What Explain Foreign Aid Allocation by The Emerging Donors?

The Case of Thailand International Cooperation Program (TICP)

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Abstract

The so-called emerging donors have increasingly been subject to academic and policy studies in recent years. However, until now, the number of empirical studies on the way these donors allocate their aid and the factors influencing their aid allocation are still limited. In this study, I focus on Thailand's aid allocation. The analysis in this study is based on the recipient need (RN), donor interest (DI), and recipient merit (RM) perspectives. The data on *Thailand International Cooperation Program* (*TICP*) provided by Thailand International Development Cooperation Agency (TICA) during 2007-2012 are analyzed by using the Logit and Tobit estimations. The results reveal some interesting patterns in Thailand's ODA allocation. Firstly, the allocation of TICP does not seem to be driven by the poverty reduction motive. In particular, TICP tends to favor developing countries with better economic development indicators. Secondly, TICP is not allocated in response to economic and commercial interests. It is found that bilateral trade relations between Thailand and its partner countries do not significantly explain whether (and how much) partner countries will receive TICP. This runs counter the critical view on emerging donors which argues that these

donors provide aid mainly for their commercial or short-term economic benefits. Finally, TICP tends to go to developing countries with sound institutional framework and favorable policy environment. All in all, my results reveal that Thailand's ODA allocation is not well explained by RN and DI perspectives. Rather, it is likely to be explained by the institutional and policy environments of partner countries, which is in line with the RM perspective.

Keywords:

Foreign Aid, Emerging Donors, Official Development Assistance (ODA)

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1. Introduction

Thailand is a small player in aid industry by international standard. It is estimated that the annual disbursement of Thailand's official development assistance (ODA)[1] is about 50-90 million USD,[2] well below the average annual ODA disbursement of OECD-DAC member countries which stood at approximately 2.7 billion per donor per year during 2004-2014.[3] Thailand has officially started its ODA programs 15 years ago. Its debut and international recognition as an *emerging* donor is marked by the establishment of two agencies: one is the so-called *Thailand International Development Cooperation Agency (TICA)* established in 2004 to provide technical cooperation (TC) and grant aid; the other one is the *Neighboring Countries Economic Development Cooperation Agency (NEDA)* founded in 2005 to provide concessional loan. At the beginning, Thailand's ODA was concentrated in its neighboring countries, especially Cambodia, Laos, Myanmar, and Vietnam (CLMV). Currently, its ODA has expanded to cover a large number of recipients[4], offering us a larger room to investigate its allocation behavior.

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1 ODA is a kind of foreign aid given by official sector (e.g. states, local governments, and governmental specialized agencies) with the main objective of promoting development and with the concessional financial terms.

2 The fluctuation in the amount of ODA budget in each year is very much dependent on the disbursement of committed loan (TICA statistics: www.tica.thaigov.net/main/en/other/4296).

3 The Development Assistance Committee (DAC) consists of 29 member countries and can be regarded as the largest player in global aid industry with the share above 60% in global aid disbursement (OECD Statistics: www.oecd.org/development/stats/idsonline.htm).

4 On average, there are more than 80 countries receiving Thailand's aid every year since 2005.

Until recently, the allocation of aid by emerging donors is still less known. Most studies on aid allocation have placed greater emphasis on the allocation of aid made by traditional donors.[5] The number of literature that attempt to find determinants of emerging donors' aid allocation is still limited (Neumayer 2003).[6] Moreover, the existing literature on emerging donors is rather descriptive and only offers some overview on the increasing influence of emerging donors in global aid industry (see, for example, Manning 2006; Kragelund 2008, 2011; Woods 2008; Six 2009; Zimmermann and Smith 2011). There are only few studies that quantitatively examine the set of factors influencing the allocation of emerging donors' aid (notable studies are Neumayer 2003b, 2004 and Dreher et al. 2011). This may be due to the lack of credible and reliable data on emerging donors' aid.[7] In this study, I intend to contribute to the body of literature on aid allocation by bringing in new evidence about aid allocation made by one of emerging donors - Thailand.

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5 Generally, the term "traditional donors" refers to the aid-providing countries that are the member of the Development Assistance Committee (DAC) under the Organization for Economic Co-operation and Development (OECD), while the term "emerging donors" is used to refer to bilateral donors outside DAC (Manning 2006). Some scholars (e.g. Dreher et al. 2011) call traditional donors "DAC donors" and call emerging donors "non-DAC donors".

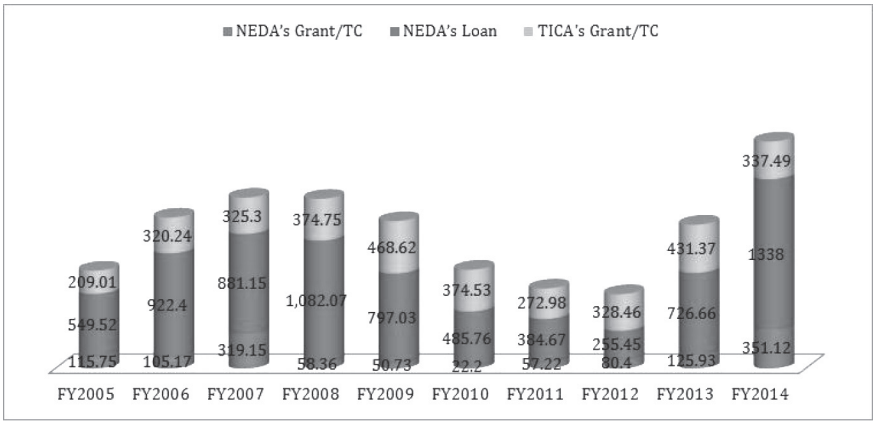
6 Notable studies include Neumayer (2003b, 2004) which focus on aid provided by Arab countries and their multilateral agencies, and Dreher et al. (2011) which compare the allocation of bilateral aid between non-DAC and DAC donor countries.

