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THE EFFECT OF FDI THROUGH LOCAL FINANCIAL MARKET ON THE ECONOMIC GROWTH

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การศึกษาครั้งนี้มุ่งที่จะอธิบายเรื่องระดับการพัฒนาของตลาดการเงินมีส่วนช่วยสนับสนุนเงินลงทุนโดยตรงจากต่างประเทศในการเร่งอัตราการเจริญเติบโตของระบบเศรษฐกิจ กล่าวคือประเทศที่ตลาดการเงินพัฒนาแล้วจะได้รับประโยชน์จากเงินลงทุนโดยตรงจากต่างประเทศซึ่งจะช่วยเร่งอัตราการเจริญเติบโตของระบบเศรษฐกิจ ได้ดีกว่าประเทศที่ตลาดการเงินกำลังพัฒนา

การศึกษาครั้งนี้ใช้แบบจำลองทางเศรษฐมิติศึกษาข้อมูลในช่วงปี 1980-2004 โดยใช้ประเทศในกลุ่ม OECD แทนประเทศที่ตลาดการเงินพัฒนาแล้วและใช้ประเทศนอกกลุ่ม OECD แทนประเทศที่ตลาดการเงินกำลังพัฒนา จากการศึกษาพบว่าระดับของการพัฒนาประเทศและระดับการพัฒนาของตลาดการเงินที่แตกต่างกันนำมาซึ่งวิธีการพัฒนาประเทศที่แตกต่างกันดังนี้ สำหรับประเทศในกลุ่ม OECD ที่ตลาดการเงินพัฒนาแล้วนั้น การพัฒนาของตลาดการเงินทั้งตลาดเงินและตลาดทุนมีส่วนช่วยเร่งอัตราการเจริญเติบโตของระบบเศรษฐกิจ นอกจากนั้นมูลค่าตลาดหลักทรัพย์ (market capitalization) มีส่วนช่วยในการเร่งอัตราการเจริญเติบโตของระบบเศรษฐกิจโดยผ่านทางการดึงดูดเงินลงทุนโดยตรงจากต่างประเทศ สำหรับประเทศนอกกลุ่ม OECD การพัฒนาของตลาดการเงินและผลร่วมระหว่างการพัฒนาของตลาดการเงินและเงินลงทุนโดยตรงจากต่างประเทศไม่มีผลกระทบต่ออัตราการเจริญเติบโตของระบบเศรษฐกิจ แต่ผลของเงินลงทุนโดยตรงจากต่างประเทศในปีที่ผ่านมามีส่วนช่วยในการเร่งอัตราการเจริญเติบโตของระบบเศรษฐกิจของประเทศ

ดังนั้นในการเร่งอัตราการเจริญเติบโตของระบบเศรษฐกิจ ผู้กำหนดนโยบายจึงควรพิจารณาว่าประเทศของตนเป็นประเทศในกลุ่ม OECD หรือประเทศนอกกลุ่ม OECD แล้วเลือกนโยบายให้เหมาะสม กล่าวคือถ้าเป็นประเทศในกลุ่ม OECD ควรกำหนดนโยบายด้านการพัฒนาตลาดการเงินเป็นหลัก หากเป็นประเทศนอกกลุ่ม OECD ควรกำหนดนโยบายด้านการพัฒนาเงินลงทุนโดยตรงจากต่างประเทศเป็นหลัก

ภาควิชา.....การธนาคารและการเงิน.....ลายมือชื่อนิสิต....ทศพล วิกรมกิจสิน.....
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TOSAPOL WIKROMKITSIN: THE EFFECT OF FDI THROUGH LOCAL FINANCIAL MARKET ON THE ECONOMIC GROWTH. THESIS ADVISOR: CHAYODOM SABHASRI, PH.D., 90 pp.

This paper examines how financial development will facilitate FDI in order to promote economic growth. This is, the better-developed financial markets economies are able to benefit more from FDI to accelerate economic growth.

This study applies regression analysis to quantitatively measure how the response of growth to FDI varies with the level of development of the financial markets over 1980-2004 periods. This paper uses OECD countries and NON-OECD countries to represent the well and poor functioning financial market, respectively. From the regression results, we can conclude that the different structure of economic development and financial development leads to different ways in order to promote the economic growth. For the OECD countries, which financial markets are well-functioning, comparing with the NON-OECD countries, the financial market development in both banking sector and capital market can stimulate economic growth. Moreover, higher value of market capitalization (CAP) accelerates economic growth by attracting FDI inflows. For the NON-OECD countries, the financial market development and the interaction between financial market and FDI do not have any effect on economic growth. However, one-period lagged FDI plays a major role for accelerating economic growth.

Therefore, in order to accelerate the economic growth, the policy maker should investigate whether a country is an OECD country or a NON-OECD country, and apply the appropriate policy. That is, if the country is an OECD country, the policy maker should pursue the financial market development policy in order to accelerate the economic growth. Conversely, if the country is a NON-OECD country, the policy maker should pursue attracting FDI policy in order to accelerate the economic growth.

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CHAPTER I
INTRODUCTION

1.1 Statement of the Problem

Many policymakers widely believe that foreign direct investment (FDI) generates several positive effects for the recipient countries of FDI, or the host countries. From the many empirical studies, FDI has played an important role to the economic growth of the host countries[1]. For example, FDI provides productivity gains, technology transfers, know-how, employee training, and more competition, which promote the economic growth of the host countries. Therefore, many countries encourage sound macroeconomic policies and improve their investment environments in order to attract FDI inflows. From Table 1, we can see that global FDI inflows have increased substantially in the two past decades, $59 billion in 1982 compared with $916 billion in 2005, resulting in higher export value, higher employment, higher national income and higher economic development as well.

Table 1: Selected Indicators of FDI over 1982-2005 Periods.

Item	Value at current prices (Billion of dollars)				Annual growth rate (Per Cent)						
	1982	1990	2004	2005	1986-1990	1991-1995	1996-2000	2002	2003	2004	2005
FDI inflows	59	202	711	916	21.7	21.8	40	-25.8	-9.7	27.4	28.9
FDI outflows	28	230	813	779	24.6	17.1	36.5	-29.4	4.0	44.9	-4.2
Cross-border M&As	-	151	381	716	25.9	24.0	51.5	-37.7	19.7	28.2	88.2
Sales of foreign affiliates	2,620	6,045	20,986	22,171	19.7	8.9	10.1	11.2	30.4	11.4	5.6
Gross product of foreign affiliates	646	1,481	4,283	4,517	17.4	6.9	8.8	1.9	20.3	22.8	5.4
Exports of foreign affiliates	647	1,366	3,733	4,214	14.3	8.4	4.8	4.9	16.5	21	12.9
Employment of foreign affiliates (thousands)	19,537	24,551	59,458	62,059	5.4	3.2	11.0	10.0	-0.5	20.1	4.4

Source: UNCTAD, based on its FDI/TNC database (www.unctad.org/fdistatistics), and UNCTAD estimates.

Since FDI provides several positive effects to the host countries, most countries continue to liberalize their investment environment in order to attract FDI inflows. UNCTAD

[1] See in Chapter 2. For example Feenstra & Markusen (1994), Balasubramanyam (1996) ,Borensztein (1998) , Xu (2000), Bende-Nabende (2003).

identified the total number of policy changes are 205 in 2005 (Table 2). Most of the changes in 2005 made conditions more favourable for foreign companies to enter and operate. Although such policies can be very effective in attracting FDI, the potential of a country to take advantage from the technology spillovers might be limited by local conditions, such as economic, institutional, and technological conditions in the host country. In an effort to further examine the effects of FDI on economic growth, this study emphasizes on the role of financial institutions as a channel of economic growth.

Table 2: National regulatory changes over 1992-2005 Periods.

Item	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Number of countries that introduced change in their investment regimes	43	57	49	64	65	76	60	63	69	71	70	82	102	93
Number of regulatory changes:	77	100	110	112	114	150	145	139	150	207	246	242	270	205
More favourable to FDI	77	99	108	106	98	134	136	130	147	193	234	218	234	164
Less favourable to FDI	-	1	2	6	16	16	9	9	3	14	12	24	36	41

Source: UNCTAD, database on national laws and regulations.

a Includes further liberalization, or changes aimed at strengthening market functioning, as well as increased incentives.

b Includes changes aimed at increasing control, as well as reducing incentives.

Although most FDI by its nature relies on capital from aboard, it is important to recognize that the spillovers for the host country might significantly depend on the extent of the development of local financial markets. The well-functioning financial markets encourage FDI spillovers via backward linkage. In the absence of well-developed financial markets, the potential of FDI to create backward linkages is severely impeded. The backward linkages not only allow existing firms, which already produce inputs in the industry, to achieve economies of scale that may not have existed earlier but also can encourage the creation of new firms. Then, it also creates the cluster of such industry which leads to achieve the economies of scale as well. Therefore, the financial markets act as a channel for the linkages effect to create positive spillovers. This paper investigates the role of local financial institutions and argues that the lack of development of local financial markets can limit the economy's capacity to take advantage from potential FDI spillovers.

1.2 Objective of the study

This paper examines how financial development will facilitate FDI in order to promote economic growth. This is, the better-developed financial markets economies are able to benefit more from FDI to promote the economic growth.

1.3 Scope of the Study

This study focuses on the role of FDI on growth through the local financial markets, both banking sector and stock market, of the developed countries (OECD countries) and the developing countries (NON- OECD countries) between 1980 and 2004.

- **OECD Member Countries** (30 countries)

Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States.

- **NON - OECD Member Countries** (27 countries)

Argentina, Bangladesh, Brazil, Cameroon, Chile, Colombia, Cyprus, Egypt, Ghana, India, Indonesia, Israel, Jamaica, Jordan, Kenya, Malaysia, Pakistan, Peru, Philippines, Singapore, South Africa, Sri Lanka, Thailand, Trinidad Tobago, Uruguay, Venezuela and Zimbabwe.

1.4 Contribution of the Study

This study provides empirical evidence about the relationship among FDI, local financial market and economic growth of OECD countries and NON-OECD countries. It can help the policy makers for better understanding about the role of local financial development which facilitates FDI in order to promote their economic growth.

1.5 Definitions and Sources of Data

This section describes the data used in the empirical analysis, the measures of FDI, financial market development, economic growth, and controlling variables used in growth regressions.

