

An Economic Development Cooperation Study: Japan's ODA for the Philippines' Lower-Middle-Income Trap

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ABSTRACT

The middle-income trap (MIT) states that middle-income economies have found it challenging to reach the high-income stage over an extended period. Overcoming MIT has long been discussed as an essential socio-economic issue, notably in Southeast Asia. Official Development Assistance (ODA) helps developing countries accelerate further growth as development cooperation. The Philippines has the longest-running history of operating under the lower-middle-income trap (LMIT). Much less research on the relationship between the ODA and MIT and of culprits that hinder the ODA were identified in the existing research. Using secondary data and POLS modeling, the strength of the Japan ODA predicting the percentage change in R^2 variance in the LMIT was evaluated in nine economies. ODA was found to be a significant predictor ($F [1, 130] = 26.553 p = .000$) and is thus a substantial factor in escaping LMIT. Using the qualitative analysis, state actors' wasteful procrastination and excessive dependency on the donor were found to be significant culprits. Building a further trustful relationship with Japan and the ASEAN is desired for the Philippines by overcoming the culprits.

KEYWORDS: ODA, Lower-Middle-income Trap, Development Cooperation, Japan, the Philippines

1. INTRODUCTION

While the world economy has greatly advanced since World War II, a number of economies have struggled for growth, prosperity, and development. Indeed, certain parts of the world have seen higher achievement in growth and prosperity over many decades. Notably, East Asian economies, including Japan, South Korea, Taiwan, and China, have achieved significant development (Perkins, 2013). Such prosperity came from the global capitalist system with private ownership, the profit pursuit in market competition, and the global trade, has brought about increased economic growth and development, improved standards of living, and the spread of new technologies and innovations (Berberoglu, 2017).

Meanwhile, the global capitalist system is also associated with significant challenges, including economic inequality and the exploitation of workers, especially in south areas, especially in Southeast Asia, South Asia, and sub-Saharan Africa. Gill and Kharas (2007) has paid close attention to the strategy of how to overcome the middle-income trap (MIT)

in many parts of the world. These two authors have classified all countries in the world into high-, middle-, and low-income groups according to various indicators and proposed the concept of the MIT in 2006. Southeast Asian economies, particularly including Cambodia, Lao P.D.R., Myanmar, Vietnam and the Philippines, have been ranked as lower-middle income economies, while China, Indonesia, Thailand, and Malaysia as higher-middle income economies for 10 years or more. From this discussion, the urgent question of how to overcome the MIT emerges as a key social problem to be addressed. Remarkably, one of the key issues in addressing the MIT is linked to the opportunity for securing employment and increase the individual income through industrialization. Particularly, the Philippines has the longest duration to be under the lower-middle income stage for over 35 years since 1987, despite several good conditions for promoting economic development. To promote economic development in Southeast Asia, international organizations and developed economies allied with the Organization of Economic Cooperation and Development (OECD) have provided

financial assistance for developing countries to be further developed, primarily through development cooperation. The Official Development Assistance (ODA) has helped poor countries promote economic development. Indeed, Japan has financed developing countries, while many have been under development.

In linking the problems mentioned above, what I am going to contribute through this study is to observe the major culprit of stagnating the LMIT despite the huge financial aid by the Japan ODA in the case of the Philippines. Based on the study outcomes, the re-definition of Development Cooperation, the value of Japan's ODA, and the Philippines' development

behavior will primarily be discussed before the end of this paper.

2. REVIEW OF LITERATURE AND IDENTIFICATION OF STUDY GAPS

2.1 Review of Literature

2.1.1. Economic Outlook in Southeast Asia

One example that demonstrates the national economic status is income. Gross National Income (GNI) per capita is one of the most recognized indicators to show the individual income status per country.

Table 1. The Trend of GNI per capita (Atlas Method) per economy

Country/ Year [↵]	Income Level [↵]	1990 [↵]	2000 [↵]	2012 [↵]	2015 [↵]	2018 [↵]	2021 [↵]
East Asia [↵]							
Japan [↵]	High [↵]	27,820	36,810	50,060	39,380	41,770	42,620
Republic of Korea [↵]	High [↵]	6,450	11,030	25,660	28,720	32,750	34,980
China [↵]	Higher-middle [↵]	330	940	5,910	7,890	9,540	11,890
Hong Kong [↵]	High [↵]	12,660	26,930	36,340	41,180	50,050	54,450
Southeast Asia [↵]							
Singapore [↵]	High [↵]	11,450	23,680	51,710	53,160	56,670	64,010
Thailand [↵]	Higher-middle [↵]	1,540	1,980	5,520	5,710	6,610	7,260
Malaysia [↵]	Higher-middle [↵]	2,400	3,460	10,180	10,680	10,650	10,930
Indonesia [↵]	Higher-middle [↵]	560	580	3,580	3,430	3,840	4,140
The Philippines [↵]	Lower-middle [↵]	830	1,180	2,860	3,380	3,710	3,640
Vietnam [↵]	Lower-middle [↵]	130	380	1,970	2,460	3,030	3,560
Myanmar [↵]	Lower-middle [↵]	40	130	990	1,170	1,220	1,140
Lao PDR [↵]	Lower-middle [↵]	190	280	1,370	1,980	2,490	2,520
Cambodia [↵]	Lower-middle [↵]	N/A [↵]	300	880	1,060	1,380	1,550
World [↵]		4,205	5,522	10,540	10,664	11,179	12,070