7 Perhaps, the problem of what should be defined as foreign aid may be one of the reasons why it is difficult to conduct the quantitative analysis on emerging donors' aid and compare results with the studies on traditional donors. It is widely known that the aid data provided by emerging donor countries are fragmented, inconsistent, and based on their own definitions which do not conform with the definition given by DAC (Walz and Ramachandran 2011).

It can be said that Thailand has only been regarded by the international development community as a donor of foreign aid after the establishment of TICA and NEDA. Before that, its status as a donor was rarely recognized, though Thailand's aid programs had long been carried out by The Department of Technical and Economic Cooperation (DTEC) in the form of technical cooperation.[8] This may be due to the small size of programs and the fact that Thailand was still a recipient of foreign aid. However, after the establishment of TICA and NEDA and Prime Minister Thaksin Shinnawatra's announcement of Thailand's independence of foreign aid, the status of Thailand as an emerging donor has attracted more attention from the international development community (Wajjwalku 2014). Figure 1 shows that the volume of ODA disbursed by these two agencies grew rapidly during 2005-2008. However, during 2009-2012, it significantly dropped, before starting to grow again in 2013. In 2014, the volume of aid had exceeded 2 billion baht, the highest level since 2005. In fact, about 60% of ODA is provided by NEDA in the form of concessional loan.

8 DTEC was a department under the Office of the Prime Minister (OPM). In 2004, it was dissolved and its personnel be transferred to TICA.

Figure 1: TICA's and NEDA's ODA disbursement by ODA types (in million baht)



Note: (1) NEDA's grant and technical cooperation (TC) are provided as a complementary part of its loan
(2) Loans are disbursed by NEDA only.

Source: TICA's and NEDA's statistics

One of important characteristics of Thailand's ODA is that, with a relatively small budget, ODA is given to a large number of nations. For NEDA, this is not much an issue because it only provides loans for the neighboring countries. But for TICA, the ODA programs (called *Thailand International Cooperation Program*: *TICP*) extend across several countries around the world, mainly in the forms of training and scholarship. As in Table 1, about 41-61% of TICA's TICP budget has been disbursed to CLMV countries.[9] Apart from CLMV, Thailand shows

9 CLMV refers to the four neighboring countries of Thailand including Cambodia, Laos, Myanmar, and Vietnam.

its interest in South Asia, the Middle East, and Africa. The amount of TICA's ODA for these regions shows the increasing trend, at least until 2009.

It is quite obvious from Table 1 that Thailand's ODA favor its neighboring countries, especially CLMV. This is consistent with Thai government's aim to use ODA as a tool to enhance Thailand's position in ASEAN (Wajjwalku 2013). Apart from its neighboring countries, Thailand also shows strong interest in Africa and South Asia, as illustrated by the growth of TICP budget disbursed for these regions over the period 2005-2014.

Table 1: ODA provided by TICA (TICP) (in million baht)

Country/Region	Fiscal Year (FY)									
	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
1. CLMV	128.27	136.60	169.57	203.66	264.14	223.93	141.46	199.90	249.23	172.9
2. SOUTHEAST ASIA	13.60	9.39	30.00	35.71	17.12	24.91	15.57	11.33	7.04	11.2
3. EAST ASIA	9.32	11.14	12.40	10.42	11.12	8.10	9.53	12.61	9.01	10.4
4. SOUTH ASIA & MIDDLE EAST	26.79	36.69	61.18	57.61	77.10	53.86	40.96	51.47	67.49	44.3
5. THE PACIFIC	0.21	0.03	0.14	2.26	3.62	0.99	2.23	1.03	4.45	4.0
6. AFRICA	16.87	31.55	22.46	30.75	46.79	33.59	21.40	25.85	43.24	27.4
7. CIS	1.03	1.34	4.99	3.30	2.63	3.62	1.55	1.51	3.80	0.5
8. EASTERN EUROPE	-	-	-	0.54	0.05	0.44	-	0.35	1.35	0.3
9. LATIN AMERICA	3.95	5.08	5.01	11.00	6.71	9.10	8.54	11.40	14.17	12.4
10. OTHERS****	8.96	88.42	19.56	19.51	39.35	15.99	31.73	9.91	31.58	20.8
GRAND TOTAL	209.0	320.2	325.3	374.8	468.6	374.5	273.0	325.4	431.4	304.2

Note: Not including NEDA's loan and TICA's Third Country Training Program (TCTP)

Source: TICA's statistics

As shown, Thailand has just emerged and recognized globally as a donor. The characteristics of its ODA program, including ODA allocation, is still less known. Despite the expansion of its ODA over the

past decade in terms of budget and number of recipients, there has been no study on its aid allocation yet. This study attempts to fill this gap. The question to be addressed in this study is: *what are the determinants of Thailand's aid allocation*?