Output levels and growth (GROWTH): Output level and growth data is the growth of real per capita GDP, constant dollars. The data are obtained from World Development Indicators (WDI 2004 CD-ROM).

Foreign direct investment (FDI): The gross FDI inflows measure the gross inflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. The data are obtained from World Development Indicators (WDI 2004 CD-ROM).

Financial development indicators can be classified into two broad categories: those relating to the banking sector and the stock market (or equity markets). For the first set, we draw on four variables introduced by King and Levine (1993a).

First, Liquidity (DEPTH): Liquid liabilities of the financial system (currency plus demand and interest bearing liabilities of the financial intermediaries and non-blank financial intermediaries) divided by GDP. The data are obtained from World Bank Financial Structure Database.

Second, Bank Deposit (BANK): ratio of deposit money bank domestic assets to deposit money bank domestic assets plus central bank domestic assets. The data are obtained from World Bank Financial Structure Database.

Third, Bank Credit (PRIVATE): Ratio of the credit issued to private enterprises divided by credit issued to central and local governments plus credit issued to public and private enterprises. The data are obtained from World Bank Financial Structure Database.

Fourth, Private sector credit (PRIVY): The value of credits by financial intermediaries to the private sector divided by GDP. It excludes credits issued by central and development banks. Furthermore, it excludes credit to the public sector and cross claims of one group of intermediaries on another. The data are obtained from World Bank Financial Structure Database.

In addition, I add Interest Rate Spread to measure the efficient of savings allocation (SPREAD): The variation between lending rate and deposit rate. The data are obtained from World Development Indicators (WDI 2004 CD-ROM).

The stock market data consist of three variables introduced in Levine and Zervos (1998). Capitalization (CAP): Captures the size of the stock market, measures the average value of listed domestic shares on domestic exchanges in a year as a share of the size of the economy (GDP). The data are obtained from World Bank Financial Structure Database.

Value traded (LIQ): Value of stock trading relative to the GDP. The data are obtained from World Bank Financial Structure Database.

Turnover ratio (TURN): The value of total shares traded on a country's stock exchanges divided by stock market capitalization, measuring trading relative to the size of the stock market. The data are obtained from World Bank Financial Structure Database.

The ''core explanatory variables'' for economic growth identified in these studies include investment, population growth, initial per capita GDP, inflation rate and degree of openness.

Domestic investment (INV): Gross domestic investment measures the outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. The data are obtained from World Development Indicators (WDI 2004 CD-ROM).

Population growth rate (POP): The data are obtained from World Development Indicators (WDI 2004 CD-ROM).

Inflation (INF): Percentage changes in the GDP deflator, used as a proxy for macroeconomic stability. The data are obtained from World Development Indicators (WDI 2004 CD-ROM).

Openness to international trade (OPEN): The ratio of the sum of exports plus imports to total output (GDP). The data are obtained from World Development Indicators (WDI 2004 CD-ROM).

Table 3: Definitions and Sources of Data

Variable	Definition	Source
GROWTH	the growth of the real GDP per capita	WDI 2004 CD-ROM
FDI	the ratio of FDI inflow to GDP	WDI 2004 CD-ROM
DEPTH	(currency + demand and interest-bearing liabilities) / GDP	World Bank Financial Structure Database
BANK	deposit money bank domestic assets / (deposit money bank domestic assets + central bank domestic assets)	World Bank Financial Structure Database
PRIVATE	credit issued to private enterprises / (credit issued to central and local governments + credit issued to public and private enterprises)	World Bank Financial Structure Database
PRIVY	credit to private enterprises / GDP	World Bank Financial Structure Database
SPREAD	the variation between lending rate and deposit rate	WDI 2004 CD-ROM
CAP	total value of shares traded / GDP	World Bank Financial Structure Database
LIQ	total shares traded on the stock market /GDP	World Bank Financial Structure Database
TURN	total value of shares traded / stock market capitalization	World Bank Financial Structure Database
INV	the ratio of gross domestic investment to GDP	WDI 2004 CD-ROM
POP	the ratio of population growth to GDP	WDI 2004 CD-ROM
GDP	the real GDP per capita	WDI 2004 CD-ROM
INF	the percentage change in the GDP deflator (base year = 2000)	WDI 2004 CD-ROM
OPEN	the degree of openness = (import+export)/ GDP	WDI 2004 CD-ROM

1.6 Organization of the Study

The remaining of this paper is organized as following. Chapter 2 discusses the literature reviews and theoretical background of this study. It reviews how FDI and financial market affect economic growth. Chapter 3 describes the relationship between FDI flow, financial market and economic growth of OECD and NON-OECD countries. Chapter 4 describes the theoretical framework, research methodology, research hypothesis and hypothesis testing. Chapter 5 shows the descriptive data analysis and results of regression analysis. Finally, conclusion and recommendations are provided in Chapter 6.

CHAPTER II
LITERATURE REVIEWS

This chapter provides concept, theoretical background about the relationship between FDI, financial market and economic growth. Moreover, it explains the interaction among FDI, financial market and economic growth. Finally, it provides empirical study about how FDI and financial market affect the economic growth.

2.1 Concept and Theoretical Background

2.1.1 Financial Sector Development and Growth

❖ Modern growth theory identifies two specific channels through which the financial sector might affect long-run growth:

1. Through its impact on capital accumulation (including human as well as physical capital) and

2. Through its impact on the rate of technological progress.

These effects arise from the intermediation role provided by financial institutions which enable the financial sector in many ways as follows:

- ➢ mobilize savings for investment;
- ➢ facilitate and encourage foreign capital inflows (including FDI, portfolio investment and bonds, and remittances) ; and
- ➢ optimize the allocation of capital, ensuring that capital goes to its most productive use.

❖ **Levine (1997,1999)** identifies five basic functions of financial intermediaries as follows:

1) Savings mobilization

The mobilization of savings is perhaps the most important function of the financial sector. The provision of savings facilities enables households to store their money in a

safe place, and allows this money to be put to productive use, for example, lent to individuals or enterprises to finance investment, therefore encouraging capital accumulation, promoting private sector development and enhancing the growth as well. Contrarily, lack of access to secure savings facilities leads people to save in physical assets such as jewelry, gold, or store their savings at home, which impedes money to be put to productive use. Bringing these savings into the financial sector where money to be put to productive use, would make a significant contribution to growth. Moreover, the returns on investment can create positive expected returns for the savers, which may in turn increase savings.

It can also facilitate the development and adoption of better technology. **McKinnon (1973)** explained this with an illustration of a farmer who cannot afford investment out of his own savings, thus he needs to borrow in order to buy some piece of equipment (to invest in "new technology") which would increase his productivity, and enable him to earn a higher income later. Therefore by mobilizing savings, and hence increasing the availability of credit, financial intermediation facilitates investment in new technologies across the economy, increasing overall productivity and promoting growth as well.

In addition, **De Gregorio (1996)** found that credit may also be made available to finance investment in education or health, and can hence promote the accumulation of human capital. Savings mobilization can have a significant impact on growth by increasing investment, productivity and human capital.

2) Risk management

2.1) Liquidity risks: Many projects or enterprises require a medium to long-term commitment of capital, while most savers prefer to have the option to draw on their savings, or move them into another investment opportunity, should the need arise. That is, savers like their savings to be 'liquid'. Since the financial intermediaries pool many households' savings, and because savers will not withdraw their all money at the same time, this allows financial intermediaries to simultaneously provide medium to long-term capital for investment, and liquidity for savers. In addition, they can also affect the rate of

technological change if long-term commitments of resources to research and development promote technological innovation. As these factors serve to raises the return on savings which raises savings and capital inflows as well.

2.2) Risk diversification: Investing in an individual project is riskier than investing in a wide range of projects whose expected returns are not related. Because savers normally dislike risk, financial intermediaries, such as banks and stock exchanges, which facilitate risk diversification, allow investments to be made in riskier projects with higher expected returns in total. This again increases overall investment returns, and improves capital allocation, with impact on growth as well.

Risk diversification can also increase technological change. Innovation is risky, many innovations will fail. However, the ability to diversify risk by investing in many different innovation-based enterprises may make investments in other risky enterprises possible. So by making more capital available to innovators, financial intermediaries that facilitate diversification may also increase technological change and positively impact on growth (King & Levine, 1993).

3) Acquiring information

Individual savers are unlikely to have the time or capacity to collect, process and compare information on many different enterprises and market conditions before choosing where to invest. Hence high information costs may prevent capital from flowing to its highest value use. Moreover, they will be less eager to invest in activities about which they have little information. As a result, the creation of financial intermediaries such as banks and fund managers, who will collect this information on behalf of many investors, and share the costs of doing so between them, will improve resource allocation and raise investment (though in developing countries, financial institutions may have only limited information on investment opportunities, as much of the economy is informal). They may also increase the rate of technological progress by identifying and thus allocating capital towards those innovations with the best chances of succeeding (King & Levine, 1993).

4) Monitoring borrowers and corporate control

Similarly, the ability of financial intermediaries to monitor the performance of enterprises of many investors, who would not have the resources to do individually, and to exercise corporate control (meeting between lenders and borrowers to discuss business strategy), helps to ensure that investors get returns that properly reflect the enterprise's performance (i.e. ensures that they are not defrauded by the firm's managers as a result of their lack of information). Therefore financial provisions that improve corporate control tend to promote faster capital accumulation and growth by improving the allocation of capital.

5) Facilitating the exchange of goods and services

The financial sector facilitates transactions in the economy, by providing the mechanisms to make and receive payments, and by reducing information costs in the ways discussed above. So by providing financial intermediation in this way, the financial sector reduces transactions costs, and facilitates the trading of goods and services between businesses and households. In doing this, the financial sector allows greater specialization which facilitates productivity gains and allows more technological innovation and growth. As a result, reducing transactions costs and better facilitates exchange of goods and services, providing faster payments systems, more bank branches, or improved remittance services, will help to promote growth.