Note: Lower-middle (US\$1,046 to 4,095), Higher-middle (US\$4,096 to 12,695), and High (over US\$12,696).[↵]

Source: *World Development Indicators (2022)*[↵]

One simple example that demonstrates the national economic status is income. Gross National Income (GNI) per capita is one of the most recognized indicators to show the individual income status per country. Table 1 summarizes the GNI per capita from 1990 to 2021 in East and Southeast Asia. In observing the statistics, we can see the discrepancy more clearly; several economies of Japan, Korea, Hong Kong, and Singapore are in high-income status, while the other nations, including China and the rest of the Southeast Asian economies, have been under the middle-income status until 2021.

Meanwhile, one more point that can be addressed from the table is that there has been a sustainable growth in GNI per

capita in Southeast Asia. Remarkably, there has been a stark difference between Malaysia and Thailand, and the other economies, including Cambodia, Indonesia, Lao P.D.R., Myanmar, the Philippines, and Vietnam in 2021. The former group overpasses the income with the figure of US\$7,000 to 11,000, while the latter remains the income less than US\$ 4,000. In focusing on the Philippines, the income has raised from US\$ 830 to 3,640 over the past 30 years, and we cannot see the skyrocket of the income increase unlike Malaysia, Singapore, as well as the other East Asian economies, such as Japan, the Republic of Korea, and China, and Hong Kong. The Southeast Asian economies are congregated in the status of lower-middle and high-income,

except Singapore.

2.1.2. Middle-income Trap in Southeast Asia

International organizations, notably including the Asian Development Bank and the World Bank, have been discussing the MIT for a considerable period (Gill & Kharas, 2007). These authors have classified all the world’s economies into high-, middle-, and low-income groups and proposed the concept of the MIT in 2006 (Gill & Kharas, 2007). The authors applied “trap” to the situation of middle- and low-income economies by considering a longer-term difficulty in escaping the low- and middle-income stages and reaching enhanced levels of prosperity as the MIT definition. Particularly, Southeast Asian economies, including Vietnam, Indonesia, and the Philippines, have remained among the lower-middle income economies for over twenty years. Most of these countries has still found it difficult to increase per capita income, remaining within the MIT over the past 40 years (Tran, 2016).

The Asian Development Bank (ADB, 2017) identified the factors, including “unfavorable demographics,” “the low level of economic diversification,” “an inefficient financial market,” “insufficient infrastructure,” “a low level of innovation,” “weak institutions,” and “an insufficient labor market,” as contributing to the MIT (ADB, 2017, pp. 16–17). Meanwhile, substantial conditions to promote economic development were identified as infrastructure, industrialization, an efficient financial market, a sufficient labor market, governance, social welfare, etc. (ADB, 2017; Allen, 2013; Otsuka, 2020). In reviewing the factors contributing to MIT in Asia, most researchers have emphasized the significance of promoting industrialization as

being highly significant in promoting economic development.

In gaining further insight into the MIT in Southeast Asia, the ASEAN economies have a history of catching up with industrialization under the division of labor system in East Asia, having reached the status of middle-income or above in 2022. In this process, China’s remarkable economic development since the 2000s has significantly impacted the economies of ASEAN countries. On this part, Tran and Matsumoto (2007) analyzed the impact of regional economic agreements, including the ACFTA, to regard China’s significant economic progress as an opportunity for the development of ASEAN economies. Through this analysis, the importance of ASEAN countries playing a critical role in the division of labor in the regional economic zone and the world economy is emphasized to promote economic development in the ASEAN region.

2.1.3. The ODA for Economic Development in Southeast Asia

The concept of “Development Cooperation (D/C)” was originated from 1945. D/C refers to “international cooperation activities by official governments and government-affiliated organizations with their main purpose being the “development” of underdeveloped regions or economies” (MOFA, 2016). The ODA is defined as “government aid that promotes and specifically targets the economic development and welfare of developing countries” (OECD, 2023). The Development Assistance Committee (DAC) embraced the ODA as the “gold standard” of foreign aid since 1969, and it has remained the primary source for development (OECD, 2023).

Table 2. The Distribution of Japanese ODA to the Regions from 1970 to 2020

Year	The Amount of Net ODA Provided from Japan (Billion Current USD)	ASEAN (%)	Asia (%)	ASEAN and Asia (%)
1970	0.46	38.9	94.4	41.2
1980	3.35	36.3	72.8	49.9
1990	9.07	34.7	61.7	56.3
2000	13.51	33.2	60.1	55.3
2010	11.06	26.8	53.1	50.4
2020	16.26	14.1	17.0	82.9

Source: Based on MOFA (2023), Nguyen et al. (2022), and *World Development Indicators* (2022), author made.