The outline of this paper is as follows. In the second section, I review the body of literature on aid allocation. Then, discussions about the analytical framework, variables to be tested, data, and methodology are provided in the third section. Regression results are presented and discussed in the fourth section. The last section concludes with some notes on the limitation of this study.

2. Literature Review

The body of literature on foreign aid allocation falls into three perspectives, namely, *donor interest* (DI), *recipient need* (RN), and *recipient merit* (RM) perspectives.

The DI perspective is based on the ideas that donors provide aid mainly for their own interest. It believes that aid is not free from donors' concerns on geo-political and economic interests. Donors are likely to consider giving aid to the countries in which they have either political or economic interest. Therefore, it is assumed that donors will give aid to their political allies, trade partners, resource redundant recipients, former colonies, or countries with similar religion and culture.

The RN perspective sees the recipient's need of foreign aid as a key factor driving aid motive. According to this perspective, aid should be allocated to the countries that need it. Generally, "*need*s" can be defined based on developmental and humanitarian criteria. If the donors'

aid motive is driven by developmental criteria, aid should be allocated in a way that promotes economic growth, macroeconomic stability, poverty reduction, or socio-economic development (e.g. education and health). Precisely, aid should be directed towards the countries with a high incidence of poverty, low per capita income, heavy indebtedness, high illiteracy rate, high fertility rate, low life expectancy, etc. If aid is allocated with humanitarian consideration, it should be given to the countries having badly affected by natural disaster, war and conflict, famine and hunger, etc.

The DI and RN perspectives can be considered as traditional approaches to explain donors' aid allocation behaviors. These perspectives were empirically tested first by McKinley (1977) based on the U.S. aid allocation data over the period 1960s to 1970s. Using variables that capture donor interests and recipient needs and estimating the DI and RN models separately, it is found that political motives and security concerns explain the choice of U.S. aid allocation over the studied period. On the other hand, the RN perspective, particularly humanitarian criteria, is not found to be relevant in U.S. aid allocation during that period. Later, Maizels and Nissanke (1984) used the cross-section regression to analyze the allocations of aid by bilateral donors and multilateral organizations. They found that donor interests predominate in the case of bilateral aid allocation, and that recipient needs provided good explanation for multilateral aid flows.

McGillivray and Oczkowski (1991, 1992) analyzed the bilateral aid allocation, using the so-called two-part sample selection models which separate the recipient's eligibility to receive aid from the level of

aid that they receive. In the first article (McGillivray and Oczkowski 1991), the authors relied on DI and RN perspectives in analyzing the factors that explain Australian bilateral aid allocation during 1980-1986. They found that Australian aid is determined by a range of objectives including humanitarian, commercial, political and strategic concerns. In the second article (McGillivray and Oczkowski 1992), the allocation of British bilateral foreign aid during 1980-1987 was examined. The key finding supports the DI perspective in that U.K. tends to favor its former colonies. In particular, the political importance of Commonwealth members dominates British aid allocation during the studied period.

Shishido and Minato (1994) analyzed the ODA allocation behavior of the G7 nations at the aggregate and bilateral levels, based on the sample period of 1970-1989. The results from regression analysis show that aid allocation behavior of individual donors varies in terms of their consideration on humanitarianism, political preference, and trade linkages. For example, Japan, Germany, France, and Italy exhibit a growing dynamism in their aid behavior. The U.S. and U.K. show a modest response in terms of partial income elasticity.

Gounder (1994) estimated the two models of aid allocation using Australian aid data. The econometric result reveals that both RN and DI perspectives generally hold. This result also holds in the later study by Gounder and Sen (1999) on Australian aid to Indonesia during 1970/71 to 1995/96. However, the result from this study shows that, in general, the RN perspective is more vigorous.

Neumayer (2003, 2004) make a contribution to the body of literature by studying the patterns of aid allocation by Arab countries

and their multilateral agencies. Applying Heckman's two-step regression to analyze the models, he found a particular pattern in Arab aid, which is quite different from Western donors: even if donor interest and recipient needs play an important role, it is the ethnic and religious similarity that dominates Arab aid allocation. In particular, Arab aid is given to recipient countries based on the principle of Arab solidarity.

While empirical studies undertaken between the late 1970s and the early 2000s were generally dominated by the DI and RN perspectives, the new perspective – RM perspective – emerged during the early 2000s and has been one of dominant perspectives in explaining donors' aid allocation behaviors until now. The RM perspective is built on the need to improve aid effectiveness. It suggests that, for aid to be effective, it should be provided in such a way that promotes poverty reduction. Moreover, donors should be selective and give aid those recipients who have merits in translating aid into pro-poor public expenditure (McGillivray 2003a). Although it has been yet a debate on what defines recipient merits, most studies seem to equate the merits with good policy and sound institutional environments in the recipient countries (Berthelemy 2006a).

