations of each economic indicator, the OLS regression is split up into nine regressions: (1) with just war as a regressor, and (2)-(9) with various development indicators. Each indicator is included separately to avoid a reduction of degrees of freedom. The regressions also include a time dummy to take time fixed effects into account. Additionally, the regressions are robust to district clusters.

We see across all the regressions that the ‘war’ dummy, indicating whether a district was affected by the war or not, is insignificant. This again suggests that in the case of Sri Lanka, war-affected areas did not receive more aid than peaceful districts.

We may note that in regression (3), a 1% increase in the population with no schooling leads to a 1.5% decrease in aid (which seems counterintuitive). In column (4), a one unit increase in calories, intuitively, leads to a 0.02% decrease in aid. In column (7), a one unit increase in the percentage of females leads to approximately 1.5 unit decrease in aid, and the female percentage stays significant with the almost same negative causal relation to aid commitments. Finally, we may note that in regression (8), a 1% increase in the population with fridges leads to a 0.18 decrease in aid.

Table A1 (found in the appendix) presents mainly the same regressions as in table 8. The only difference is that the explanatory variables are lagged one period. It could be that the effect of development on aid commitment does not happen in the same year, but a year later. In Table A1, we have chosen to lag the explanatory variables one period, and we see that it does not change the fact that war-affected districts do not get more aid than no-war affected districts. The simple causal relationship between aid and war-affected districts demonstrated here is, in fact, not statistically significant.

#### **7.4. Robustness tests**

This section presents various robustness tests to verify whether the results found in the previous section using the chosen data set are, in fact, correct independent of how the author has defined some of the variables. For tables 8, A1, and A2 (where A1 and A2 can be found in the appendix), the aid variable has been redefined by separating ADB and World Bank out from the total aid. We have chosen not to show the Chinese data as the observations are as low as 7 for the various periods. The objective is to see if the results are different for ‘traditional’ donors (the World Bank and Asian Development Bank) and non-traditional donors (being China).

Table 8 shows ADB and WB separated out from the donor pool (they are the two major donors).

**Table 8. Estimation of equation (1) by Asian Development Bank and World Bank**

	(1) ADB/WB	(2) ADB/WB	(3) ADB/WB	(4) ADB/WB
Tsunami	3.08* (1.67)			
Tsunami Tamil		5.81*** (2.13)		
War			-2.13 (1.81)	
War Tamil				-2.49 (2.17)
Constant	8.37*** (2.44)	22.84*** (1.07)	15.37*** (2.44)	22.68*** (1.69)
Obs.	125	125	125	125
Year dummies	Yes	Yes	Yes	Yes
R-square				
Within	0.47	0.47	0.49	0.49
Between	0.12	0.18	0.05	0.04
Overall	0.42	0.43	0.41	0.41

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Note: The dependent variable is the log of real aid. (1) is the regression for the years 2005-2009. The binary variable Tsunami is significant. (2) is also for 2005-2009. The interaction term between the binary variable Tsunami and the share of Tamils in those districts is significant. (3) is the regression for the years 2010-2015. The binary variable War is not significant. (4) is also for 2010-2015 where the interaction term between the binary variable War and the share of Tamils in those districts is not significant. All regression include year dummies.

We see that there is actually no real difference between Table A1 and Table A2.

Table 9 presents the aid allocation by the ADB, and the World Bank regressed on economic development indicators.



**Table 9. Aid allocation by ADB and World Bank; war and level of development, 2010-2015**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
War	1.19 (2.12)	0.72 (2.49)	2.98 (2.33)	-1.27 (2.36)	-0.75 (2.43)	1.16 (2.29)	0.03 (2.44)	4.69* (2.72)	1.22 (3.03)
Gini		12.86 (19.32)							18.28 (20.81)
Computer (%)			0.46** (0.17)						-0.10 (0.35)
No school				-1.65** (0.67)					-0.57 (0.77)
Kcal.					-0.02** (0.01)				-0.01 (0.02)
Poverty gap						-0.61 (0.72)			-0.30 (1.63)
Female (%)							-1.01 (0.72)		-1.56** (0.70)
Fridge (%)								0.25*** (0.09)	0.17 (0.23)
Constant	21.68*** (1.88)	15.58 (9.87)	16.21*** (3.14)	29.20*** (3.45)	72.47*** (18.14)	22.40*** (2.61)	74.63* (37.59)	11.94** (4.34)	124.03** (59.90)
Obs. Year dummies	50 Yes	47 Yes	47 Yes	47 Yes	47 Yes	47 Yes	47 Yes	47 Yes	47 Yes
R-squared:									
Within	0.74	0.71	0.72	0.70	0.72	0.70	0.74	0.71	0.77
Between	0.01	0.34	0.47	0.50	0.47	0.36	0.31	0.52	0.52
Overall	0.58	0.55	0.61	0.60	0.62	0.55	0.56	0.63	0.67

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Note: Dependent variable is the log of real aid, donors are Asian Development Bank and World Bank Regression (1) through (9) are for 2010-2015 (post-conflict). The variable of interest is the binary variable War since we want to know if conflict-affected districts receive more aid than others. The variable War is insignificant in all nine iterations of the regression.