The ODA is composed of two methods of assistance: bilateral national assistance and multi-national assistance. Bilateral assistance primarily consists of “Grants” and “Government loans.” The former has two types of “Grant Aid”

and “Technical Cooperation,” while the latter also does two kinds of “Loan Aid” and “Overseas Investment,” respectively (JICA, 2022). In the case of Japan, the ODA has been implemented by the Japan International Cooperation

Association (JICA) since 1954.

Statistically, the ODA totaled 185.9 billion USD in 2021, more than double in 2020. The total ODA in 2021 is equivalent to 0.33% of DAC members' combined GNI (OECD, 2023). Regionally, sub-Saharan Africa had the most considerable amount of the ODA with a figure of 23.18% (33,307.43 million USD), followed by South and Central Asia with 12.19% (17,519.57 million USD) and Asia and the Pacific with 9.61% (13,802.25 million USD).

Japan had the third largest proportion of the ODA, with a figure of 21,951 million USD on the expenditure base (MOFA, 2023). Particularly, the relationship between Japan and the ASEAN economies has been refined, primarily through the ASEAN-Japan Comprehensive Economic Partnership (AJCEP) in 2008 (ASEAN, 2023). The Japanese government has been working closely with the ASEAN nations to provide various financial aid forms. Thus, the ASEAN has received an extended portion of the Japanese ODA, a crucial rapport for decades. The ODA flow from Japan to the ASEAN still maintains a significant volume in Asia in Table 2.

The effects of foreign aid on economic growth have yet to be evident with various empirical analyses and results. For example, the effectiveness of ODA for increased investment and economic growth can be asserted (Nguyen et al., 2022). Yiew and Lau (2018) employed panel data analysis for 95 developing countries, showing that the relationship between aid and economic development is U-shaped, which means that an adverse effect of aid on economic development is initially observed. In contrast, Abate (2022) employed panel data collected from 2002 to 2019 in 44 developing countries, resulting in an inverted U-shape for the relationship between aid and economic development. The result meant that aid is positively associated with growth at the lower level of 8% to 9% of GNI and has a detrimental impact at a higher level.

Nevertheless, the ODA has not permanently been a panacea for development. There have been several issues in promoting it in developing countries. Remarkably, Afolabi (2021) criticized ODA as spoon-fed aid, which is one of the most severe disadvantages for African development, as well as the donors, as if kids needed more food (Afolabi, 2021). Also, Alesina and Weder (2002) pointed out that the more ODA is provided, the more corruptions occur. The most important thing for the recipients is to promote further self-development with independence and confidence in how to handle their development issues by themselves. The reality is, however, that the recipients need more financial support from the donors than they do. Notably, grant aid is a double-edged

sword because the recipients do not need to repay the financial support. Therefore, the recipients find it challenging to solve the development issues by spoiling the financial aid, resulting in inappropriate aid for the donors.

2.1.4. A Development Situation and ODA Status under the New Regime in the Philippines

The Philippines has remained the same as the lower-middle income level for over 35 years since 1987, which is the longest history of operating under the MIT of any of the countries surveyed. Interestingly, many experts see that no other economies have possessed favorable initial conditions for economic development than the Philippines. For instance, the formulation of civil society has played a major role in affecting the earlier establishment of democracy, especially through the Peoples Power Movement (PPM), well-recognized as the EDSA Revolution in 1986, marked the beginning of a new era of democracy in the country catalyzing the growth of civil society organizations and the emergence of a more active and engaged citizenry, and establishing the true democracy (Ide, 2017). Another viewpoint to sustain the Philippines’ economy is labor migration; one of the features of labor migration is well-known as the Overseas Filipino Workers (OFWs), due primarily to their high ability of English. The number of the OFWs who make remittances to their families is 1.83 million in 2021 with the cash remittances from the OFWs sent to the Philippines, amounting to approximately 29.38 billion USD (Statista, 2023). This remittance amount accounts for around 8.4 percent of the GNI (PSG, 2023).

Despite these preferable development conditions, socio-economic indexes have shown impediments for economic development in the Philippines, and its GNI per capita (US\$ 3,640) remains within the LMIE range (WDI, 2022). Meanwhile, it also has a lower HDI than other countries—0.699, ranked 116th (UNDP, 2022)—fares even worse in its business environment, with its Ease of Doing Business Index (EDBI), ranked 95th out of 190 economies in the world in 2019 (World Bank, 2022). These indexes can suggest the challenges involved in escaping LMIT. Thus, inappropriate policies to take advantage of its good initial conditions could be a hidden factor perpetuating LMIT in the Philippines.

Meanwhile, the updated PDP emphasized the significance of “Resiliency” with the main three pillars of trust, equity, and growth potential. Still, based on the solid intention of the former president, Rodrigo Duterte, infrastructure was emphasized with the slogan of “build, build, build” in his faith (Ide, 2017). Then, the new president, Bongbong Marcos, who started his new regime in July 2022, launched both the

short-term and mid-term plans by focusing on promoting employment and fair trade (JETRO, 2022), focusing on several social issues, especially of employment and wage.