The foundation of the RM perspective derives from the World Bank's study (World Bank 1998) and Burnside and Dollar (2000). These two studies similarly show that aid works better in good policy and sound institutional environment. This finding gives policy implication that aid should be directed toward countries with a good record in institutional arrangement (e.g. less corruption, respect for human/civil rights, and commitment to the rule of law) and policy effectiveness (e.g.

low inflation, low external debt, and trade openness). Later, Collier and Dollar (2002) provided empirical evidence showing that aid has the maximum effect on poverty (called poverty-efficient aid allocation) when it is given to countries with high incidence of poverty *and* with the good policy quality.

It can be said that most studies on donors' aid allocation that were carried out during the past decade (say, 2003 onward) tend to build their analytical framework on *all* three main perspectives discussed above. Importantly, these studies provide evidence that donors are not homogenous in their choice of aid allocation. The results from these studies tend to vary depending on the donors and time periods used for analysis. For example, Berthelemy and Ticit (2004) applied a three-dimensional panel analysis to analyze the aid allocation pattern in 22 DAC donors. They found that the donors' self-interests in terms of security concern and colonial links play less significant role after the cold war, and that donors generally seem to favor trade partners more. At the same time, most donors pay more attention to recipients' political governance when making the choice of giving aid. Claesens et al. (2009) analyzed the aid allocation criteria of 22 DAC donors over the period 1970-2004. They found that donors' aid criteria changed significantly after the end of cold war. Aid has been increasingly given to recipient countries that are characterized by high incidence of poverty, but have sound institutional and policy environments. However, there exists some variation in the degree of donors' selectivity.

A recent study by Dreher et al. (2011) employed the probit and tobit regressions to examine the aid motives of both DAC and non-DAC

donor countries based on DI, RN, and RM perspectives. They found that non-DAC donors in general are more responsive to recipient needs than DAC donors. However, non-DAC donors show relatively little concerns, compared to DAC donors, for corruption and quality of policy in recipient countries. The significant contribution of this study is not only that it brings all the DI, RN, and RM perspectives into the analytical framework, but it also examines donors of various stances – both DAC and non-DAC donors.

In sum, the more recent studies on aid allocation are based on all three perspectives – donor interest, recipient needs, and recipient merits. The empirical studies tend to provide contrasting evidence on factors determining donors' choice. Donors are likely to base their aid provision on different criteria. And their criteria tend to change over time. However, as most of previous studies only took the cases of traditional donors in their analysis, the evidence so far has been limited to this group of donors. With the increasing role of the so-called emerging donors, it is important to extend the analysis to cover these new donors as well. In this paper, I intend to contribute to the existing body of literature by testing the DI, RN, and RM perspective, using the aid allocation data of Thailand – the country that has emerged as a donor only recently.

3. Analytical framework and methods

3.1 Dependent variable

The dependent variable is the natural logarithm of the amount of TICA's ODA budget (i.e. *Thailand International Cooperation Program*: *TICP*) disbursed to partner countries over the period 2005-2012. In aid allocation literature, there is a strong argument in favor of aid commitment rather than disbursement because it better reflects donors' decision and willingness to give aid. The disbursement, on the other than, tends to be affected by recipients' capability to meet requirements imposed by donors (White and McGillivray 1995; Berthelemy 2006a, 2006b). However, as TICA only reports the disbursement data, it must be used as a dependent variable in this study. Nevertheless, the disbursement data is also used in some studies (e.g. Neumayer2003; Macdonald and Hoddinott 2004; and Claessens et al. 2009).

It should be noted that only TICA's ODA (*TICP*) is used, not including NEDA's ODA, for analysis. This is because, by its establishment statute, NEDA is committed only to providing aid for the neighboring countries. Thus, including NEDA's ODA in analysis may cause serious selection bias.

3.2 Explanatory variable

The explanatory variables mainly capture partner countries' characteristics that are assumed to affect TICP. These variables can be categorized into three groups based on the three main perspectives on aid allocation reviewed above. The variables that capture the recipient need include:(1) the partner countries' gross national income

per capita(*GNIPC*); (2)per capita ODA that partner counties receive (*ODAPC*); (3) adult literacy rate (*ADTLIT*); and (4) child mortality rate (*CHMOTAL*).

Variable *GNIPC* is used by the previous studies to capture material well-being of recipient countries. It can be hypothesized that if TICP is aimed for poverty reduction, this variable should have a negative coefficient. *ODAPC* is included in the model mainly to capture the extent to which partner countries are in need of foreign aid. Apart from being a need variable, this variable can also be interpreted in terms of aid-signaling: a donor may follow other donors in providing aid to particular recipients, believing that most aid would go to countries that deserve it (e.g. good policy environments or better coordination) (Claessens et al. 2009). Thus, if this idea holds in the case of Thailand's ODA, we would expect the coefficient of *ODAPC* to be positive.[10] Variables *ADTLIT* and *CHMOTAL* are used to proxy health and education development in the partner counties. It is expected to capture a non-material dimension of poverty and to have positive effects on dependent variable.[11]

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10 It is suggested that the interpretation about the effect of this variable to be made with caution due to a possible simultaneity with dependent variable: giving more aid to recipients will increase their aid per capita, and vice versa (Berthelemy and Tichit 2004). However, this simultaneity basis should not be too large in our case because all independent variable (including ODAPC) are measured in one-year lag.