Once again, the results do not differ much from the original results. We do see that in one instance, regression (8), 'war', is positive and significant as we would have expected. But, since it is just this one case, one cannot claim robustness. It might just be a single outlier. The other significant variables are for the most counterintuitive, e.g., If the percentage of the population in a district with computers increases, then aid allocation to that district will increase. If computers are indicators of development, one would assume that more computers would cause less aid allocation.

## **7.5. Discussion of results**

In this study, we used the tsunami as a natural experiment to explore donor behavior in Sri Lanka. What we saw from that is the tsunami-affected districts did get more aid than non-affected districts, regardless of whether these districts were predominantly Tamil or not.

This is what one objectively would have expected. However, the disaster and aid literature from Sri Lanka about the tsunami tells a somewhat different story of tarmac bias, where tsunami-affected people were treated differently than war-affected people within the same districts, donors and NGOs were scared of working in active war districts that were also affected by the tsunami, donors and government were scared of allocating money to areas under LTTE control because there was a suspicion that the money would go for war prep instead of aiding the needing, and finally some donors just did not know about the political situation and were completely unaware of the ethnic dynamics in the country.

Nonetheless, it seems the so-called 'traditional' donors drive the found statistical significance and positivity of aid allocation to tsunami-affected districts (years 2003-2009). It is worth noting here that China's involvement in Sri Lanka is later (approximately from 2006 and onwards).

Sections 7.3 and 7.4 showed that districts affected by war did not get more aid or less aid than districts that were not affected by the war. The results indicate that the donors do not respond to economic development indicators in the country and that they do not take the needs of those war-affected districts into account when deciding how to allocate aid. Objectively speaking, this is, in fact, very surprising as one would have expected that war-affected districts would, in general, be allocated more aid than no war-affected districts. However, in the case of Sri Lanka, these results should not be surprising; we already saw on the maps that there were few aid projects in the northeastern parts of the country where the war took place. Additionally, our summary stats showed a similar pattern – war-affected districts were allocated less aid than non-affected districts. We might also mention that even though the 'war' coefficients are not statistically significant, they are negative. The coefficients of some of the economic indicators are similar in magnitude and significance.

One reason why we see what we see in Sri Lanka could be that the war ‘only’ ended a decade ago and the spatial connection between Colombo district, where most of the aid would come in, and the northern and eastern regions were impoverished. Hence, the bias (or neglect) we see in aid allocation could be the so-called tarmac bias. However, Moramudali (2019) writes that from 2009 to 2013, 221 billion Sri Lankan rupees (equivalent to 12 billion USD) were spent on infrastructure development programs. Additionally, the A9 highway from Kandy to Jaffna was renovated and opened from 2009. So arguing that the absence of a relationship or even the presence of negative correlation could be caused by tarmac bias seems implausible.

The reasons why we find no significant relationship aid allocation and war incidences are plentiful. One reason could be that aid categorized as ‘country-wide’ was removed from the data since it is not allocated to a specific district. ‘country-wide,’ in addition to the aid allocated to Colombo, might be aid intended to also improve governance and public institutions in the northern and eastern districts. Unfortunately, we have no way of tracking the money from allocation to one district to another. As mentioned previously, political patronage is a crucial thing in Sri Lankan public resource allocation. Money may be allocated to one place but is supposed to be commissioned by politicians to their own respectful districts.

Another reason for the non-relationship could also be that the aid allocations in this study are commitments and not disbursements. This fact might affect the seeming neutrality, even on the maps. Could it be that donors are trying to look as if they are not taking sides and thereby committing a sort of structural violence/neglect? Even this implication is a sharp critique of the results.

Finally, a reason could also simply be data limitation. The relationship might have been significant if we had the underlying household surveys upon which the district averages are based on. These household surveys are available in person at specific public institutions. The government has a so-called ‘Right to information’ policy, so any citizen should, in practice, be able to get hold of this data.