2.1.2 Foreign Direct Investment (FDI)

UNCTAD (2002) defines FDI as an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy in an enterprise resident in an economy other than that of the foreign direct investor. FDI inflows comprise capital provided by a foreign direct investor to an FDI enterprise. FDI stock is the value of the share of the foreign enterprise capital and reserves (including retained profits) attributable to the parent enterprise plus the net indebtedness of affiliates to the parent enterprise. A parent enterprise is defined as an enterprise that controls assets of other entities in countries other than its home country, usually by owning a certain equity capital stake (10% or more of the equity stake). A foreign affiliate is an incorporated or

unincorporated enterprise in which an investor, who is resident in another economy, owns a stake that permits a lasting interest in the management of the enterprise (an equity stake of 10% for an incorporated enterprise or its equivalent for an unincorporated enterprise)[1].

Dunning (1977, 1981) states an *eclectic theoretical framework* for the new trade theory based on three concepts: ownership advantage, location advantage, and internalization advantage. The presence of these advantages increases the chance that a firm will make a foreign direct investment rather than simply exporting home production. These advantages must be large enough to offset the diseconomies of distance, which include communications costs, and barriers due to different languages, customs, and regulations. It implies that the multinational enterprise is bringing something with it, such as new technology or managerial expertise, which is not available in the host country.

- **Ownership advantages** are resources or production processes to which firms in the host country do not have access. These proprietary assets are typically knowledge-based, in patents, trademarks, copyrights, or other technical know-how; or in the reputation of the firm. Knowledge-based assets can move across great distances at low cost, and have tremendous scale economies, i.e., they can be applied to multiple plants at low marginal cost. These reasons imply that multinational enterprises will dominate world trade in sectors where knowledge-based assets are the fundamental inputs.

- **Location advantages** are conditions in the host country that make it profitable for a multinational enterprise to produce in the host country rather than produce at home and export to the host country. Some examples of location advantage are cheap factor prices in the host country; high transportation costs; import quotas and tariffs; and better access to the host country customers. The provision of services to customers in the host country is the essence of what many multinational enterprises produce (for example, hotels).

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[1] World Bank, (2004), **The Shift Towards Services**, United Nations, New York and Geneva.

- **Internalization advantages** are conditions which rule out a firm from simply licensing its 'knowledge capital' to a host country firm (which would prevent some of the costs associated with foreign direct investment). One example is information spillover generated during the production and delivery of the product or service, which can be valuably internalized by a multinational firm. This is especially important for R&D-intensive and information-intensive firms, which benefit from guarding proprietary information because this type of information tends to be 'non-excludable' once a competitor outside the organization learns it. Another example is a valuable brand name or reputation, which may be easier to preserve in the more controlled environment of foreign direct investment.

2.1.3 The Interaction among FDI, Financial Market and Economic Growth.

World Bank, WIR (1999) stated that MNEs are able to mobilize financial resources from a wide range of sources. One of these is their own corporate systems. In order to finance an investment in a particular country, a MNE can move excess liquidity from anywhere to anywhere in its corporate system. MNEs also have access to borrowing on international financial markets at low spreads. They borrow in the form of bond issuing or stock issuing or long-term bank borrowing in the financial markets of their home and host countries. However, global financing means that firms have to take into account not only relative borrowing costs but also risks related to exchange rate movements and other factors, and then, it encourages fund-raising in host countries' financial markets. Nevertheless, the well-functioning financial markets, by lowering costs of conducting transactions, ensure capital is allocated to the projects that yield the highest returns. In addition, the host countries will benefit from technological innovation, capital accumulation, and productivity improvement, which are the channels to economic growth.

The spillovers of FDI for the host economy might significantly depend on the extent of domestic financial markets development. For instance, the channels in which the local financial markets matter are as follows:

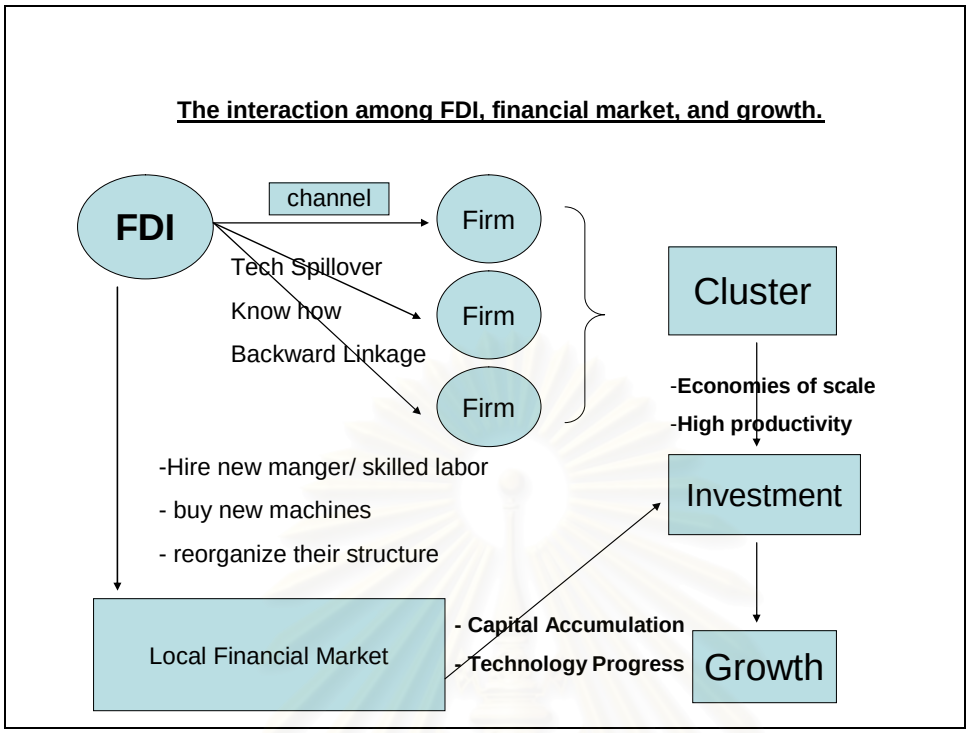
- *The technology spillovers and know-how channel.*

The lack of financial markets can constrain the spillovers of FDI. The spillovers are restricted to the cost of workforce improvements in the organization. To take advantage from the new knowledge, local firms need to alter activities, such as buy new machines, hire new managers and skilled labor. Although some local firms might be able to finance new requirements with internal financing, the greater technological-knowledge gap between their current practices and new technologies, the greater the need for external finance. The lack of financial markets can constrain the potential entrepreneurs. This is especially true when the arrival of an entirely new technology brings with potential to capture not just domestic markets but export markets. In sum, *the well-function financial market will facilitate the investments which are high productivity, and thereby promoting growth.*

- *The backward linkage channel.*

The well-developed financial markets encourage the creation of backward linkage firms. In the absence of well-developed financial markets, the potential of FDI to create backward linkages is severely impeded. The backward linkages not only allow existing firms, which already produce inputs in the industry, to achieve economies of scale that may not have existed earlier but also can encourage the creation of new firms. Then, it also creates the cluster of such industry which leads to achieve the economies of scale as well. As a result, *the well-developed financial markets will facilitate the creation of the backward linkages cluster which leads to economies of scales and enhances the growth as well.*

Figure 1: The interaction among FDI, financial market, and growth



2.2 Empirical Study

2.2.1 The Relationship between FDI and Economic Growth

There are many empirical studies about the role of FDI and economic growth which the impacts of FDI on growth are various. FDI is expected to enhance the growth by encouraging the integration of new inputs and technologies in the production process, through capital accumulation in the host economy. In the case of new inputs, output growth can result from the use of a wider range of intermediate goods in FDI-related manufacturing, according to Feenstra & Markusen (1994). In the case of technologies, FDI is expected to be a potential source of productivity gains via spillovers to domestic firms. UNCTAD (1999) finds that FDI has either a positive or negative impact on output depending on the variables that are entered in the test equation. These variables include the initial per capita GDP, education attainment, domestic investment ratio, political instability, terms of trade, black market premium, and the state of financial development. Xu (2000) examines international trade and foreign direct investment as channels for

technology diffusion among industrialized countries. He investigates US multinational enterprises (MNEs) as a channel of international technology diffusion in 40 countries from 1966 to 1994. The main finding is that technology transfer provided by US multinationals contributes to the productivity growth in developed countries but not in developing countries. Borensztein (1998) suggests that the differences in the technological absorptive ability may explain the variation in growth effects of FDI across countries. The level of human capital in each country determines the ability to adopt foreign technology. Thus, larger human capital endowments are assumed to stimulate higher growth rates, given the amount of FDI. Thus, it appears that the main channel through which FDI contributes to economic growth is by stimulating technological progress, rather than by increasing total capital accumulation in the host economy. He suggests further that countries may need a minimum threshold stock of human capital in order to experience positive effects of FDI.

The above discussion shows that the impact of FDI on economic growth is ambiguous, depending on the economic, institutional, and technological conditions in the recipient economy.

2.2.2 The Relationship between Financial Market and Economic Growth

The interaction between financial markets and growth itself has more positive conclusions. That is, well-developed financial markets promote economic growth. The theoretical framework of this paper has been well established in the literature, with supporting evidence in the empirical studies. King and Levine (1993), Beck (2000) and Levine (2000), suggest that the financial systems are important for productivity growth and economic development. The financial variables they used are as follows: (1) liquid liabilities of banks and non-bank financial intermediaries (currency + demand and interest-bearing liabilities) over GDP, (2) bank credit over the sum of bank credit and central bank domestic assets, (3) credit issued to private enterprises divided by credit issued to central and local governments plus credit issued to public and private enterprises, and (4) credit to private enterprises over GDP to represent the financial system. These measures have

positive correlation with economic growth, and became standard variables for later studies.

With regard to the role of different types of financial institutions, Levine and Zervos (1998) show that stock markets and banks have different services and products but both stock market liquidity and banking development positively enhance growth, capital accumulation, and productivity improvements. In addition, they utilize a set of control variables to find out the effects of liquid stock markets on growth from a set of other potential influences. They found that stock market liquidity, measured in several ways, is "a robust predictor of real per capita GDP growth, physical capital growth and productivity growth," after controlling for a set of other potential sources of growth. Similarly, Levine and Demirguc-Kunt (1995) found that stock market liquidity promote the economic growth. They use 1) the market capitalization ratio, equals the value of listed shares divided by GDP, measuring the stock market size; 2) The total value traded/GDP ratio equals total shares traded on the stock market exchange divided by GDP, measuring the organized trading of equities as a share of national output; 3) the turnover ratio, equals the value of total shares traded on a country's stock exchanges divided by stock market capitalization (the value of listed shares on a country's stock exchanges), measuring trading relative to the size of the stock market. And Wurgler (2000) shows that even if financial development does not lead to higher levels of investment, it seems to allocate the existing investment better and hence promotes economic growth.