11 Some scholars (see, for example, Berthelemy and Tichit 2004) use these two variables to measure recipients' development policy effectiveness (i.e. recipients' merit). However, in this study I use these variables to capture recipients' needs, assuming that policy makers would consider a high incidence of adult literacy and child mortality as the underdevelopment syndrome rather than the outcome of ineffective policy.

Two explanatory variables are used to capture donor economic interest: (1) the value of bilateral trade between Thailand and partner countries (*TRADE*); and (2) the value of exports from Thailand to partner countries (*EXPORT*). Based on these two variables, we can test whether Thailand uses its development cooperation program to pursue its commercial self-interest. If this is the case, the coefficient of these variables should be positive and statistically significant.

The variables that capture good policy and institutional environments based on the RM perspective include: (1) partner countries' control of corruption (*CORRUP*); (2) index of government effectiveness (*GOVEF*); (3) index for voice and accountability (*VOAC*); (4) percentage of military expenditure in the annual budget of partner countries (*MILEXP*); and (5) trade openness (percent of export and import in GDP) (*TRDOPN*).

Variables *CORRUP, GOVEF, VOAC* are drawn from the World Bank's Worldwide Governance Indicators. *CORRUP* measures the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests; *GOVEF* measures the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies; and *VOAC* measures the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media (Kauffman et al. 2010, p.4). Each of these three variables takes a

continuous value ranging between -2.5 and 2.5. The small values reflect the weakness of partner countries in terms of control of corruption, government effectiveness, or voice and accountability.[12] *TRDOPN* is used to measure the degree to which partner countries are open to international trade. As mentioned by Burnside and Dollar (2000), it is likely that closed economies can generate high average tariffs on capital goods, black market premium, or pervasive government control of tradable goods. The openness to international trade can reduce these unnecessary costs, and thus can serve as an indicator for good (internal trade) policy. *MILEXP* is used to capture poverty-efficient resource allocation (which is considered as a good policy by Western donors) in partner countries. As argued by Berthelemy (2006, p.186), excessive military expenditure should trigger a reduction in foreign assistance, because it would imply a high risk of utilization of aid for non-developmental purposes. Altogether, we may hypothesize that if the allocation of TICP goes along with the recipient merit perspective, we would expect the positive effects of *CORRUP, GOVEF, VOAC,* and *TRDOPN,* and negative effects of *MILEXP*.

Finally, two variables are used to control for particular characteristics of partner countries that may affect TICP allocation: (1) partner countries' population (*POP*), and (2) dummy for countries with Buddhist population *or* ASEAN member countries (*BUDASEAN*). Population is used in the previous studies (e.g. McGillivray and Oczkowski 1992;

12 Another variable that is widely used is CPIA (Country Policy and Institutional Assessment) score – an indicator used by the World Bank staffs' assessment on the quality of policy and institutions (see Nunnenckamp 2006; Claessens et al. 2009).

Neumayer 2005; and Dreher et al.2011) to capture recipients' country-size effects that may influence donors' decision on aid provision. Two possible outcomes can be expected from this variable. On the one hand, donors may prefer small countries because they constitute the majority part in international organizations in which the aid-for-votes business can be made (Kuziemko and Werker 2006). On the other hand, large countries may be preferred either due to their greater political or economic importance (Nuemayer 2003a) or due to scale economies of large development projects (Furuoka 2008). Technically, including partner countries' population into the model is required if the dependent variable is not measured in per-capita terms (Neumayer 2005; Dreheret al.2011), as in this study.

Variable *BUDASEAN* is used to measure the effect of geographical and cultural proximities between Thailand and partner countries. It is a dummy variable used for partner countries located ASEAN region *or* with Buddhist population of 1% or more. These two characteristics (being ASEAN member countries or having 1% or more Buddhist population) are combined to increase the number of countries having such characteristics in the sample.

All explanatory variables, except *BUDASEAN*, are lagged for one period, thus their sample period is 2004-2011.

Table 2: Independent variables included in the statistical analysis

Variables	Description/Measurement	Period	Data Sources
Recipient Needs			
GNIPC	Real GNI per capita, PPP (constant USD 2008) (log)	2004-11	WDI, World Bank
ODAPC	ODA per capital (constant USD 2008) (log)	2004-11	WDI, World Bank
ADTLIT	Adult literacy rate (%)	2004-11	WDI, World Bank
CHMOTAL	Under-five Child motility (log)	2004-11	WDI, World Bank
Donor Interest			
TRADE	Value of trade between Thailand and partner countries (constant USD 2008) (log)	2004-11	Ministry of Commerce, Thailand
EXPORT	Value of export from Thailand to partner countries (constant USD 2008) (log)	2004-11	Ministry of Commerce, Thailand
Recipient Merit			
CORRUP	Corruption Perception Index	2004-11	WGI, World Bank
GOVEF	Government Effectiveness Index	2004-11	WGI, World Bank
VOAC	Voice and Accountability Index	2004-11	WGI, World Bank
MILEXP	Military expenditure relative to government's annual budget (%)	2004-11	WDI, World Bank
TRDOPN	Export and import as a share of GDP (%)	2004-11	WDI, World Bank
Others			
POP	Partner countries' population size (%)	2004-11	WDI, World Bank
BUDASEAN	Dummy of Buddhist *or* ASEAN (1, if a partner country has 1% or more of Buddhist population *or* is ASEAN member country; 0, otherwise)		www.religionfact.com