So, why do we need aid donors to focus on the war-affected districts, at the very least, at the commitment level? What is happening in those districts that aid could potentially help solve? The next section will explore these questions in more detail

## **7.6. War affected zones – their experiences**

Nonetheless, when I was traveling in Vanni in 2017 (one of the areas that were most affected by the war), I spoke with some women who had lived in the same house throughout the war. We were sitting on their

porch and drinking tea while talking about the experience they had had of being there during and after the war. At a certain point towards the end of the war, they were forced to leave their house, but they moved back the summer after the war. These women were telling me that the central government in fact allocated (and continues to allocate) plenty of money to the Northern Province after the war, but because the politicians were utterly unqualified to manage the budget and spend it on job creation or education or other rebuilding programs, most of the budget got sent back to the Central Government at the end of every year. Now, whether this is true or not is less important than the fact that this is what they believed about the allocation of resources in Sri Lanka and the capacity of their own politicians. It so happens that these women were entirely correct. I spoke with an activist<sup>17</sup> from Jaffna, who told me that in the years immediately after the first election was held in the Northern Province for the Northern Province Council (NPC) in 2013, there was a substantial discussion of the NPC failure to utilize the funds provided to them. The activist remembers that approximately 40 % of the funds were sent back to the central government. This is an area where more aid projects focusing on training the politicians to make long-term plans and administer big budgets in sustainable ways and informing about democracy would have been fruitful.

It is commonly known that the north, in particular, which was hit hardest by the war for the most extended period, is impoverished compared to the rest of the country, and it is a part of the country where the population still struggles to get through their every day.

First of all, the Northern Province went from 25.2 % GDP growth rate in 2012 to merely 4.1 % in 2018, 'indicating that state-driven infrastructure development has failed to sustain the growth momentum in the region' (p.3 Moramudali, 2019). Moramudali (2019) also investigates the poverty headcount ratio in the country and finds that there are four districts with double-digit poverty headcount ratios, and all four districts are within the Northern and Eastern provinces. Comparing Uva Province, which is in the central-southern part of the country, with the Northern Province, one finds that Uva had the highest poverty headcount ratio (15.4 %) in 2013 while the Northern Province had 10.9 %. However, in 2016, the Uva province's poverty headcount ratio had come down to 6.5 % whereas it had only come down to 7.7 % in the Northern Province (Moramudali, 2019, and Sri Lankan Department of Census and Statistics).

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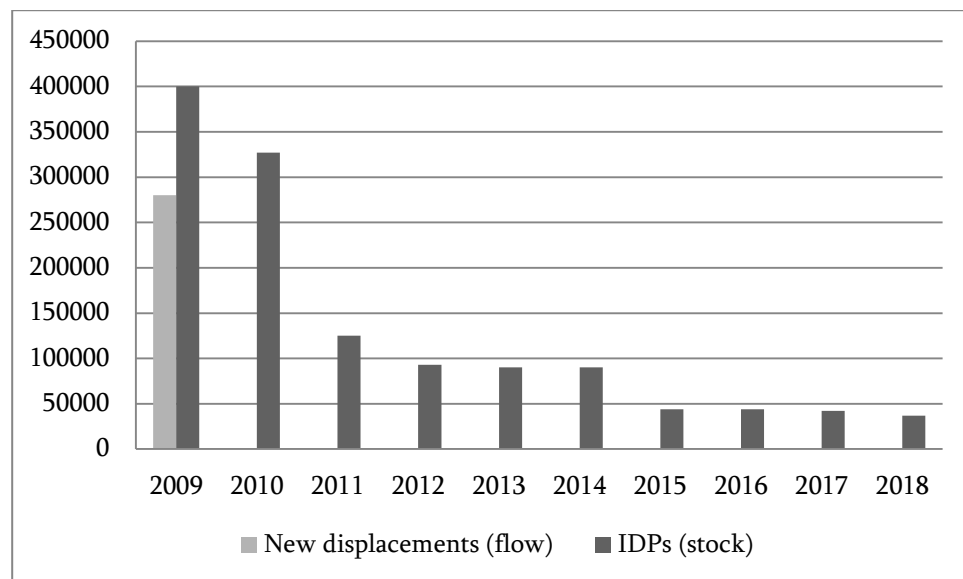
<sup>17</sup> Niyanthini Kadirgamar, activist and scholar on Sri Lanka. She is currently pursuing her PhD in education at University of Massachusetts, Amherst.