CHAPTER III

FDI, FINANCIAL MARKET AND ECONOMIC GROWTH

This chapter explains about the relationship between FDI, financial market and growth of both OECD countries and NON-OECD countries over 1990-2004 periods.

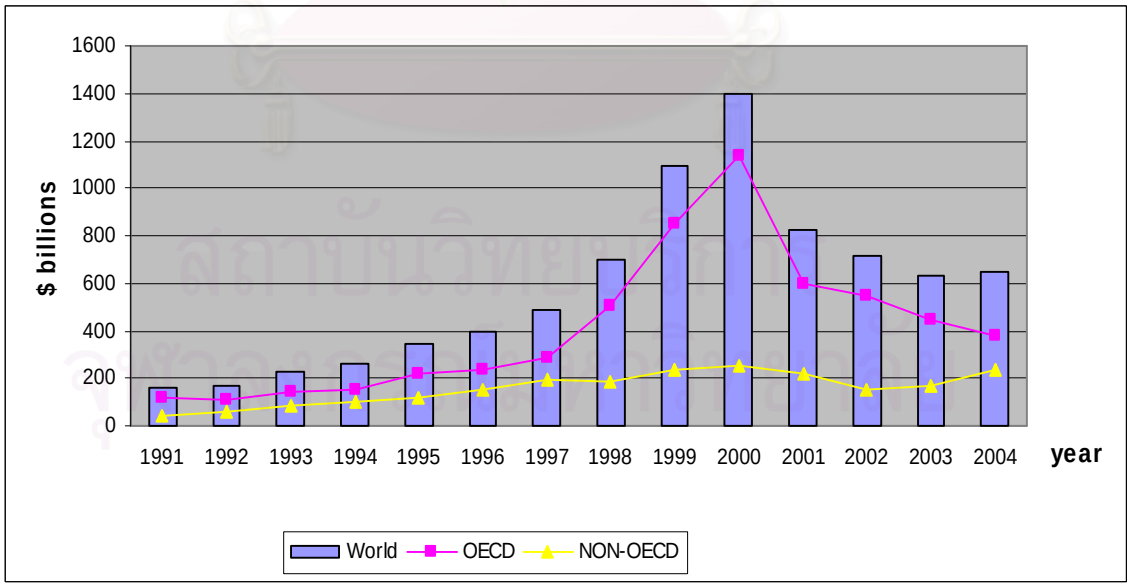
3.1 FDI and Growth

From the Figure 3.1, we can divide global FDI inflow over 1991-2004 periods into four stages as follows:

- *Stage 1: The 1991-1992 world FDI recession.*

FDI inflows into OECD countries decreased to $117 billion in 1991 and $113 billion in 1992. FDI inflows to OECD countries continued to decline in 1992, although less sharply (3.8 percent) than in 1991 (32.0 percent). The decline in FDI inflows into OECD countries is mostly a consequence of economic recession. The rate of economic growth of OECD countries is 0.9 percent in 1991 and 1.8 percent in 1992. Falling demand as a result of recession led to declining FDI inflows into OECD countries.

Figure 2: global FDI inflow over 1991-2004 periods.



Source: UNCTAD, based on its FDI/TNC database (www.unctad.org/fdi statistics).

Even during the FDI recession in OECD countries, flows into NON-OECD countries continued to boom. Flows into NON-OECD countries increased by 23.0 percent to $44 billion in 1991, another 24.8 percent in 1992, for a total of $55 billion. While the rate of economic growth of OECD countries is 4.2 percent in 1991 and 4.7 percent in 1992. This shows the positive relationship between economic growth and FDI inflow. Rapid growth resulting in expanding domestic markets made NON-OECD countries attractive destinations of FDI, especially when their growth performance is compared with that of OECD countries.

- *Stage 2: The 1993-2000 world FDI boom.*

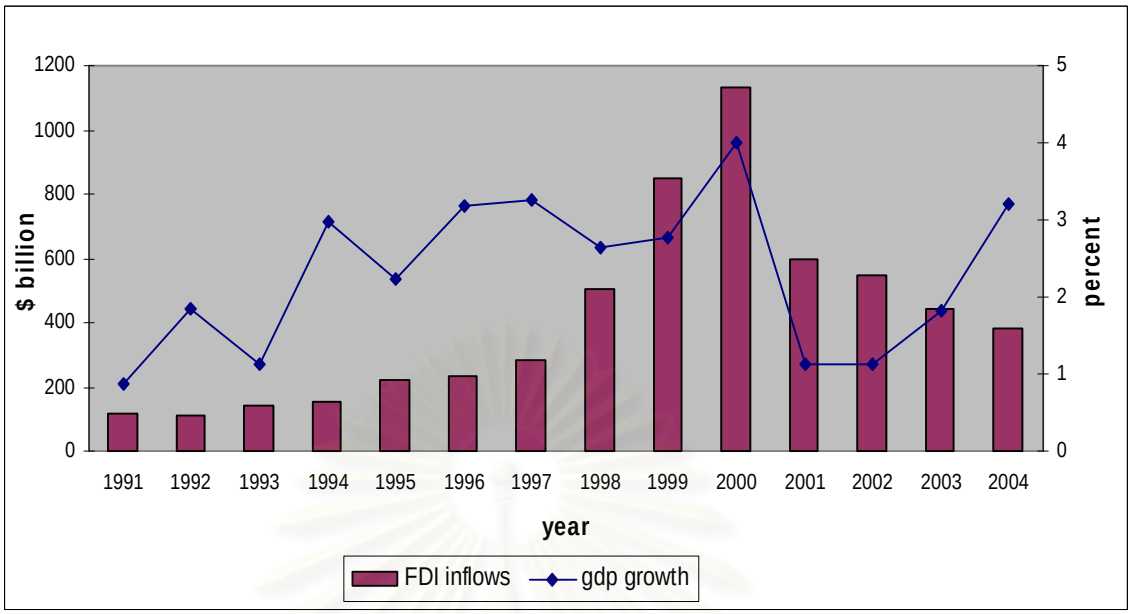
A new wave of FDI inflows into OECD countries began in 1993 following the end of the FDI recession that had prevailed in 1991 and 1992. FDI inflows increased by 27.9 percent to $144 billion in 1993, another 5.4 percent in 1994, for a total of $152 billion. While the rate of economic growth is 1.8 percent in 1993 and 3.0 percent in 1994. This shows the positive relationship between economic growth and FDI inflow. Higher economic growth is attractive to FDI inflow. FDI inflows rose by 44.1 percent in 1995, to $203 billion. The share of OECD countries in world inflows increased to 65 percent in 1995. The growth of OECD countries FDI was led by a few countries (the United States, United Kingdom, France and Australia) in the case of inflows. Whereas the rate of economic growth is 2.2 percent in 1995.

FDI inflows continued their upward climb in 1997 for the seventh consecutive year. Flows into OECD countries have risen substantially between 1996 and 1997, to reach $284 billion in 1997 from $235 billion in 1996. Their share in world FDI inflows is about 59.8 percent and 58.2 percent in 1996 and 1997, respectively. There has been a steady decline in their share of global inflows since 1990. That decline can be attributed partly to the increasing attractiveness of NON-OECD countries, especially those that are growing rapidly and have large domestic markets. Whereas the rate of economic growth is 3.2 percent in 1996 and 3.3 percent in 1997. This shows that high economic growth attracts FDI inflow to OECD countries. OECD countries accounted for 71.9 percent of global inflows in 1998. FDI inflows to OECD countries reached new heights of $504 billion,

increased over 1997 of 77.4 percent. OECD countries attracted $849 billion in FDI flows in 1999 increasing by 68.5 percent. While the rate of economic growth is 2.6 percent in 1998 and 2.8 percent in 1999. OECD countries accounted for more than three-quarters of global inflows in 2000. Cross-border mergers and acquisitions (M&As) remain the main stimulus behind FDI, and these are still concentrated in the OECD countries. As a result, inflows to OECD countries increased by 33.6 percent and amounted to a little over $1 trillion. Whereas the rate of economic growth reached about 4.9 percent in 2000.

For NON-OECD countries, they attracted a record $80 billion in 1993, the share of NON-OECD countries in world FDI flows reached about 35.3 percent. The most important factors making them attractive to foreign investors were rapid economic growth, privatization programmes open to foreign investors and the liberalization of the FDI regulatory framework. Though the rising of FDI inflows to NON-OECD countries was substantial, the rate of growth of flows to NON-OECD countries was even larger (46.6 percent) in 1993, producing a new record level of FDI inflows of $80 billion; a further increase (30.7 percent) was registered in 1994, to $105 billion. Investment flows into NON-OECD countries have been increasing dramatically in the 1990s, with their share in world FDI inflows reaching 35.3 percent, 40.5 percent in 1993 and 1994, respectively. The current boom in FDI flows to NON-OECD countries, with inflows reaching $118 billion in 1995, is a reflection of sustained economic growth (economic growth rate is 5.3 percent in 1993, 5.8 percent in 1994 and 5.2 percent in 1995) and continuing liberalization and privatization in these countries. FDI inflows set a new record of around $152 billion in 1996, a 29.1 percent increase. The share of NON-OECD countries in global inflows rose to 38.6 percent in 1996 (from 34.5 percent in 1995). NON-OECD countries have become increasingly attractive for foreign investors. In 1997, they accounted for close to two-fifths or $192 billion of world FDI inflows. While the rate of economic growth still sable (5.3 percent in 1997).