Note: WDI = World Development Indicators; WGI = Worldwide Governance Indicators

3.3 Estimation method

The previous studies prefer to divide donor's decision regarding aid provision into two stages (e.g. Nuemayer 2003, 2005; Dreheret al.2011).In the first stage (called"*gate-keeping stage*"), donors decide whether or not to give aid to particular recipients; and in the second stage (called "*level stage*"), after such decision has been made, they further decide how much aid should be given.[13] Following this practice, TICP allocation is divided into the gate-keeping/eligibility stage and the level stage. In the gate-keeping stage, the binary logit model is used with binary dependent variable having two values: one if a particular recipient is chosen to receive TICP and zero if it is not. The logit model with panel data can be estimated by the fixed-effects (FE) as well as random-effects (RE) approaches. The FE estimation is usually employed to control for the unobserved heterogeneity that may affect the dependent variable. However, it has a drawback in that it will not work well if there is no (or very limited) variation in independent variables over time. On the other hand, the RE estimation can be used to capture the variation across units that may affect the dependent variable. Also, if the parameter of time-invariant variables is of interest, the RE estimation is preferable to the FE estimation.[14] However, the RE estimation will perform well when the error terms are not correlated with the predictors in the model.

13 See Nuemayer (2003b).

14 In the FE model, the effects of time-invariant variables are absorbed by the intercept.

In deciding which estimation is more appropriate, I ran the Hausman test to see whether the unit errors are correlated with the predictors (Wooldridge 2006; Green 2008). The Hausman test was performed by regressing the estimates derived from FE model on those from RF model. The regression result yielded a statistical significance at 5% level, thus rejecting the hypothesis of no correlation between the error terms and predictors in the model. This gives an indication that FE model is preferred to RE model. Nevertheless, the RE model is also reported for a robustness check of results. However, when the results from RE model contradict those from FE model, the latter results are preferred.

For the level stage, the Tobit model is employed to include all values of *TICP* including zero observations. In fact, there are two alternative methods that are widely used in the literature. The first one is to perform OLS estimation only with positive observations. However, this procedure is likely to yield a sample selection bias in model parameters (McGillivray 2003b). Another alternative is to apply a Heckman's two-step estimation which introduces the inverse Mill's ratio obtained from the Probit regression (done in the gate-keeping stage) together with other independent variables (Berthelemy and Tichit 2004; Berthelemy 2006). One of the disadvantages of the Heckman's two-step estimation is that it requires an exclusionary variable that has significant effect upon the gate-keeping stage, but not upon the level stage (Nuemayer 2005). Finding such a variable is difficult and not applicable in the current study. Here, the random-effects Tobit model is applied. In fact, fixed effects can also be introduced into the model to capture

time-specific fluctuations. However, estimating the standard parametric Tobit model with fixed effects can be biased (Berthelemy and Tichit 2004).

In order to reduce the number of zero observations and missing values in a particular year, I average the data for every two year. Thus, we have panel data with four periods for dependent variable (2005/06, 2007/08, 2009/10, and 2011/12) and independent variables (2004/05, 2006/07, 2008/09, and 2010/11). As a result, our panel data set is strongly balanced.

Independent variables are entered into the models with a one year lag, assuming that policy makers make decision based on the past year information. Lagging independent variables can also lessen, to some extent, a simultaneity bias. Many independent variables are transformed into natural logarithm in order to mitigate the problem of distributional skewedness and heterogeneity of error variances (Neumayer 2003b). The data set contains 144 countries appeared in the DAC list of ODA recipients in 2006 and 2012.

4. Regression results and discussion

In order to obtain the most reliable model specifications, regression models were run several times with different set of variables. I removed variables with a large number of missing values and those that generate strong multicollinearity. The final model specifications include nine independent variables. In Table 3, the estimated coefficients of the model are presented. The first two models – Logit (FE) and Logit (RE) – report the probability that a particular partner country will be selected as a candidate to receive TICP (gate-keeping stage). The

Tobit model provides general information on the level of TICP that partner countries would receive (level stage). As mentioned earlier, at the gate-keeping stage, the fixed-effects logit model is more preferable than the random-effects model. The latter is reported only for a robustness check and to see the effects of time-invariant variable *BUDASEAN.*