Second, there is a substantial microfinance debt crisis, especially in the Northern Province (Moramudali 2019, A.Kadirgamar & N.Kadirgamar 2019, and A.Kadirgamar & N.Kadirgamar 2018). The microfinance loans had effective annual interest rates ranging from 40 to 220 % These massive interest rates created a debt trap where people (in particular women) had to take out new loans from informal lenders to pay back microfinance loans. This situation was so dire that in 2019, the Central Bank imposed an interest rate cap of 35 % on microfinance loans, and this was seen as an achievement. According to the Sri Lankan Department of Census and Statistics, the district with the highest percentage of the population in debt is Vavuniya in the Northern Province. In 2016 Vavuniya district had a population of 80.8 % indebted. Comparably, the Colombo district only has 51.3 % of the population being indebted.

Finally, many internally displaced persons (IDPs) have still not been able to return to their homes or even their villages because reconstruction has been dragging and because the land has been seized by neighbors, military, or the state (Center for Policy Alternatives, 2016).

Figure 8 gives us a picture of the official numbers on internally displaced people due to the conflict from 2009 until 2018. These numbers exclude IDPs due to disasters – that would increase these numbers even more.

**Figure 8. Population displaced by conflict**



Source: Internal Displacement Monitoring Center (<http://www.internal-displacement.org/countries/sri-lanka>)

In 2009 almost 500,000 were displaced due to the war, and by 2018 there are still 37,000 internally displaced. Most of these IDPs have homages in the Northern and Eastern Province.

Overall poverty, microfinance debt crisis (targeting widows in particular) or getting people back to their homes and their villages are all post-conflict issues that donors should focus on when deciding how to allocate aid.

## **8. Conclusion and further research**

This paper investigates whether war-affected districts were allocated more aid than areas that were not affected by the war. The war-affected areas distinguish themselves from the others by higher poverty rates, a higher percentage of widows, geographically far from the capital city, being predominantly Tamil and Muslim which are some of the ethnic minorities in Sri Lanka.

The results from the analysis, both GIS and econometric, showed that donors do not follow the needs of the war-affected districts when deciding where to allocate aid.

Some might say that the geographical location of these districts made/makes it hard for donors to reach those areas. That does seem like a weak excuse since there has been at least one highway and railway roads going from the southern and western parts of the island to the northern and eastern regions. The war-affected districts should have been a priority for donors and the central government in the post-war environment.

The government has been focused on infrastructural rebuilding after the war and high-cost beautification development projects in Colombo city that are not focused on reconciliation of the ethnic groups or rebuilding the war-affected districts.

Recently, India has reentered the Sri Lankan donor scene and has taken up some critical projects in the North and the East. India redeveloped Jaffna International Airport and has also agreed to redevelop Batticaloa International Airport. These two projects still go under the 'infrastructure umbrella' that seems to be the Sri Lankan government's priority, but these airports could potentially have significant impacts on the mobility of the residents in the area and thereby affect their job opportunities which have been lacking ever since the war ended.

It is also important to mention here that even though the war has ended in the sense that there is no more actual war violence, there is still structural violence against the same minority groups. One could even question whether we can talk about a real 'post-war' condition since the elected politicians, time and again reinforce the same structural issues that caused the war to begin with.

It is evident from the news, from talking to people in the war-affected districts and from activists working in those areas, that these districts have been neglected by local and central politicians. This does not show up so clearly in our econometric analysis. We believe this can be attributed to the data available to the author at the time. Firstly, the fact that the investigation cannot be done on disbursements is a problem. The results would be improved if that data were available, and one could even include a comparison between commitments and disbursements to investigate how donor politics changes from an initial stage to a later stage. Secondly, the author was only able to get access to household surveys that reported district averages. The data would be enriched if the author could get access to the underlying raw data which would require fieldwork. Thirdly, including more donors, would show a more definitive picture of the aid situation in Sri Lanka. For instance, Japan and India have historically been significant donors in Sri Lanka and have influenced Sri Lankan trade politics considerably over the years but the author has not been able to identify how much money has gone to which districts from those donors.

Regardless, the findings from this paper is that donors value 'path of least resistance' when deciding aid allocation. However, simply throwing money at a problem has rarely resolved anything, especially when it is not combined with proper guidance. Donors need to spend time getting to know a country's history and the intricate political situation which exists after a conflict. Donors need to work both central and local governments to identify where can actually make a difference. Assuming that aid is given with the intentions of helping or maintaining country relations, reconciliation need to be a priority for donors when allocating aid in post-conflict countries.

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## Appendix

### Further Data Details

For the World Bank aid data, the subset data called ‘level 1a’ from the 2017 data set provided by AidData was used. The time indicator chosen in this study is the variable named ‘approval year’ while the variable of interest (aid amounts) is the variable named ‘even\_split\_commitments’. This particular variable was selected because some donors commit an amount for several projects without clarifying how much is going to which project. So to avoid looking through several hundred project reports, the ‘even\_split\_commitments’ variable averages the total amount committed by the donor on the total number of projects.