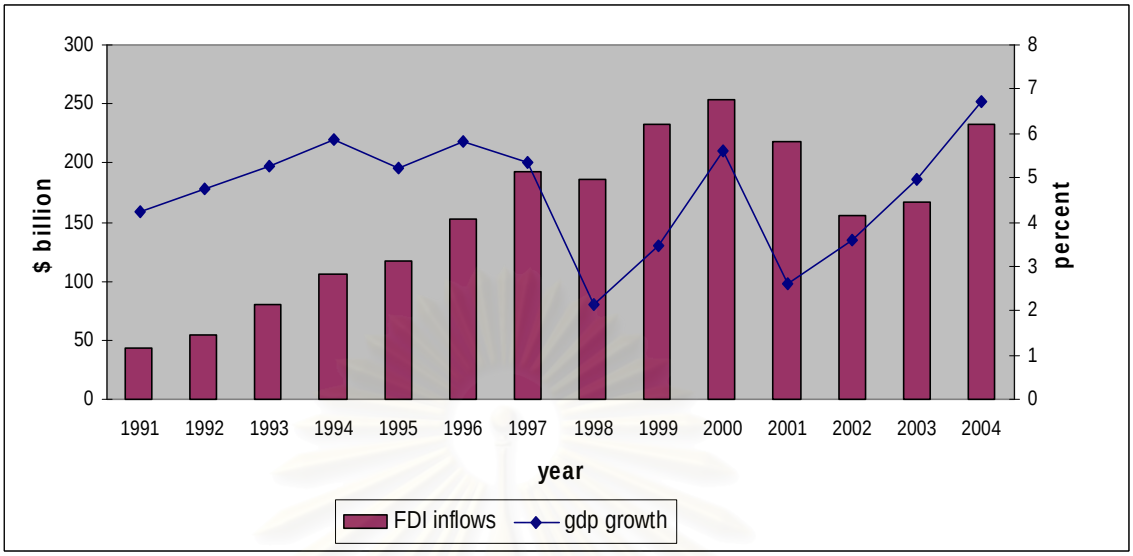
Figure 3.2: FDI inflow and economic growth of OECD countries over 1991-2004 periods.



Source: UNCTAD, based on its FDI/TNC database (www.unctad.org/fdi statistics).

In NON-OECD countries, which grew at a rate of only 2.2 percent in 1998, the first time in 10 years that they recorded a lower rate of economic growth than the OECD countries, FDI flows decreased slightly to $187 billion in 1998, a decline of 2.7 percent. The extent of the decline was due to currency depreciations, FDI policy liberalization and more welcoming attitudes towards M&As. After stagnating in 1998, FDI flows to NON-OECD countries have resumed their earlier growth trend. In 1999, NON-OECD countries received $233 billion in FDI, an increase of 24.6 percent over 1998. The share of NON-OECD countries in global FDI inflows has, however, fallen, going from 39.3 percent in 1997 to 21.3 percent in 1999. FDI inflows to NON-OECD countries rose, reaching $253 billion in 2000 reached all time high. However, their share in world FDI flows declined to 18.1 percent, compared to the peak of 40.5 percent in 1994. High growth rate of FDI inflows also reflect higher growth rates in developing and transition economies (economic growth rate is 3.5 percent in 1999 and 5.6 percent in 2000).

Figure 3.3: FDI inflow and economic growth of NON-OECD countries over 1991-2004 periods.



Source: UNCTAD, based on its FDI/TNC database (www.unctad.org/fdi statistics).

- *Stage 3: The 2001-2003 world FDI recession.*

FDI inflows to OECD countries fell by about half (47.4 percent), from $1.1 trillion in 2000 to $596 billion in 2001. The share of OECD countries in global FDI inflows has fallen, going from 81.2 percent in 2000 to 72.2 percent in 2001. FDI inflows declined in 2002 for the second consecutive year, falling by 8.1 percent to $548 billion. The main factor behind the substantial decline was slow economic growth in most parts of the world and weak prospects for recovery. To the extent that the events of 11 September 2001 worsen this slowdown, they may also have contributed to the further decline in FDI. FDI inflows to OECD countries declined by 19.3 percent (to $442 billion) in 2003, following a massive decline in 2001-2002. FDI inflows to OECD countries declined in 2003 for the third year, decreased by 19.3 percent to $442 billion. Lower growth rate of FDI inflows also reflect lower growth rates in OECD countries (economic growth rate are 1.1 percent in 2001, 1.1 percent in 2002 and 1.8 percent in 2003).

FDI inflows to NON-OECD countries decreased by 14.0 percent from $253 billion in 2000 to $218 billion in 2001. The share of NON-OECD countries in global FDI inflows has, however, risen, from 18.1 percent in 2000 to 26.4 percent in 2001. In 2002, FDI inflows declined for the second consecutive year, falling by 28.6 percent to $156 billion.

The share of NON-OECD countries in global FDI inflows has fallen, going from 26.4 percent in 2001 to 21.7 percent in 2002. Lower growth rate of FDI inflows also reflect lower growth rates in NON-OECD countries (economic growth rate are 2.6 percent in 2001 and 3.6 percent in 2002). Though OECD countries as a group experienced a drop 19.3 percent in their FDI inflow, NON-OECD countries as a group that experienced a recovery, with FDI inflows rising by 6.9 percent, to $166 billion in 2003. As a result, the share of NON-OECD countries in world FDI inflows rose by 26.3 percent, the highest level since 1998. Higher growth rate of FDI inflows also reflect higher growth rates in NON-OECD countries (economic growth rate are 5.0 percent in 2003).

- *Stage 4: The current world FDI boom (since 2004).*

FDI inflows into OECD countries fell by 14.1 percent to $380 billion in 2004. This decline was less sharp than in 2003. After the significant fall of 2001-2003, the further decline brought FDI inflows to OECD countries to just 30 percent of their peak level of $1.1 trillion in 2000. The share of countries in world FDI inflows decreased to 69.9 percent. While the economic growth rate is 3.2 percent in 2004, higher than economic growth rate in 2003. FDI inflows to OECD countries were substantial in 2005, reach to $542 billion. However, FDI inflows to OECD countries remained far below the 2000 peak of $1.1 trillion. It also reflects higher growth rates in some developed countries as well as strong economic performance in many developing and transition economies.

FDI inflows to NON-OECD countries surged by 40.2 percent, to $233 billion in 2004. As a result, the share of NON-OECD countries in world FDI inflows was 36.0 percent, the highest level since 1997. FDI Inflows to NON-OECD countries rose to the highest level ever recorded, $334 billion. In percentage terms, the share of NON-OECD countries was 36.5 percent. As a result, the difference between inflows to OECD countries and NON-OECD countries shrank to $147 billion, a significant narrowing of the gap compared with previous years. NON-OECD countries have gained in importance as recipients of FDI. FDI inflows to NON-OECD countries reached to $334 billion. Their share in total world inflows rose to 36.5 percent in 2005. Higher growth rate of FDI inflows also

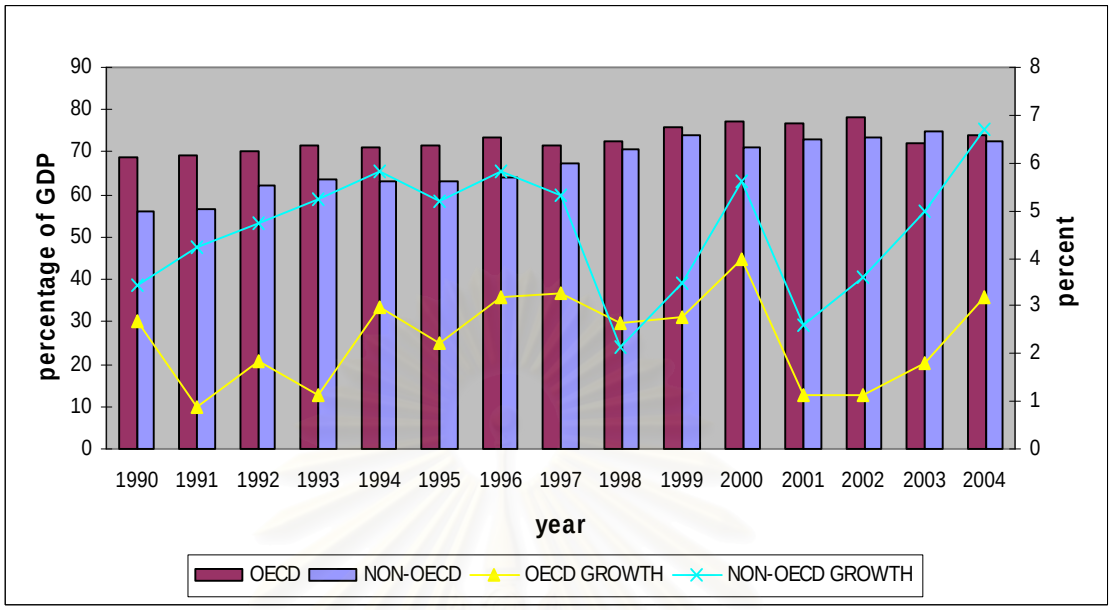
reflect higher growth rates in NON-OECD countries (economic growth rate are 6.7 percent in 2004 and 6.3 percent in 2005).

In sum, Over 1991-2000, FDI inflow of both OECD countries and NON-OECD countries have increased over time and reached all time high in 2000. For economic growth rate of both OECD countries and NON-OECD countries have upward trend, although it has a fluctuation especially in 1998 and 2001. We can see the positive relationship between economic growth and FDI inflow. Rapid growth resulting in expanding domestic markets made countries attractive destinations of FDI. Therefore, higher economic growth is attractive to FDI inflow. Conversely, economic recession resulting in falling domestic market demand led to FDI inflows declining. Therefore, lower economic growth is less attractive to FDI inflows.

3.2 Financial Market and Growth

From Figure 3.4, the economic growth rate over 1990-2004 periods of NON-OECD countries is higher than that of OECD countries, except the year 1998. Since 1990, the economic growth rate of NON-OECD countries increased dramatically until 1994. At the same time, the economic growth rate of OECD countries is unstable, however it is upward trend. In 1995, the economic growth rate of both OECD countries and NON-OECD countries slightly decreased. The economic growth rate of OECD countries remained stable since 1996 until 1998. On the other hand, the economic growth rate of NON-OECD countries declined sharply, due to Asian economic crisis in 1997. However, the economic growth rate of both OECD countries and NON-OECD countries have upward trend since 1999, especially in NON-OECD countries which economic growth rate is significantly high. But, the events of 11 September 2001 worsen global economic growth, resulting in declining of economic growth in both OECD countries and NON-OECD countries. After stagnating in 2001, there is a sign of economic recovery in both OECD countries and NON-OECD countries in 2002. Since 2002 until now, the economic growth of both OECD countries and NON-OECD countries increase dramatically.

Figure 3.4: DEPTH and economic growth of OECD and NON-OECD countries over 1991-2004 periods.