First of all, there are three variables that capture recipient needs – *GNIPC*, *ODAPC*, and *CHMOTAL*. At the gate-keeping stage, the results show that TICP is likely to be given to the socio-economically more advanced countries. The variable *GNIP* has a positive and statistically significant coefficient, meaning that wealthier developing countries are more likely to receive TICP. Similarly, the negative and statistically significant coefficient of variable *CHMOTAL* illustrates that countries with more child motility rate tend to have less opportunity to receive TICP. Altogether, this means that TICA's aid tends to favor developing countries with higher level of development. This result is in contrast with most previous studies, which find that aid is more likely to go to less advanced countries. But the result is similar to that of Cooray and Shahiduzzaman (2004), which finds Japanese ODA to be biased for the better-off countries, especially its Asian partners. There are two possible explanations for this surprising result. Firstly, as shown in Table 1, around two third of TICP goes to developing countries in Asia, which are in general more developed than those in Africa. Thus, TICP may be driven by geographical proximity more than level of socio-economic development. Secondly, the result may be in line with Berthelemy and Tichit's (2004) reasoning that some social development

indicators (e.g. child motility rate, infant motility rate, or adult literacy rate) do not only reflect the recipient needs, but can also serve as a proxy for the recipient merit in terms of effective development policy. It is possible that Thai aid may follow the trend that donors increasingly use aid to penalize the countries that do not use aid for socio-economic development purposes.

Regarding the donor interest perspective, there is only one variable retained in the final model specifications – *TRADE*. This variable is not significant in any model. Thus, it can be concluded that TICP is not driven mainly by a commercial self-interest. In fact, several studies find that, in the case of traditional donors, trade benefit can strongly explains donors' motive to give aid. The critiques of aid from emerging donors (e.g. Manning 2006; Woods 2008) have argued that those donors tend to provide development assistance for their commercial interest. However, as long as TICP is concerned, I do not find evidence to support this argument.

The three variables that proxy recipient merit – *CORRUP*, *GOVEF*, and *TRDOPN* – have the coefficients that are generally consistent with previous studies. The effects of control of corruption (*CORRUP*) are positive and significant in both FE and RE models, denoting that TICA tends to target countries with better governance. *GOVEF* is found to be statistically insignificant, while the coefficient of *TRDOPN* is *only* moderately significant. Generally, it can be said that TICA tends to select the candidate partners that are on track of control of corruption and are open to foreign trade. This result is in contrast with some critics saying that emerging donors may undermine the governance agenda

promoted by OEDC/DAC due to their disregard of recipient's merits (Hilsum 2005; Tull 2006).

Variable *POP* is not statistically significant in the FE model, but significant in the RE model, also with different coefficient sign. It can be interpreted that, at the gate-keeping stage, the country size bias is not quite evident in this study. The coefficient of *BUDASEAN* is positive and statistically significant, meaning that ASEAN countries and countries which have Buddhism culture are likely to receive TICP.

Table 3: Regression results

Variable	Models		
	Logit (FE)	**Logit (RE)**	**Tobit (RE)**
GNIPC	0.907**	0.059	0.131
	(0.446)	(0.215)	(0.166)
ODAPC	0.380	0.458**	0.479***
	(0.452)	(0.209)	(0.156)
CHMOTAL	-4.540*	0.420	0.35
	(2.565)	(0.357)	(0.304)
TRADE	0.712	0.170	0.107
	(0.445)	(0.142)	(0.117)
CORRUP	0.317**	0.267**	0.139**
	(0.13)	(0.111)	(0.067)
GOVEF	-0.462	1.823***	1.079***
	(1.501)	(0.491)	(0.389)
TRDOPN	0.020*	0.011*	0.007*
	(0.012)	(0.006)	(0.004)

Variable	Models		
	Logit (FE)	Logit (RE)	Tobit (RE)
POP	-3.081	0.916***	0.750***
	(5.44)	(0.236)	(0.17)
BUDASEAN		3.852**	4.070***
		(1.725)	(0.812)
Constant		-18.482***	-12.755***
		(4.965)	(3.389)
Test statistics:			
LR Chi-Square (8):	27.77		
Wald Chi-Square (9):		39.10	95.78
Log Likelihood:	-59.83	-222.56	-1107.04
Prob. > chi2:	0.0005***	0.0000***	0.0000***
# Obs.	199	483	483

Note: *, **, *** denote a statistical significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$, respectively.

Source: Author's calculation

In the Tobit model, there are both consistency and difference with the Logit model. The coefficient of *GNIPC* is not statistically significant. This implies that the better-off-country bias is not evident in determining the level of TICP. The coefficient of *ODAPC* is positive and strongly significant (at 1% level). Thus, partner countries who receive more ODA from other donors tend to receive more of Thailand's ODA as well. This result is similar to those of Dowling and Hiemenz (1985), Berthelemy (2006b), Claessens et al. (2009) which also find the positive effect of

this variable. As mentioned earlier, this variable can be interpreted based on the recipient need perspective: more aid goes to the country that needs it most, and TICA is likely to follow other donors to provide ODA to the more needy countries. Apart from this interpretation, *ODAPC* may have a signaling effect in that the countries that receive most aid are those with good policy environment or better coordination (Claessens et al. 2009). So, when the positive coefficient of *ODAPC* is observed, it can be also interpreted that more ODA tends to go to countries with better institution and policy quality. In this sense, TICA is likely to increase its ODA activities in developing countries with good institutional and policy environment.

The insignificant coefficient of *CHMOTAL* means that this variable has no significant effect on how much a particular country will receive TICP. As discussed earlier, TICA's ODA tends to favor countries with good social and economic development indicators. Here, it is possible that the effect of cooperation partners in Asia, who perform better in terms of economic and social development, outweighs the effect of partners in other regions (especially Africa) which are characterized by high incidence of economic and social poverty. In other words, as the main recipients of TICP are countries in Asia, the negative as well as insignificant effects of *CHMOTAL* variable are observed in the gate-keeping and level stages, respectively.