For the Chinese aid, the time indicator is ‘transaction start year’. A variable similar to ‘even\_split\_commitment’ was created based on ‘project\_total\_commitment’.

The reason why this study uses a variable containing commitments instead of disbursement is that the Chinese data and the Asian Development data have little information on disbursements. One issue with this is that there often is a significant difference between what donors commit to and what actually gets disbursed. Thus, this study will not be able to evaluate aid project in the traditional sense. However, we will be able to comment on the donors’ political agendas intentions based on their aid commitments.

Collecting aid data from the Asian Development Bank required going through all project reports in Sri Lanka by the Asian Development Bank from 2002 to 2015. The data collected consists of commitment amount, year of project approval, project categories, and geographical locations (districts).

The three data sets were merged using ‘year’. After merging projects categorized as ‘Nation-wide’ or ‘Sri Lanka’ were excluded. All projects without geolocation were also removed.

To include the economic development indicators, which are district averages, the aid data needed to be on the district level as well. The aid data was coded at precise GPS location and not divided into districts (except for the ADB data). GIS was used to transform the data into district-level data. In particular, the ArcGIS ‘Intersect’ tool was used: a layer of districts only was created and then ‘intersected’ with the geocoded layer, which allowed the geolocations to be sectioned out on districts.

After extracting the aid data on district levels, the aid series had to be within donor, within district, and within year such that it could be merged with the economic development indicators.

Table A1: Aid allocation, war and lagged level of development, 2010-2015

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
War	1.42 (2.30)	-0.39 (3.55)	-1.81 (3.93)	-1.88 (3.89)	-2.04 (4.05)	-1.89 (4.12)	-0.71 (3.36)	-1.90 (3.34)	-2.04 (2.79)
Comp_L1		0.26 (0.20)							1.04** (0.48)
Noschool_L1			0.10 (0.47)						0.17 (0.93)
Kcal_L1				-0.00 (0.01)					-0.00 (0.02)
Gini_L1					-6.13 (12.19)				-11.94 (21.93)
Poverty gap_L1						0.01 (0.97)			0.66 (2.17)
Female_L1							2.65*** (0.86)		2.60*** (0.92)
Fridge_L1								-0.00 (0.06)	-0.40** (0.15)
Constant	21.60*** (1.92)	5.55 (7.63)	9.64 (9.74)	15.03 (22.21)	12.93 (11.97)	10.07 (9.63)	-129.82*** (43.14)	10.15 (8.97)	-119.20 (72.61)
Obs.	50	47	47	47	47	47	47	47	47
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared :									
Within	0.69	0.75	0.72	0.71	0.72	0.72	0.74	0.71	0.77
Between	0.01	0.56	0.59	0.60	0.59	0.59	0.70	0.59	0.76
Overall	0.49	0.67	0.65	0.65	0.65	0.65	0.71	0.65	0.76

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Note: Dependent variable is the log of real aid

**Table A2: Aid allocation by World Bank and Asian Development Bank, war and lagged level of development, 2010-2015**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
War	1.19 (2.12)	1.14 (3.43)	-1.15 (3.86)	-1.08 (3.86)	-0.82 (4.27)	-0.92 (4.16)	-0.03 (3.29)	0.01 (3.92)	0.15 (4.19)
Comp_L1		0.38 (0.24)							1.02** (0.47)
Noschool_L1			-0.13 (0.53)						-0.09 (1.04)
Kcal_L1				-0.01 (0.01)					0.00 (0.02)
Gini_L1					9.49 (21.36)				3.17 (33.77)
Poverty gap_L1						-0.16 (1.05)			1.31 (1.80)
Female_L1							2.34** (1.03)		2.05* (1.07)
Fridge_L1								0.07 (0.11)	-0.28 (0.16)
Constant	21.68*** (1.88)	2.84 (7.86)	10.10 (10.02)	20.24 (26.66)	5.14 (15.46)	9.79 (9.93)	- 114.24** (52.14)	6.56 (10.08)	-116.44 (74.93)
Obs.	50	47	47	47	47	47	47	47	47
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared :									
Within	0.74	0.71	0.66	0.66	0.65	0.66	0.65	0.67	0.70
Between	0.01	0.56	0.61	0.60	0.61	0.60	0.69	0.57	0.71
Overall	0.58	0.65	0.63	0.63	0.63	0.63	0.67	0.63	0.71

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Note: Dependent variable is the log of real aid, donors are Asian Development Bank and World Bank