Finally, looking at the ODA receiving status in the Philippines, the most significant bilateral source of ODA is Japan over 20 years (DOF, 2021). During the 20 years covering the regimes of Arroyo, Aquino III, and Duterte, the Philippines contracted the least bilateral ODA loans in 2003, totaling US\$95.726 million, while the most outstanding amount of bilateral ODA loans was in 2020, totaling US\$2.774 billion (DOF, 2021). Indeed, Japan has been the most reliable financing donor for the Philippines compared to the other donors’ amount (MOFA, 2023). The highest proportion of use of the ODA was prioritized in investing the road construction, railway development, and highway establishment, followed by tax reform, trade and investment, and education and health¹(NEDA, 2021).

2.2. Identification of Study Gaps

Despite the recognition of promoting ODA in Southeast Asian LMIEs and HMIEs, much less research on the unclouded evidence of the relationship between ODA and MIT in the Philippines was identified in the existing study. As explained, typically the argument for moving out of the MIT is need for economic efficiency with rising wages and move up value chain, i.e., from manufacturing to adding more value in service industry, while it has still been evident that the effects of foreign aid on economic growth have yet to be clarified with various empirical outcomes by other scholars. Despite the considerable amount of ODA grants and loans from donors, especially of Japan, the Philippines has been under the LMIT for more than 35 years. A similar study was done by Nguyen et al. (2022), concluding that the ODA exhibits a significantly positive relationship with economic growth in Southeast Asia. Nevertheless, in the context of the Philippines, the specific culprits of promoting ODA, notably for grant aid, were not seen, at least from the PDP. From this point of view, it would be essential to see to what extent and how the ODA can impact MIT in the Philippines.

3. RESEARCH OBJECTIVES AND RESEARCH QUESTIONS

3.1. Research Objectives

This study’s primary purpose is to contribute to overcoming the MIT with the ODA in Southeast Asia,

notably in the Philippines, where they have spent the most extended duration of the trap, by observing the major factor contributing to ODA affecting the MIT by using the mixed-method.

3.2. Research Questions (RQs)

What can be the major culprit of stagnating the LMIT despite the huge financial aid by the Japanese ODA in the case of the Philippines?

4. FRAMEWORKS

Tran (2016) formulated a framework, exploring how to escape the MIT by dividing the issue into two syndromes: the lower-middle-income trap (LMIT) and the higher-middle income trap (HMIT). In addition, with a decade of empirical research on development, McKee et al. (2020) proposed a new framework and set of indicators of aid quality of the ODA and classified aid effectiveness into four principles of “Prioritization,” “Ownership,” “Transparency,” and “Learning” (Mitchell and Rogerson, 2020) for assessing recipients’ views of aid providers, but even for OECD-DAC providers. “Prioritization” is a fundamental choice that development cooperation agencies and their political owners necessarily make, for better or worse, on where, for what purposes and through what channels to route their aid. “Ownership” focuses on whether donors key off recipient countries’ strategies, help them record aid on-budget, use national financial systems, and deliver aid predictably in the short and medium terms. As for “Transparency,” the three main transparency-related indicators of overall coverage of published aid data; comprehensiveness (and level of detail) of that data; and timeliness and frequency of publication. Finally, the category of “Learning” focusses on quantifying the quality of their evaluation and learning systems (McKee et al., 2020).

Based on Tran (2016) and McKee et al. (2020), a new framework can ultimately be established. Figure 1 represents the relationship between the economic development stage and ODA effectiveness by income levels, which was primarily applied by the model by Tran (2016). Specifically, Line AB stands for the low-income stage; the countries in the stage should emphasize “Ownership” as shown in Figure 1. Then, the ODA effectiveness should further be emphasized on “Prioritization” for overcoming the LMIT (Line BC and CC’) Also, as for HMIT under line C-D and DD’, the effectiveness

¹ In the Philippines, the ODA Act complemented National Economic and Development Authority (NEDA) Board Resolution No. 30 series of 1992, which instructed the Investment

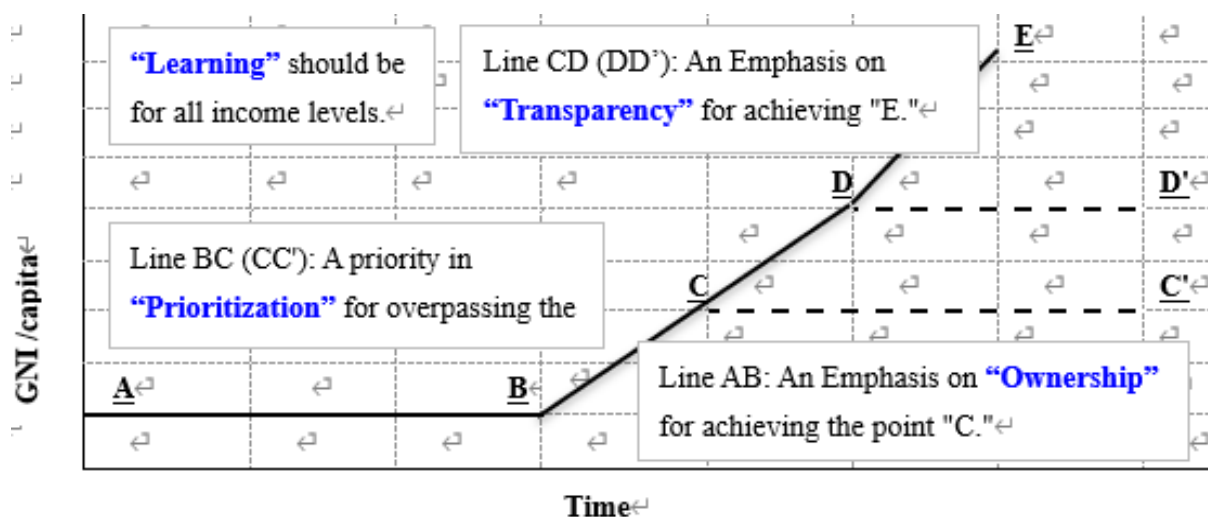
Coordination Committee (ICC) to review all on-going ODA-funded programs and projects mandated as the ODA Act of 1996 (NEDA, 2021).