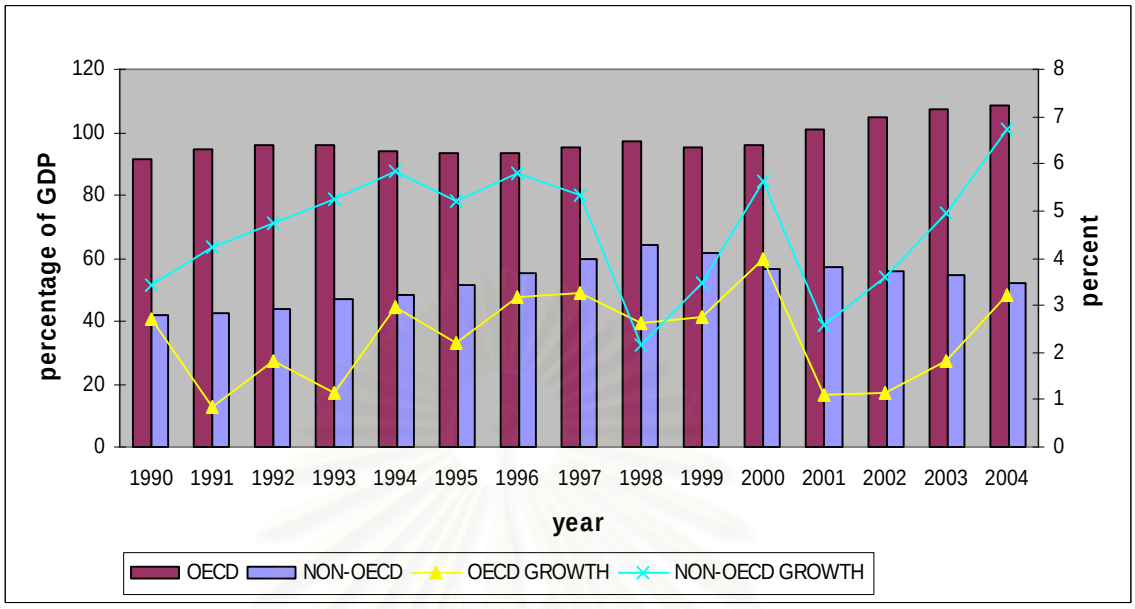


Source: World Development Indicators (WDI 2004 CD-ROM).

The first financial development indicator is DEPTH, the ratio of liquid liabilities (M3) to GDP. It represents the overall **size of the financial sector**. From Figure 3.4, it shows that overall DEPTH of OECD countries is higher than that of NON-OECD countries. In the other word, the OECD's size of financial sector is larger than that NON-OECD's size of financial sector. The growth rate of DEPTH in both OECD and NON-OECD countries increased over time. However, the growth rate of DEPTH in NON-OECD countries is relatively high than that in OECD countries. This indicates that the financial sector of NON-OECD countries grew faster than that of OECD countries.

Over 1990-2004, DEPTH and economic growth of both OECD countries and NON-OECD countries have upward trend, although the economic growth has a fluctuation especially in 1997 and 2002. Therefore, we can conclude that there is a positive relationship between size of the financial sector and economic growth.

Figure 3.5: PRIVY and economic growth of OECD and NON-OECD countries over 1991-2004 periods.

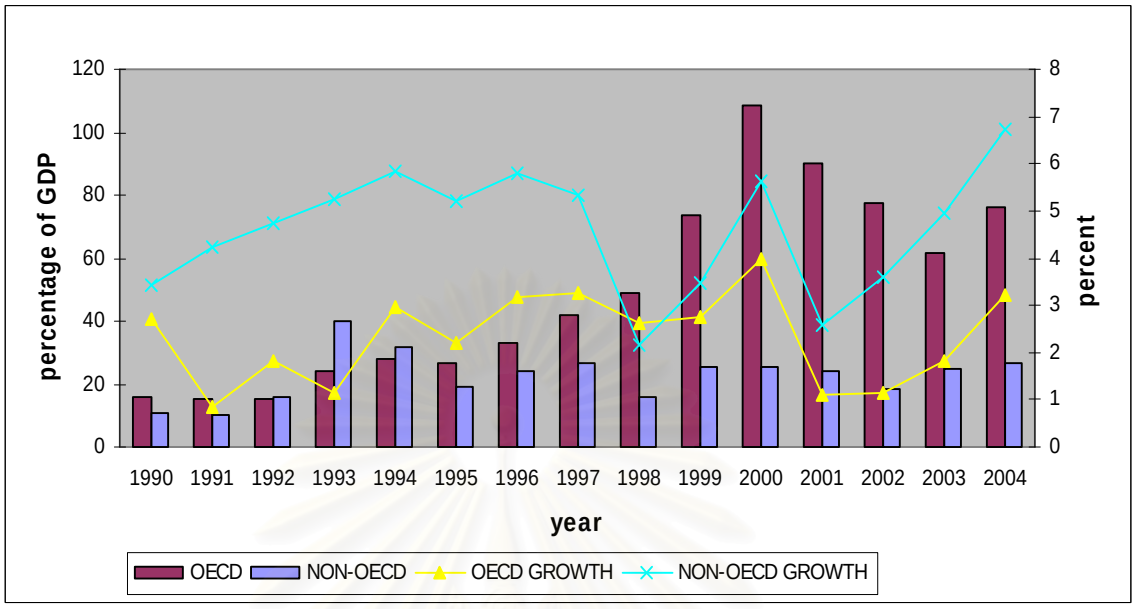


Source: World Development Indicators (WDI 2004 CD-ROM).

The second financial development indicator is PRIVY, the **credit issued to private enterprises divided by GDP**. Higher value of PRIVY should indicate more credit to the private sector as a share of GDP. Then, it facilitates the number of investment project and enhances the economic growth in the long run as well. From Figure 3.5, it shows that overall PRIVY of OECD countries is higher than that of NON-OECD countries. In the other word, the credit to the private sector as a share of GDP of OECD countries is greater than that of NON-OECD countries. The growth rate of PRIVY in both OECD and NON-OECD countries increased over time. However, the growth rate of PRIVY in NON-OECD countries is relatively high than that in OECD countries. This indicates that the credit to the private sector of NON-OECD countries grew faster than that of OECD countries.

Over 1990-2004, PRIVY and economic growth of both OECD countries and NON-OECD countries have upward trend, although the economic growth has a fluctuation especially in 1997 and 2002. Therefore, we can conclude that there is a positive relationship between credit to the private sector and economic growth.

Figure 3.6: LIQ and economic growth of OECD and NON-OECD countries over 1991-2004 periods.

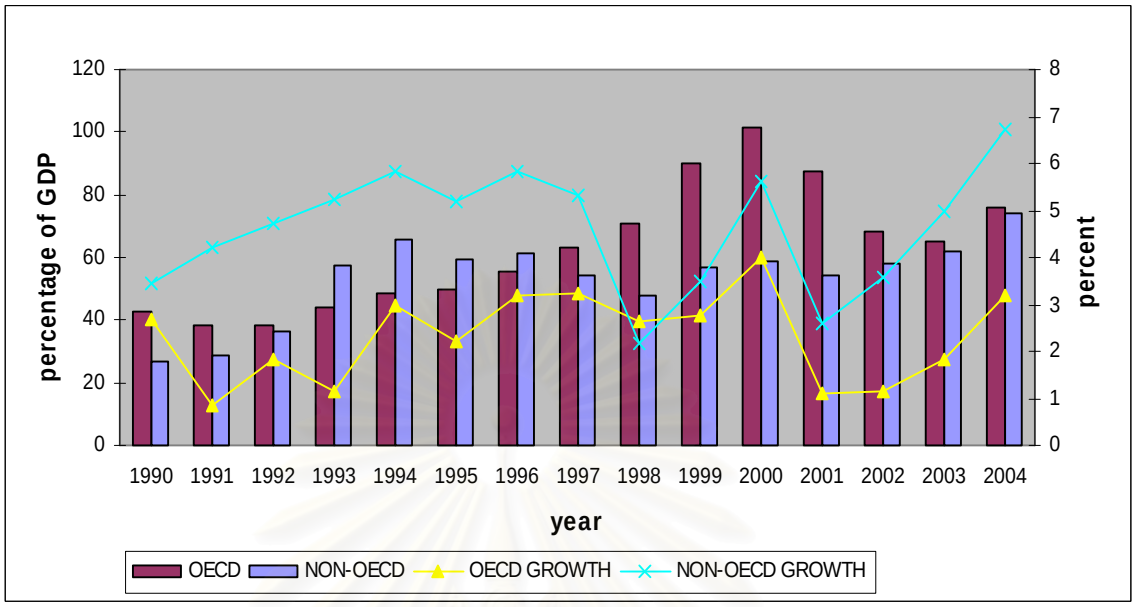


Source: World Development Indicators (WDI 2004 CD-ROM).

The third financial development indicator is LIQ, the valued traded ratio. It equals the total value of shares traded on a country's stock exchanges divided by GDP. It measures trading relative to the size of the economy. In Levine (1991) individuals reduce liquidity shocks by selling shares on the stock market rather than withdrawing money from the bank, while the stock market also allows agents to reduce rate of return risk by portfolio diversification. From Figure 3.6, it shows that overall LIQ of OECD countries is higher than that of NON-OECD countries. In the other word, the stock market size of OECD countries is larger than that of NON-OECD countries.

Over 1990-2004, LIQ and economic growth of both OECD countries and NON-OECD countries have upward trend. Although the economic growth has a fluctuation especially in 1997 and 2002 and LIQ decreased dramatically in 2001 due to the events of 11 September 2001, resulting in falling stock market valuations, lower corporate profitability in some countries, especially in OECD countries. Therefore, we can conclude that there is a positive relationship between stock market size and economic growth.

Figure 3.7: CAP and economic growth of OECD and NON-OECD countries over 1991-2004 periods.



Source: World Development Indicators (WDI 2004 CD-ROM).

The fourth financial development indicator is CAP, the value of listed shares divided by GDP. It measures the **stock market size**. From Figure 3.7, it shows that overall CAP of OECD countries is higher than that of NON-OECD countries. In the other word, the stock market size of OECD countries is larger than that of NON-OECD countries. Therefore, the ability to mobilize capital and diversify risk of OECD countries is larger than that of NON-OECD countries.

