

THE EFFECTS OF ODA AS A TRIGGER FOR FDI -THE CASE IN ASIAN COUNTRIES-

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INTRODUCTION①

■ Benefits of FDI

- Technology Diffusion
- Human Capital Formation
- Trade integration
- Competitive business environment
- Enterprise development



Higher economic growth, which is the most potent tool for alleviating poverty in developing countries

(『Foreign Direct Investment for Development: Maximizing Benefits, Minimizing Costs』 OECD)

■ Costs of FDI

- When there is a competitive enterprise within the host country, FDI can take away the market of the already existing enterprise. As a result, decrease in domestic investment can occur. →(**Cloud-out effect of FDI**)

However...

Cloud-out effect is less likely to occur in countries which are **not industrialized as much**.

In Asian countries, Cloud-in effect (FDI resulting in increase in domestic investment) is likely to occur.

(Agosin, M. and R. Mayor[2000],『Foreign Investment in Developing Countries』 UNCTAD Discussion Papers No.146)

FDI(海外直接投資)とは、海外での単なる資産運用ではなく、経営参加や技術提携を目的にした対外投資のことで、現地法人の設立や既存外国法人への資本参加、支店設置、不動産取得などを行なう。

exBuzzwordsより

INTRODUCTION②

Relations between FDI and ODA

■ Factors of FDI in developing countries

Infrastructure improvement, firm legislative framework, size of domestic economy, wage level, security, exchange fluctuations, industrial agglomeration, and so on...

■ Positive and Negative effects of ODA on FDI

■ Positive 'infrastructure-effect' . . . improvement in economic and social infrastructure attracts FDI

■ Negative 'lent seeking-effect' . . . intention to 'lent' distracts FDI

(Harms, Philipp. and Lutz, Matthias. [2006])

■ Positive 'Vanguard-effect' . . . the ODA from one donor country works as a 'Vanguard' to FDI from the same country

(Kimura and Todo. [2007])

Estimates of 5 top donor countries (US, UK, France, Germany, Japan) shows that generally no relations can be seen between ODA and FDI. However, Vanguard-effects can be seen in ODA from Japan.

ODA(政府開発援助)とは、発展途上国の技術や経済発展のために、先進国が資金や技術面で支援すること。資金支援は、贈与や賠償、国際間で資金の貸し借りをする借款などがある。

INTRODUCTION③

■ Success in industrialization through education (the case in Asian countries in the aftermath of WW2)

During the East Asian Economic Miracle, education contributed in building resources that are capable for industrialization in Japan, Korea and Taiwan.(Godo[2006])

■ Countries who are in need

CLMV(namely, Cambodia, Laos, Myanmar, Vietnam. These are the least developed countries of ASEAN) are facing resource constraint and poverty. For these countries to overcome resource constraint and reduce poverty, job creation through industrialization must be promoted.

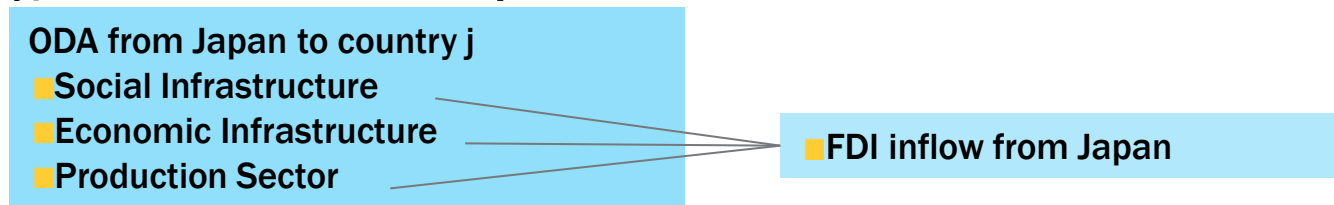
(Amakawa[2006])



We can expect that improving social infrastructure by ODA can result in promoting FDI and economic growth in developing countries in Asia.