should ultimately be emphasized on “Transparency” for finally achieving E, and thus escaping the HMIT. Finally, as for “Learning” should be put under all the income stage. This framework can hypothetically play a role in making the theoretical relation between economic development and ODA effectiveness more evident.

From this point of view, this theoretical framework can show the connection between the key variables of the

individual income and the ODA effectiveness. With the main variables of the GNI per capita (Atlas Method, US\$) used for the MIT and the ODA providing amount, the quantitative approach, the first research purpose, and the RQ are connected to this framework, notably in observing the impact of the ODA providing amount on the GNI. Thus, the framework can be rationalized with the existing models.

Figure 1. A Theoretical Framework of Development Stages of an Economy and ODA Effectiveness



Source: Based on Tran (2016, p. 78) and McKee et al. (2020), author made.

5. METHODOLOGIES

5.1.1. Data-Collection and Treatment

Overall, for arranging the dataset to approach RQ quantitatively first, I used the secondary data as the following variables in Table 3, which were primarily gained through the publicly open websites from the World Bank, the OECD, the UNCTAD, and the UNDP from 2002 to 2021 with nine economies in Southeast Asia (Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Timor-Leste, and Vietnam). The dataset listed the World Development Indicators (WDI), the World Governance Indicators (WGI, 2022) and the Human Development Index (HDI) ($N = 180$: nine economies for 20 years). One weakness to be reported in this paper is that I did not handle the missing data, thereby utilizing a pairwise sample. Because this study focuses on how much the ODA can affect MIT in the

Philippines, it can be justifiable for me to use the variable directly.

Meanwhile, for qualitative analysis, I found the necessary data relevant to Japanese ODA used in the Philippines, encouraging the economy to overcome the LMIT. Remarkably, I paid closer attention to the specific causes of why the Philippines finds it challenging to promote economic development by observing the advantages and disadvantages of the ODA recipient in comparison with the other economies to achieve higher-middle-income and high-income economies in East and Southeast Asia. Specifically, I employed the archive data, primarily from international organizations and the Philippines’ government agencies as the primary data, due to the most significant entities in this RQ. The archive data relevant to economic development through ODA in the Philippines were obtained.

Table 3. Variables of Quantitative Analysis for RQ:

Type	Variables	Definition	Expected Direction
DV	GNI per capita (US\$)	Gross National Income per capita measured by Atlas Method in US\$ (WDI, 2022).	N/A
IV	Capital	Capital stock measured by domestic savings (WDI (2022); OECD (2022)).	(+)
IV	Labor	Labor force participation rate for ages 15+, total (%) (modeled ILO estimate ((WDI, 2022)	(+)
IV	Official Development Assistance (ODA)	The ODA amount provided by Japan for Southeast Asia, including Grants and Government loans. (EC (2023); OECD (2022).	(+)/(-)
IV	Foreign Direct Investment (FDI)	The amount of the FDI, including Greenfield and M&As, to the Southeast Asia (UNCTAD, 2022)	(+)
CV	Governance: Voice and Accountability (V/A)	V/A measures the extent to which citizens in a country can join the government selection, freedom of expression and a free media (WGI, 2022).	(+)
CV	Governance: Political Stability and Absence of Violence/Terrorism (P/A)	P/A is defined as the measurement of the possibility of political instability and politically motivated violence (WGI, 2022).	(+)
CV	Governance: Government Effectiveness (G/E)	G/E measures the quality of public and civil services, and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the commitment to the policies (WGI, 2022).	(+)
CV	Governance: Regulatory Quality (R/Q)	R/Q observes the ability of the government to formulate and implement sound policies and regulations that permit and promote further development in private sector (WGI, 2022).	(+)
CV	Governance: Rule of Law (R/L)	R/L sees the extent to which agents have confidence in and abide by the rules of society, and the quality of contract enforcement, property rights, the police, and the courts (WGI, 2022).	(+)
CV	Governance: Control of Corruption (C/C)	C/C perceives the extent to which public power is used for private gain, including both petty and grand forms of corruption (WGI, 2022).	(+)
CV	Industrialization:	Value added in Manufacturing through the data source on structure of output per GDP (WDI, 2022).	(+)
CV	Infrastructure:	The rate of all transport services, including ship, air, land, internal waterway, space, and pipeline performed by residents of one economy for those of another is calculated (WDI, 2022).	(+)
CV	Human Capital	Human Development Index (HDI) is used to see the development status from the perspectives of health, education, and income (UNDP, 2022)	(+)

