

学位論文の要旨 (論文の内容の要旨)
Summary of the Dissertation (Summary of Dissertation Contents)

論 文 題 目
Dissertation title

Essays of Aid Effectiveness in Developing Countries

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Development, as a matter of centrality of political economy, has been strongly discussed in global development dialogue for several decades. Supplemental economic theories such as Harrod - Dornar growth model, Slow growth model, Big push theory, etc., consider capital as a vital factor for higher economic growth. Therefore, those theories are more optimistic, relating to the contribution of foreign aid towards the development process. But, developing economies are suffering from a lack of investment. As a result, assume that official development assistance (ODA) supplements domestic savings, export earnings, and tax revenue and thereby catalyst the growth process. In the 1950s, the success story of the Marshall plan in Europe had created a ray of optimism regarding the ability of foreign aid towards the promotion of economic development in the developing countries as well. In contrast, many studies have found that there are serious economic hazards of a foreign aid led growth model in addition to long-term aid dependency.

Traditional works, on the empirical front, just include the aid variable as an explanatory variable in the growth regression and ignore the effects of the causal path in between aid and growth. Those works just focus on the direct effect by controlling different variables. An influential paper done by Addison *et.al* (2017) pointed out that cross-country analysis can only suggest a pattern or tendency that holds on average. On the other hand, such traditional specifications are suffering from estimation biases due to omitting investment or double counting as it omits investment or includes both aid and investment. Burnside (2000) made an influential contribution and conclude that a good policy environment induces a positive growth effect and vice versa. But some other studies such as Dalgaard *et al.* (2004), Easterly *et al.* (2004), Islam (2005), Outtara (2008), and Shaomeng *et.al* (2019) reveal that aid is not conditional on good policies. However, the bulk of studies on aid effectiveness have often ended up with a contradictory nature of findings and inconclusive conclusions.

This study aims to examine whether foreign aid meets the intended development objectives. Any study that tries to unveil the aid effectiveness needs to consider, whether foreign aid supplement savings, and in turn increase the investment as well as Aid supplement the export earnings, and in turn increase import. This means that foreign aid positively transmits through investment, import, and public consumption. Our first research objective, which discusses in chapter two, covers the above scope by addressing the aforesaid research gaps. Beyond the claim raised by Addison (2017), we establish the causation of the association between aid and growth through statistical mediation analysis, which emphasis that foreign aid operates via indirect mechanisms. Simultaneously, we remove the double counting and omitting variable biases by employing the Residual with regression (RWR) approach. Thereby, we unveil not only the total effect but also the indirect effect of multilateral aid and

bilateral aid on per capita GDP by employing fixed effect estimation procedure and compared the influence for low middle income (LMI) and upper middle income (UMI) countries, in addition to the regional comparison among Asia, Africa, and Latin America. The evidence proves that the foreign aid is no longer effective - indeed ineffective - when aid transmit through mediator variables like a domestic investment and public consumption, while they themselves have a positive effect on per capita GDP. The findings enlighten the prominent question - why foreign aid induces a negative effect in developing countries. Even if we expect that foreign aid should increase investment, in contrast, the domestic investment declines due to shrinking the private investment - (foreign aid increases the public investment). It suggests that the rate of return on private capital is reduced or is treated unfavorably by AID. Based on this novel interpretation, we argue that aid ineffectiveness is not conditional on policies, but policies are conditional on aid effectiveness.