MODEL AND METHOD

- Verification of the relation between ODA from Japan and FDI inflow into Asian countries. The main hypothesis is 'ODA from Japan increases FDI inflow into Asian countries'



Hypothesis 'The relation between ODA from Japan and FDI inflow from Japan differs according to the sector of ODA.'

- Estimated formula

$$\ln FDI_{ijt} = \beta_1 \ln AID_{jt} + \beta_2 \ln GDP_{it} + \beta_3 \ln WGI_{jt}$$

i = investing country (Japan) , j = host country , t = time

- Explained variable $\ln FDI_{ijt}$ = FDI inflow from country i to country j during time t
- $\ln AID_{jt}$ = ODA inflow from country i to country j during time t
- $\ln GDP_{i(j)}$ = GDP of country j during time t
- $\ln WGI_{jt}$ = World Government Indicators of Country j during time t

DATA

■ FDI

y: FDI inflow from Japan (Data source: OECD DAC Data statistics)

■ AID

x1 : AID Total (Data source: OECD DAC Data statistics)

x2 : AID Total Sector Allocable (Data source: OECD DAC Data statistics)

x3 : AID Social Infrastructure & Services (Data source: OECD DAC Data statistics)

x4 : AID Economic Infrastructure & Services (Data source: OECD DAC Data statistics)

x5 : AID Production Sector (Data source: OECD DAC Data statistics)

■ Economic development level

x6 : GDP per capita (Data Source: World Bank)

■ Government Indicators

x7 : Political Stability and Absence of Violence (Data source: World Bank)

x8 : Government Effectiveness (Data source: World Bank)

RESULTS

- Estimation on 5 countries (Indonesia, Malaysia, Philippines, Thailand, Vietnam)
- For each countries,
 - 5 Foreign aid Sector × 2WGI × missind data replenished/not replenished
 - × 1 year time lag/no time lag=40regression analysis results
- Almost all of the results showed showed that foreign aid from Japan have a positive effect on FDI inflow from Japan.
- Other variables, GDP and Government Indicators also showed positive effect.
- Countries that showed a significant result with 1 year lag in consider : Malaysia, Thailand and Vietnam
- Countries that showed a significant result with time lag not in consider : Indonesia and Philippines
- In Malaysia, x3 (Foreign aid for Social Infrastructure and Services) showed a strong effect on FDI.

RESULTS

■ Indonesia

x1、x2、x3、x4 showed a positive effect on y, whereas x5 (Production Sector) showed a negative effect on y. However, the correlation coefficient of x5 and y showed a positive rate (0.420). Since the correlation coefficient of x6 and x7 was high (0.808) we can assume that the result may be biased due to multicollinearity.

■ Malaysia

x1、x2、x3 showed a **positive and strong effect** on y. Especially, x3 (Foreign aid for Social Infrastructure and Services) showed a strong effect. As for x4 and x5, R Square was low (between 0.1-0.3) meaning that the result was insignificant.

■ Philippines

x1—x4 showed a positive but weak effect on y. x5 (Foreign aid for Production Sector) showed a positive and strong effect on y.

■ Thailand

x1—5 showed a positive but weak effect on y. Trends or differences between sector could not be seen.

■ Vietnam

x1-x5 showed a positive but weak effect on y. Trends or differences between sector could not be seen.

CONCLUDING REMARKS

- As Kimura and Todo [2007] concluded, we can assume that relation between the public sector and private sector is strong in Japan.

- Result on Malaysia

Attempts for building human resources through foreign aid have attracted FDI .

→Since only one year time lag is taken in consider, and we can assume that the effect of human capital on requires more time, we can only say that the foreign aid policy made by the government towards social infrastructure may have attracted multinational enterprises.

- Result on Philippines

The latest Country Assistance Program for the Republic of the Philippines formulated by the Ministry of Foreign Affairs (MOFA) Published in 2008. states that it is essential that the Philippines provides investment incentives by specifying business sectors in which the Philippines has comparative advantage (electronics industries, business process outsourcing, tourism, etc.) and that Japan will cooperate in these areas. This Japanese foreign aid policy might have attracted Japanese FDI.

Future research : 援助ストックでの計算、他の説明変数(貿易量・賃金・etc)、タイムラグ

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