Note: DV (Dependent Variable), IV (Independent Variable), and CV (Controlled Variable)

Source: Author

5.1.2. Methodology

For RQ, a mixed method was employed, which can combine elements of quantitative research and qualitative research to answer the RQ with the expanded evidence, helping me gain a more complete picture than a standalone quantitative or qualitative analysis in generalizability, contextualization, and credibility (George, 2021). Also, as for the research design, the effectiveness of ODA can vary depending on the uncertain elements, including the recipient’s diplomatic speculation, allocation methods of the funds, procedure use for policymaking, etc. In these ways, the mixed-method should be justified. Thus, it is appropriate for me to choose an explanatory sequential design; quantitative data collection and analysis occurs first, followed by qualitative analysis.

The following procedure was made below.

Firstly, I conducted quantitative analysis to see the effect of the Japanese ODA on the GNI per capita by employing the multiple-linear regression analysis this time. One reason for this is that I primarily observed the effect of the Japan ODA on the GNI per capita in the designated nine economies in Southeast Asia, especially by gaining insight into the figures of R^2 variance as coefficients of determination, indicating how much the IVs statistically contribute to the DV (Kvalseth, 1985).

I referenced the previous study conducted by Nguyen et al. (2022) to assemble an econometric model to examine the effect of ODA on GNI per capita over 20 years in ASEAN economies by applying the pooled ordinary least squares (POLS) model, to investigate the potential linkage of foreign

aid on individual income. The annual data were collected before incorporating it into the Solow Growth Model. The Cobb-Douglas production function is written as follows:

$$Y_{it} = A_{it}K_{it}^{\alpha_2}L_{it}^{\alpha_3} \dots \dots \dots (1)$$

Where the total production is “Y” which means the predicted value of the dependent variable, “K” means the “Capital” input. “L” represents “Labor.” The superscripts demonstrate the output elasticities of capital and labor in the order. The subscripts (i) and (t) are the individual terms and period horizon. From the Equation (1), I standardized the natural logarithm model of Cobb-Douglas into a linear-regression form. In applying the official formula (1) above to this study, I made the formula for as shown in (2) below.

$$GNI_{it} = \alpha_2Capital_{it} + \alpha_3Labor_{it} + A_{it} \dots \dots \dots (2)$$

Where, GNI per capita denotes the gross national income per capita. The two variables "K" and "L" denote the amount of capital and labor forces in the economy. The remaining factor "A" represents the total factor productivity (TFP). TFP is employed to explain the output growth, which is driven by other factors of production. More importantly, this factor is also known as the omitted factor. It is highlighted that two parameters, consisting of α_2 and α_3 , contribute to the explanation for the elasticity of output explained by "K" and "L," respectively. From this point, we specified total factor productivity as follows.

$$A_{it} = \alpha + \alpha_4ODA_{it} + \alpha_5FDI_{it} + \alpha_6OTHFACS_{it} + \varepsilon_{it} \dots \dots \dots (3)$$

where ODA_{it} is an inflow of foreign aid and FDI_{it} is the inflow of foreign direct investment. Note that α_1 is a constant, and α_4 , α_5 are the elasticity of output with respect to ODA_{it} and FDI_{it} . $OTHFACS_{it}$ means the alternative factors, primarily including *Governance, Industrialization, Infrastructure, and HDI* fixed as the CVs. ε_{it} is the error term. One of the most important assumptions is the growth of foreign aid and FDI inflows having the connectedness in terms of the TFP growth, which improves the GNI and the aid as well. Therefore, the extant literature suggests the correction by emphasizing the role of capital goods or technology and is associated with technology transfer (Morrissey, 2001). Furthermore, foreign aid has no association with investment and saving rates. Then, by substituting (3) to (2), I obtained the final regression model as follows:

$$GNI_{it} = \alpha_2Capital_{it} + \alpha_3Labor_{it} + \alpha_4ODA_{it} + \alpha_5FDI_{it} + \alpha_6OTHFACS_{it} + \varepsilon_{it} \dots \dots \dots (4)$$

where GNI_{it} represents the GNI per capita in ASEAN economies. $Labor_{it}$ is the country’s total labor force. $Capital_{it}$ stands for capital stock measured by domestic savings. Total official development assistance inflows are ODA_{it} and Foreign Direct Investment inflows are FDI_{it} . Finally, $OTHFACS_{it}$ includes the other factors of the MIT. All variables are expressed in a natural logarithm term. In terms of econometric approach, I followed the existing literature with POLS, FEM, and REM estimation methods to tackle the problems of simple and robust-OLS for the panel data. The use of FDI in the econometric model to control the effects of ODA on GDP has been employed in the literature (Dhahri and Omri, 2020). Therefore, my study has a new context when using the FDI as the control variables, which is apart from the capital as well as labor forces in the model.