Over 1990-2004, CAP and economic growth of both OECD countries and NON-OECD countries have upward trend. Although the economic growth has a fluctuation especially in 1997 and 2002 and CAP decreased radically in 2001 due to the events of 11 September 2001, resulting in falling stock market valuations, lower corporate profitability in some countries, especially in OECD countries. Therefore, we can conclude that there is a positive relationship between stock market size and economic growth.

In conclusion, the overall all financial market indicators (DEPTH, PRIVY, CAP and LIQ) of OECD countries are higher than that of NON-OECD countries. In the other word, size of the financial market and private credit of OECD countries are larger than that of NON-OECD countries. Moreover, over 1990-2004, all financial indicators (DEPTH, PRIVY, CAP and LIQ) and economic growth of both OECD countries and NON-OECD countries have upward trend, although the economic growth has a fluctuation especially in 1997 and 2002. Therefore, we can conclude that there is a positive relationship between size of the financial sector, private credit and economic growth.

CHAPTER IV
METHODOLOGY

This chapter describes the theoretical framework, research methodology, research hypothesis and hypothesis testing of this study.

4.1 Theoretical Framework

❖ **How can financial development affect growth?**

According to Pagano (1993), in order to capture the potential effects of financial development on growth, he considered the simple endogenous growth model - the 'AK' model, where aggregate output is a linear function of the aggregate capital stock:

$$Y_t = AK_t \qquad (1)$$

Assume that there is a competitive economy with external economies, where each firm faces a technology with constant returns to scale but productivity is an increasing function of the aggregate capital stock K_t. For instance, consider an economy with N identical firms, then aggregate output, $Y_t = NY_t$, is given by (1).

For simplicity, assume that the population is stationary and that the economy produces a single good that can be invested or consumed and, if invested, depreciates at the rate δ per period. Gross investment then equals

$$I_t = K_{t+1} - (1-\delta)K_t \qquad (2)$$

In a closed economy with no government, capital market equilibrium requires that gross saving S_t equals gross investment I_t. For reasons that will be made clear below, it is convenient to assume that a proportion $1 - \theta$ of the flow of saving is 'lost' in the process of financial intermediation:

$$\theta S_t = I_t \qquad (3)$$

From (1), the growth rate at time t+I is $g_{t+1} = Y_{t+1}/Y_t - I = K_{t+1}/K_t - I$. Using eq. (2) and dropping the time indices, the steady-state growth rate can be written as

$$G = A(I/Y) - \delta = A\theta s - \delta \qquad (4)$$

where in the second step he have used the capital market equilibrium condition (3) and denoted the gross saving rate S/Y by s.

Eq. (4) shows briefly how financial development can affect growth. That is, assuming the depreciation is constant; financial development can raise θ, the proportion of saving funnelled to investment; it may increase A, the social marginal productivity of capital; and it can influence s, the private saving rate.

1) Funnelling saving to firms

In the process of transforming saving into investment, financial intermediaries absorb resources, so that a dollar saved by households generates less than one dollar worth of investment - the fraction θ in eq. (3). Then, the remaining fraction 1 - θ goes to banks as the spread between lending and borrowing rates, and to securities brokers and dealers as commissions and fees.

As noted by Roubini and Sala-i-Martin (1991, 1992), this absorption of resources by the financial sector is often burdened by taxation (in the form of high reserve requirements, transaction taxes, etc.) and by restrictive regulations, translating into higher unit margins. If financial development reduces this leakage of resources (raises θ), it also increases the growth rate g.

2) Improving the allocation of capital

A second key function of financial intermediation is the allocation of funds to those projects where the marginal product of capital is highest. The developed financial intermediaries increase the productivity of capital, A, so promoting growth in two ways:

(i) collecting information to evaluate alternative investment projects.

The financial intermediaries with their large portfolios can perfectly manage the aggregate productivity shock, and thus choose the technology that is most appropriate for the current realization of the shock. Thus savings channeled through financial intermediaries are allocated more efficiently, and the higher productivity of capital results in higher growth.

(ii) inducing individuals to invest in riskier but more productive technologies by providing risk sharing.

Financial intermediaries enable investors to share risks. This risk sharing role is not performed only by insurance markets but also by banks and securities markets, which allow individuals to share the uninsurable risk, and the diversifiable risk deriving from the volatility of asset returns.

In Levine (1991) individuals reduce liquidity shocks by selling shares on the stock market rather than withdrawing money from the bank, while the stock market also allows agents to reduce rate of return risk by portfolio diversification. This drives investors to invest in less liquid and more productive projects, as a result, stock market raises the productivity of investment and the growth rate as well.

3) Affecting the saving rate

The third way financial development can affect growth is by altering the saving rates. However, the sign of the relationship is ambiguous, in that financial development may also reduce saving, and thereby growth. As capital markets develop, households gain better insurance against endowment shocks and better diversification of rate-of-return risk, while consumer credit becomes more readily and cheaply available. Financial

development also narrows the wedge between the interest rate paid by firms and that received by households. Each of these factors affects saving behavior, but in each case the effect is ambiguous.

Therefore, many authors avoid this complication by ruling out a negative effect of risk sharing on saving by appropriate assumptions: Levine simply posits a constant saving rate, while Saint-Paul chooses assumptions under which risk sharing actually raises saving.

4.2 Research Methodology

This paper will examine the role of FDI on growth through financial markets. For the set of financial market variables, it is divided into two categories, which are money market (banking sector) and capital market (stock market). The banking sector variables in this paper are based on King and Levine (1993), using (1) liquid liabilities of banks and non-bank financial intermediaries (currency + demand and interest-bearing liabilities) over GDP, measuring total financial size, (2) deposit money bank domestic assets / (deposit money bank domestic assets + central bank domestic assets), (3) the credit issued to private enterprises divided by credit issued to central and local governments plus credit issued to public and private enterprises, representing the fraction of credit extended to firms and households, and (4) credit to private enterprises over GDP to represent the banking system. In addition, I add SPREAD variable which is the variation between lending rate and deposit rate to measure the efficient of savings allocation.

For the stock market development indicators, they are based on Levine and Demirguc-Kunt (1995). They use the *market capitalization ratio*, equals the value of listed shares divided by GDP, measuring the stock market size. The *total value traded/GDP ratio* equals total shares traded on the stock market exchange divided by GDP, measuring the organized trading of equities as a share of national output and therefore should positively reflect liquidity on an economy-wide basis. And *the turnover ratio*, equals the value of total shares traded on a country's stock exchanges divided by stock market

capitalization (the value of listed shares on a country's stock exchanges), measuring trading relative to the size of the stock market. High turnover ratio is often used as an indicator of low transaction cost.

Moreover, I interact FDI with financial market variable and use this as a regressor to test for the significance of financial markets in promoting economic growth associated with FDI inflows. Following the contributions of Romer (1990) to the development of the new growth theory, and of Levine and Renelt (1992) to the search for a set of robust variables for modeling growth, a degree of convergence on the most appropriate empirical specification has occurred. The ''core explanatory variables'' for economic growth identified in these studies include investment, population growth, real per capita GDP, inflation rate and degree of openness. Thus, the regression model of this paper is as follows:

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 FIN_{it} + \beta_3 FDI_{it}*FIN_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it}$$

Where

GROWTHit = the growth of the real GDP per capita

FDIit = the ratio of FDI inflow to GDP

FINit = the financial market variable which is divided into two groups:

1) banking sector

1.1) DEPTH = (currency + demand and interest-bearing liabilities) / GDP

1.2) BANK = deposit money bank domestic assets / (deposit money bank domestic assets + central bank domestic assets)

1.3) PRIVATE = credit issued to private enterprises / (credit issued to central and local governments + credit issued to public and private enterprises)

1.4) PRIVY = credit to private enterprises / GDP

1.5) SPREAD = the variation between lending rate and deposit rate

2) stock market

2.1) Stock market size indicator

- CAP = total value of shares traded (stock market capitalization) /GDP

2.2) Liquidity Indicator

- LIQ = total shares traded on the stock market /GDP
- TURN = total value of shares traded / stock market capitalization

INVit = the ratio of gross domestic investment to GDP

POPit = the population growth rate

GDPit = the real GDP per capita

OPENit = the degree of openness = (import+export)/ GDP

INFit = the percentage change in the GDP deflator

4.3 Research Hypothesis and Hypothesis Testing

❖ From above equation, I expect that the sign coefficients of such variables are as follows:

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 FIN_{it} + \beta_3 FDI_{it} * FIN_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it} \quad \text{.....(1)}$$

(+/-) (+) (+) (+) (-) (+) (+) (-)

Hypothesis 1: The relationship between the ratio of FDI inflow to GDP and the growth of the real GDP per capita is ambiguous, depending on the economic, institutional, and technological conditions in the recipient economy, as shown in the above literature reviews in Chapter II.

$H_0: \beta_1 = 0$

$H_1: \beta_1 \neq 0$

The significant of the coefficient is tested by using t-statistic.

Hypothesis 2: The financial development is expected to have positive relationship with the growth of the real GDP per capita. Financial market development enhances an economy's growth possibilities through the channels which are higher supply of credits for investment, better provision of information and more efficient insurance of risks. That is when the local financial sector is developed; it affects both driving forces of growth, factor accumulation and efficiency of allocation, then the growth of the real GDP per capita increases.

For the financial development indicators, the interaction between them and the economic growth are as follows:

- <u>DEPTH and growth</u>

$$GROWTH_{it} = \beta_0 + \underset{+/-}{\beta_1} FDI_{it} + \underset{+}{\beta_2} DEPTH_{it} + \underset{+}{\beta_3} FDI_{it}^{*} DEPTH_{it} + \underset{+}{\beta_4} INV_{it} + \underset{-}{\beta_5} POP_{it} + \underset{+}{\beta_6} GDP_{it} + \underset{+}{\beta_7} OPEN_{it} + \underset{-}{\beta_8} INF_{it}$$

..... (2a)

The first financial development indicator is DEPTH, it equals the ratio of liquid liabilities to GDP. Liquid liabilities equal currency held outside of the banking system plus demand and interest-bearing liabilities of banks and non bank financial intermediaries. King and Levine (1993) use DEPTH as a measure of the overall size of the formal financial intermediary sector which is the broadest measure of financial sector. They find that the size of the financial sector is positively correlated with the provision of financial services. The provision of money is important for growth since it facilitates economic activity and reduces transaction costs. Therefore, higher value of DEPTH leads to the higher economic growth.