We needed to take a close snapshot of aid effectiveness for further confirmation of the previous research objective. Therefore, we decided to consider an individual country case and selected Sri Lanka as the research area by considering two basic factors. Sri Lanka is a country that belongs to the second poorest region of the world. On one hand, Sri Lanka reached the end of its long-term civil war in 2009 and enjoyed political stability. In this context, the Sri Lankan government accelerated economic growth through increased public investment drastically and reached the growth level of around 7 percent. At a glance, and as a whole, the country was merely a workplace. On the other hand, there was a black hole under the macroeconomy, and the story had reached its illusionary end by 2015. Accordingly, the country is downgraded by world-famous three credit rating agencies such as Moody, S&P, and Fitch continuously from 2015 to 2020 and is reached the level of 'substantial risk' by November 2020. Now the country is running through a critical debt crisis. This story provides evidence for a macro-micro paradox. This impressive phenomenon stimulates us to get feedback on aid effectiveness in Sri Lanka in two different dimensions, i.e. macro and micro perspectives. In chapter three, we analyze the aid effectiveness, which depends on the financial decisions that are affected by foreign aid by regressing the fiscal response model under the 3SLS estimation procedure. Movrotas (2002) pointed out that foreign aid first goes to the recipient government's budget, and any effect of aid on the macroeconomy depends on the fiscal decisions. Here, we test whether the foreign aid supplement public savings and in turn increase the public investment. Simultaneously, we test whether foreign aid substitutes or supplement the tax revenue. Similarly, we test whether foreign aid increases the socio-economic consumption which might help to delay the threshold level of diminishing return as per the Solow growth model.

We found that public investment decreases while consumption increases in the presence of foreign aid. Similarly, fiscal policymaker substitutes tax revenue in the presence of foreign aid. Accordingly, it is expected that the budget deficit and domestic borrowings will increase. In that context, the fiscal authority prioritizes eradicating the pressure on domestic borrowing rather than increasing investment due to the inability to fulfil the domestic resource requirement for investment.

The story discussed above provides insight that foreign aid works well at the micro-level while macroeconomic positions are collapse in Sri Lanka. To get a clear confirmation on it, we carried out an impact assessment on the first expressway experience in Sri Lanka by using a causal approach. Thereby, chapter 4 allocated to assess the intended outcomes such as RGDP, the industrial sector value addition, unemployment rate, and SMEs. Causal evidence, which derives from the fixed effect estimation based on the difference-in-difference framework, supports that RGDP for the affected regions was greater than for the non-affected regions by around 421 billion Sri Lankan Rupees per annum. The industrial sector value addition is increased by approximately 160 billion Sri Lankan rupees per annum, which accounts for 38% of the total impact on the regional gross domestic product (RGDP). The expressway induced 285 small and medium enterprises (SMEs), while the unemployment rate declined by 1.05% due to the expressway.

Findings, derived from the above three empirical studies, shed a light on rigorous consistent conclusions. Fourth chapter advocate for the supplemental economic theories, that emphasize the

foreign aid work well. Even If foreign aid works well at the micro-level, chapter three support that aid does not work at the macro level since Sri Lankan public policymakers' desires to maximize their utility in the short run by sacrificing the long-run utility that is expected to be gained through improved production possibility, which is built by aid-financed investment at the margin. Which means that aid management and administration is the matter. When foreign aid mediates through fiscal policies, it leads to some sort of fiscal policy asymmetries that unfavorable for private investment.

According to the empirical findings in given chapters, we can see that there is a micro-macro paradox. Even if some projects are successful on the ground, the aid management and administration process badly influence at the macro level. Therefore, reliance on foreign aid does not offer a better solution for sustainable growth given the prevailing fiscal behavior. Accordingly, we emphasize to implement a gradual growth perspective that ensures more bearable, stable, and sustainable economic achievements, instead of getting rapid growth through isolated megaprojects that take a long time for mobilizing income-generating activities and domestic resources. Accordingly, the recipient governments should divert foreign aid to the manufacturing sector through financial support schemes for private entrepreneurs and to key initiatives of private-public joint ventures instead of over-investing in infrastructure. Further, we emphasize the requirement of mobilizing domestic resources rather than depending excessively on domestic borrowings for aid-financed public investment. Thus, fiscal authorities should improve their domestic revenues by expanding the tax base and should not substitute tax revenue with foreign aid. Furthermore, expenditures on general public services need to be reduced. At finally, we emphasize the requirement of strengthening good governance practices and effectively enabling the fiscal responsibility act (2003).

備考 論文の要旨はA4判用紙を使用し、4,000字以内とする。ただし、英文の場合は1,500語以内とする。

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