Based on the statistic results, I conducted the qualitative analysis into practice. From these points of view, I used document/archival analysis with coding process by referencing the papers, journals, articles relevant to the ODA in the Philippines in the context of finding the advantageous conditions and causes of the ODA directly not impacting the LMIT in the Philippines. Remarkably, employing the Murdoch School of critical political economy makes it possible to broaden the perspectives, especially in finding the invisible disadvantages of the domestic elites over global capitalism system. Therefore, I analyzed the archival data and excerpt the texts which are directly related to the conditions and disadvantages of promoting the Japan ODA above.

6. STUDY RESULTS

Table 4 shows the results of the appropriate models executed from SPSS. In paying close attention to the items of “R Square (R^2)” and “Adjusted R Square (Adjusted R^2)” accordingly, the Model 4, which includes the variable of the Japan ODA (IV4_Japan ODA) had the figure .806 in R , while R^2 .649 with adjusted R^2 .639 with Significance in F. 0.000 eventually. Examining the Model in Table 4 as the final model, the “Adjusted R^2 ” was 0.639; approximately 63.9% of the ODA Japan for the primary predictor variables of the GNI per capita, at least, in the selected 9 Southeast Asian countries. In a word, the Japan ODA is strongly influenced by the accumulated effects of the GNI per capita. A remaining 36.1% of the predictive influencers remain unmeasured or otherwise unidentified.

Further, in paying attention to the item of “Significance

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in. F,” the figures are 0.000 in Table 4 illustrated significant (p < .05). In a word, the significance in the Model 1 to 5 was identified, despite some missing data available in two variables (IV1_Capital (N=161) and CV2_Indust. (N=173)) as a study weakness. The ANOVA Model in Table 4 were

significant (p < .001) illustrating a significant fit of data (Field, 2018). Based on these perspectives for testing the quantitative analysis in the first sequence for RQ, it was possible to be in favor of the Japan ODA with statistically significant contribution to the MIT via the GNI per capita.

Table 4. Regression Model Outputs for RQ1

Model summary ^c									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model Summary ^c				
					R Square change	F Change	df1	df2	Sig. F Change
1	.449 ^a	0.201	0.195	2350.561	0.201	33.515	1	133	0.000
2	.544 ^b	0.296	0.285	2215.281	0.095	17.740	1	132	0.000
3	.760 ^c	0.578	0.568	1722.129	0.282	87.424	1	131	0.000
4	.806 ^d	0.649	0.639	1575.325	0.072	26.553	1	130	0.000
5	.908 ^e	0.824	0.805	1158.212	0.174	13.277	9	121	0.000

a. Predictors: (Constant), IV1_Capital

b. Predictors: (Constant), IV1_Capital, IV2_Labor

c. Predictors: (Constant), IV1_Capital, IV2_Labor, IV3_FDI

d. Predictors: (Constant), IV1_Capital, IV2_Labor, IV3_FDI, IV4_JapanODA

e. IV1_Capital, IV2_Labor, IV3_FDI, IV4_Japan ODA, CV1_GV1, CV1_GV2, CV1_GV3, CV1_GV4, CV1_GV5, CV1_GV6, CV2_Indust, CV3_Infra, CV4_HDI

Durbin-Watson value = 2.146

Note. Adapted from SPSS output.

Based on the quantitative analysis in Table 4, one more qualitative analysis was tested. With the two variables of the ODA and GNI per capita, I scrutinized the culprits that can hinder the Philippines from overcoming the MIT through the

ODA, shown in Table 5, with several disadvantageous features that can stagnate economic development progress to be identified in comparison with a higher-middle income economies of Indonesia for reference below.

Table 5. A Result of Obstacles of Overcoming the LMIT in the Philippines and Indonesia

No.	Income Level as of 2022	Country	Japan ODA Started from	Focus Areas by Japan ODA	Current ODA Status as of April. 2023	Culprits/Obstacles to overcome MIT via ODA
1	Lower-middle Income	Philippines	1954	<ol style="list-style-type: none"> 1. Infrastructure 2. Governance 3. Human Resource 4. Poverty Reduction 5. Agriculture 6. Disaster Risk Management 	Under the LMIT since 1987, despite the massive amount of Japan ODA since 1979 as the biggest doner in the world.	<ol style="list-style-type: none"> 1. Procrastination of putting ODA into practice due to unnecessarily complicated processes for approval 2. Dependency on donor’s funds 3. Insufficient Private Sector and Citizens Involvement 4. ODA Resource Misallocation 5. Political Corruption
2	Higher-middle Income	Indonesia	1954	<ol style="list-style-type: none"> 1. Infrastructure 2. Poverty Reduction 3. Agriculture 4. Governance 	Lifted-up to a higher-middle-income level in 2021	<ol style="list-style-type: none"> 1. Political Speculation and Corruption 2. Regional Discrepancy 3. ODA Resource Misallocation

Source: Based on ADB (2022), JETRO (2021;2022), NEDA (2022), World Bank (2021;2022), author made.