Again, variable *TRADE* is not statistically significant, as similar to the gate-keeping stage. This result reveals that trade interest is not a key factor determining TICP. It can be argued that the economic interest attached to ODA may not only be in the form of trade and

investment promotion. It can be in a more direct form such as the purchase of donors' goods and services (tied aid). However, the tied aid is not an issue in case of TICP because TICA only provides grant and technical cooperation, which are generally untied.

Three variables that proxy recipient merits – *CORRUP*, *GOVEF*, and *TRDOPN* – are positive and significant at 1%, 5%, and 10%, respectively. Thus, developing countries with a good record on corruption control, effective public policies and services, and more openness to foreign trade tend to receive more amount of ODA. Again, this result provides contrasting evidence against the criticism that emerging donors care less for good governance in the recipient countries. In fact, Dreher et al. (2011) shows that, in general, emerging and traditional donors are not different in the degree of concern for recipients' governance and democracy. They thus suggest that emerging donors should not be blamed to be undermining the DAC-promoted global governance agenda. Apart from theoretical interpretation in terms of recipient merit, the positive and significant coefficients of *CORRUP*, *GOVEF*, and *TRDOPN* can also reflect the current foreign policy of Thailand. That is to say, Thailand is likely to enhance its relationship with developing countries that are characterized by democratic and economically liberalized regimes more than those characterized by political dictatorship and economic authoritarianism.

The last two variables – *POP* and *BUDASEAN* – show positive coefficients and strongly statistical significance at 1% level. Although a statistical significance of *POP* in the fixed-effect Logit model is not found, its significance in the random-effects model is observed. The positive

and statistical significant coefficient of *POP* in the Tobit model confirms that Thailand's development cooperation programs have a big-country bias at the level stage. Finally, as similar to the gate-keeping stage, variable *BUDASEAN* is positive and strongly significant, confirming the importance of geo-political and cultural factors in Thailand's ODA.

5. Conclusion

There have been a number of empirical studies on the allocation of foreign aid, but most of them look at the aid allocation by traditional donors. The empirical studies that focus on the allocation of ODA by the so-called emerging donors are still very limited, despite their growing importance in the development cooperation business in recent years. This study aims to contribute new evidence on determinants of aid allocation by emerging donors, taking Thailand as a case study. It tries to answer the question of what determine Thailand's ODA allocation.

To address this research question, I base my analysis on the three dominant perspectives on foreign aid allocation (i.e. donor interest (DI), recipient needs (RN), and recipient merits (RM) perspectives), and apply a panel data analysis based on Logit and Tobit estimations, taking data from TICP during 2005-2012.

The regression results show interesting patterns in Thailand's ODA allocation. Firstly, it is not clear whether Thailand's ODA is driven by the poverty reduction motive. TICP allocation is not significantly driven by per capita income and child mortality rate of developing countries. This result can be interpreted in terms regional preferences

in Thailand's ODA. As shown in Table 1, TICA's ODA tends to go to Asian countries with better economic and social development more than African countries. This geographical preferences dominates the effect of development necessity, and it is reflected in likelihood that TICP tends to go to the socio-economically more developed countries rather than the less developed ones.

Secondly, the empirical evidence significantly shows that TICP is not driven by the bilateral trade relations between Thailand and partner countries. This finding is in contrast with a critical view on emerging donors, which mentions that emerging donors tend give aid for their commercial interest. In case of TICA's ODA, it does not happen as criticized. Rather, TICP tends to go to developing countries that are not key trade partners with Thailand. To some extent, it is possible to say that TICA's ODA is driven by diplomatic stimulus, which aims to enhance cordial relations between Thailand and partner countries, more than short-term economic benefits.

Finally, recipient merits in terms of control of corruption and trade openness provide a good explanation on Thailand's ODA allocation. TICP is more likely to go to countries with a high concern of corruption and more openness to foreign trade. This result runs counter the critical view suspecting that emerging donors' aid would undermine the global governance agenda promoted by OECD/DAC. This result, to some extent, also reveals the direction of Thailand's foreign policy, which seems to favor democratic and economically liberalized countries.

It should be noted that the results of this study are inconclusive, and some limitations should be mentioned here. Firstly, it is only TICA's

ODA that is used for regression analysis. Therefore, the results of this study may not capture Thailand's ODA as a whole. Secondly, due to data limitation, I cannot examine the effects of some key variables representing donor interests, recipient needs, and recipient merit. For example, donor's economic interest in this study is only captured by the bilateral trade. In reality, there are various types of economic benefits that donors can expect from recipients when providing aid. Finally, as this study is based only on a quantitative analysis, it cannot answer such questions as why TICA provides ODA the way it does and how the institutional structure of ODA architecture affects the ODA allocation. These questions are significant because when donors make decision on aid allocation they are not only influenced by external factors but also by internal factors (e.g. political groups, bureaucratic politics, and pressures from business sectors). It will be more comprehensive if the donor's internal factors are brought into the framework of analysis as well. This point should be addressed in the future research.

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