The Philippines needs to make the breakthrough to overcome the MIT through ODA efficiently, despite some progress in economic growth over the past 20 years. I put five obstacles/culprits of "Procrastination of putting ODA into practice," "Dependency on donor's funds," "Insufficient Private Sector Involvement," "ODA Resource Misallocation," and "Political Corruption," which are the essential components for overcoming the LMIT through ODA. These five culprits can be significant factors contributing to the Philippines' LMIT. In reference to the interview survey with several agencies, including JICA Philippines Office, one of the significant concerns in implementing the ODA is that the Philippines' public procedure to the ODA funding has always been procrastinated due primarily to unnecessarily complicated processes for approval by various stakeholders, which consumes plenty of time. For instance, in my interview survey, one human resource development project, which was supposed to be started from July 2021, was postponed until February 2022 (JICA Philippines, 2022²). Such procrastination due to wastivity frequently happens in the Philippines.

Further, since the ODA is a state-to-state grant agreement, many citizens and non-state actors need help to see how it works for economic development via poverty reduction, and thus their less involvement with the ODA. As per the DAC policy, the ODA does not play a role in harnessing commercial transactions (OECD, 2023), while business development is inextricably linked to economic growth. It can be a significant dilemma between what ODA is and what ODA should be. The citizens in need want to visualize how ODA contributes to MIT.

Another culprit that can hinder the Philippines from promoting socio-economic development would be the allocation of funds between central and provinces and political corruption, which are common issues in the developing world. Also, these issues must be handled better and witnessed by the government and in Indonesia for reference. Still, these culprits can absolutely deteriorate the economic progress in a country, and the Philippines is also case.

All in all, these five culprits that I raised in Table 5 can hinder the Philippines from using the ODA efficiently through archival data and interview analysis, despite the statistically significant outcome quantitatively. Notably,

Procrastination and Dependency need to be addressed so that the Philippines can independently lift to the higher-middle income stage. In a way, as a lower-middle income economy, “Prioritization” needs to be improved in implementing the ODA. In comparison with Indonesia, which lifted to the higher-middle income in 2021, there are several similar obstacles in employing the ODA: “Political Speculation and Corruption,” “Regional Discrepancy,” “ODA Resource Misallocation,” which cannot be easily handled by the state actors. Nevertheless, these three issues should be further addressed so that Indonesia can climb up to the high-income status in the long run. In a sense, in a higher-middle income economy, “Transparency” should further be tackled toward the next stage.

7. CONCLUDING REMARKS

7.1. Discussion

Based on the study results shown above, here are several discussive topics relevant to this study:

Firstly, the “Development Cooperation (D/C)” should be the time for re-definition of the D/C. Primarily, since the COVID-19 pandemic, the D/C should be handled by state actors and non-state actors as something unexpected and uncontrolled by the government has happened globally. Considering the reference from Lo Turco and Maggioni (2017), the D/C should be re-defined as global and local (glocal) activities and leadership by the state in collaboration with non-state actors leading to sustainable development. With the re-definition, the Philippines needs to be further involved with Japan and the ASEAN, taking the initiative and expand the network to improve accountability, transparency, and prioritization through the national, public, and private exchange.

Secondly, Burnside and Dollar (2000) concluded that development aid, including ODA, can work just as long as there is good governance and policies in the recipient countries, despite the unclear relationship between economic growth and ODA in their study. At least, the Philippines needs to improve the ODA promotion for overcoming the LMIT as earliest as build a diplomatic and economic partnership with Japan and be responsible for repaying the loan aid in the long run. As Kimura (2006) suggested, how ODA can contribute to promoting national “self-growth” as independency would be one of the most meaningful studies. Then, the Philippines should, at least,

² The interview survey was conducted in May 2022 at JICA

Philippines Office in Makati city in the Philippines.

not request more aid and recommend maximum performance with the minimum resource.

7.2. Study Limitations

Firstly, as for the ODA and MIT in Southeast Asia, it would be worthwhile to use several Southeast Asian economies as case-studies and identify the policy gaps, finding a better breakthrough for the MIT. The Philippines is the island nation, Also, the political-economic relation with China should also be inevitable in realizing sustainable economic development in the long run. In this respect, examining several other countries to study the relationship between MIT and ODA can also be studied.

Secondly, the more specific project design per respective field, such as education, agriculture, human capital, ICT, disaster risk management, energy, transportation, can be described in this paper. I introduced the ODA and explained the Japan’s ODA to the Philippines as a general way this time, while addressing the issues of the specific projects can be a potential in making the ODA study more specific and aligned with the local actor’s behavior, leading to further interdisciplinary study. In this way, it would be more worthwhile to conduct the ODA study together with the local actors.

7.3. Recommendations

Firstly, political, cultural, and religious aspects should be further incorporated even if we study development issues. The social and cultural background can swiftly go beyond or move backward theories or frameworks. It should be a challenging but rewarding topic to deal with economic and business studies from cultural, historical, or religious points of view, formulating theories for practice.

Secondly, in the case of development studies, including ODA, MIT, and other related issues, research collaboration with professionals or experts would be more favorable. There is a higher chance to elaborate research through data-collection, research trend, and opinion exchange discussion. In this respect, the human resource would be more useful in making the comprehensive research.

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