$H_0: \beta_A = 0$

$H_1: \beta_A > 0$

The significant of the coefficient is tested by using t-statistic.

- <u>BANK and growth</u>

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 BANK_{it} + \beta_3 FDI_{it}^{*} BANK_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it}$$

(+/-, +, +, +, -, +, +, -)

..... (2b)

The second financial development indicator is BANK, it equals the ratio of deposit money bank domestic assets to deposit money bank domestic assets plus central bank domestic assets. According to King and Levine (1993), this development should be considered positive because one would expect banks with private owners to guarantee a more efficient allocation of existing funds for investment projects and thus to stimulate economic growth. Then, higher value of BANK should correspond to more financial services and higher levels of financial development and economic growth.

$H_0 : \beta_B = 0$

$H_1 : \beta_B > 0$

The significant of the coefficient is tested by using t-statistic.

- <u>PRIVATE and growth</u>

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 PRIVATE_{it} + \beta_3 FDI_{it}^{*} PRIVATE_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it}$$

(+/-, +, +, +, -, +, +, -)

..... (2c)

The third indicator is PRIVATE, it equals the credit issued to private enterprises divided by credit issued to central and local governments plus credit issued to public and private enterprises. King and Levine (1993) state that higher values of PRIVATE reflect a redistribution of credit from public enterprises and government to private firms. Thus, if

financial sector interactions with the private sector are more indicative of the provision of productivity enhancing financial services than financial sector interactions with the public sector. Then, higher value of PRIVATE should indicate greater financial development and economic growth as well.

$H_0 : \beta_C = 0$

$H_1 : \beta_C > 0$

The significant of the coefficient is tested by using t-statistic.

- <u>PRIVY and growth</u>

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 PRIVY_{it} + \beta_3 FDI_{it}* PRIVY_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it} \quad \text{..... (2d)}$$

(+/-) (+) (+) (+) (-) (+) (+) (-)

The fourth indicator is PRIVY, equals credit issued to private enterprises divided by GDP. King and Levine (1993) state that, similar with PRIVATE, higher value of PRIVY should indicate more credit to the private sector as a share of GDP. Then, it facilitates the number of investment project and enhances the economic growth in the long run as well. Therefore, higher value of PRIVY should correspond to greater financial development and eventually lead to higher economic growth.

$H_0 : \beta_D = 0$

$H_1 : \beta_D > 0$

The significant of the coefficient is tested by using t-statistic.

- <u>SPREAD and growth</u>

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 SPREAD_{it} + \beta_3 FDI_{it}* SPREAD_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it}$$

(+/-) (-) (-) (+) (-) (+) (+) (-)

..... (2e)

The fifth indicator is SPREAD, it equals the variation between lending rate and deposit rate. Markus Neimke (2003) states that SPREAD implies minor losses in the allocation of existing savings for investment projects. The losses that went along with this inefficiency could be linked to the fact that the volume of financing for investment activities lagged behind the volume that would be possible if based on all existing savings. A developed financial sector ensures a relatively small variation between lending rate and deposit rate. Hence, in terms of efficiency, lower value of SPREAD should correspond to greater level of financial development and also lead to higher economic growth.

$H_0 : \beta_E = 0$

$H_1 : \beta_E < 0$

The significant of the coefficient is tested by using t-statistic.

- <u>CAP and growth</u>

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 CAP_{it} + \beta_3 FDI_{it}^{*} CAP_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it}$$

(+/-) (+) (+) (+) (-) (+) (+) (-)

..... (2f)

The sixth indicator is CAP, or equals the value of listed shares divided by GDP, measuring the stock market size. Kunt and Levine (1995) use this indicator to measure trading relative to the size of the economy. They state that the assumption behind market capitalization is positively correlated with the ability to mobilize capital and diversify risk. Since, greater value of CAP should indicate higher economic growth.

$H_0 : \beta_F = 0$

$H_1 : \beta_F > 0$

The significant of the coefficient is tested by using t-statistic.

- LIQ and growth

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 LIQ_{it} + \beta_3 FDI_{it}^{*} LIQ_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it} \quad \text{..... (2g)}$$

(+/-, +, +, +, -, +, +, -)

The seventh indicator is LIQ, or the valued traded ratio, it equals the total value of shares traded on a country's stock exchanges divided by GDP. Levine and Zervos (1998) and Beck and Levine (2000) use this indicator to measure trading relative to the size of the economy. In Levine (1991) individuals reduce liquidity shocks by selling shares on the stock market rather than withdrawing money from the bank, while the stock market also allows agents to reduce rate of return risk by portfolio diversification. This drives investors to invest in less liquid and more productive projects leading to higher economic growth. Since, greater value of LIQ should indicate higher economic growth.

$H_0: \beta_G = 0$

$H_1: \beta_G > 0$

The significant of the coefficient is tested by using t-statistic.

- TURN and growth

$$GROWTH_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 TURN_{it} + \beta_3 FDI_{it}^{*} TURN_{it} + \beta_4 INV_{it} + \beta_5 POP_{it} + \beta_6 GDP_{it} + \beta_7 OPEN_{it} + \beta_8 INF_{it} \quad \text{..... (2h)}$$

(+/-, +, +, +, -, +, +, -)

The eighth indicator is TURN, the turnover ratio equals the total value of shares traded on a country's stock exchanges divided by the stock market capitalization. Levine and Zervos (1998), Beck and Levine (2000), Kunt and Levine (1995) use this indicator to capture the relative size of stock market. The stock markets should enable the allocation of

savings to more efficient investors. They also facilitate the transfer of short-term to long-term capital market and encourage the inflow of venture capital, which promote growth in the number of shares available to investors. High turnover ratio is often used as an indicator of low transaction cost. Hence, higher value of TURN should correspond to greater financial development and higher economic growth as well.

$H_0 : \beta_H = 0$

$H_1 : \beta_H > 0$

The significant of the coefficient is tested by using t-statistic.

Hypothesis 3: The interaction between FDI and financial development is expected to have positive relationship with the growth of the real GDP per capita. The spillovers of FDI for the host economy might significantly depend on the extent of domestic financial markets development. Through spillover-effects, FDI drives the technological knowledge stock of an economy, facilitated by the well-function financial market, which in turn increases total factor productivity and enhances the growth as well.

$H_0 : \beta_3 = 0$

$H_1 : \beta_3 > 0$

The significant of the coefficient is tested by using t-statistic.

Hypothesis 4: The ratio of gross domestic investment to GDP growth is expected to have positive relationship with the growth of the real GDP per capita. Investment is the channel of the accumulation of the capital that leads to the economy faster the long run growth.

$H_0 : \beta_4 = 0$

$H_1 : \beta_4 > 0$

The significant of the coefficient is tested by using t-statistic.

Hypothesis 5: The population growth rate is expected to have negative relationship with the growth of the real GDP per capita. When the population increases, the GDP per capita decreases given the other variable constant.

$H_0: \beta_5 = 0$

$H_1: \beta_5 < 0$

The significant of the coefficient is tested by using t-statistic.

Hypothesis 6: The real GDP per capita is expected to have positive relationship with the growth of the real GDP per capita.

$H_0: \beta_6 = 0$

$H_1: \beta_6 > 0$

The significant of the coefficient is tested by using t-statistic.

Hypothesis 7: The degree of openness is expected to have positive relationship with the growth of the real GDP per capita. International trade fosters growth by increasing product market competition since it allows firms to take advantage of economies of scale. That is, with large-scale production, firms can reduce the production costs, then the productivity is improved and eventually it enhances the growth in the long run.

$H_0: \beta_6 = 0$

$H_1: \beta_6 > 0$

The significant of the coefficient is tested by using t-statistic.

Hypothesis 8: The inflation is expected to have negative relationship with the growth of the real GDP per capita. The inflation represents as the indicator of the stability of economy. Therefore higher inflation affects the confidence of the economy. This impedes the economy growth in the long run.

$H_0: \beta_7 = 0$

$H_1: \beta_7 < 0$

The significant of the coefficient is tested by using t-statistic.

Hypothesis 9: The better-developed financial market economies are able to benefit more from FDI to promote their economic growth or not, comparing with poorer-developed financial market economies. According to Schumpeter, he states that the lack of development of local financial markets can limit the economy's capacity to enhance

technological innovation, capital accumulation and economic growth. Therefore, this study uses OECD countries and NON-OECD countries to represent the well functioning financial market and poor functioning financial market, respectively.

CHAPTER V
RESULTS

This chapter discusses descriptive data analysis and the results of model in the previous chapter which investigates the relationship among FDI, financial development indicators and growth of OECD countries and NON-OECD countries over 1980-2004 periods.

5.1 Descriptive Data Analysis

From Table 4-15, we can analyze descriptive data of control variables and financial marker variables as follows:

For OECD countries, the average FDI inflows variables are 1.68% of GDP, 5.08% of GDP and 13.51% of GDP, over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average FDI inflows variables are 2.27% of GDP, 4.72% of GDP and 4.57% of GDP, over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average FDI of both OECD countries and NON-OECD countries increased over time. In addition, the averages FDI inflows (% of GDP) of OECD countries are higher than that of NON-OECD countries.

For OECD countries, the average GDP are $16,888 million, $19,161 million and $21,074 million, over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average GDP are $3,563 million, $4,114 million and $4,266 million, over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average GDP of both OECD countries and NON-OECD countries increased over time. In addition, the averages GDP of OECD countries are higher than that of NON-OECD countries in every period.

For OECD countries, the average population growth rate variables are 0.67%, 0.56% and 0.53%, over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-

OECD countries, the average population growth rate variables are 2.06% of GDP, 1.74% and 1.49%, over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average population growth rate variables of both OECD countries and NON-OECD countries decreased over time. In addition, the average population growth rate of OECD countries is lower than that of NON-OECD countries.

For OECD countries, the average inflation rate variables are 81.73, 96.27 and 108.99, over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average inflation rate variables are 98.01, 104.72 and 100.10, over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average inflation rate variables of OECD increased over time.

For OECD countries, the average investment variables are 22.26 % of GDP, 23.09% of GDP and 21.97% of GDP, over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average investment variables are 23.09 % of GDP, 22.11% of GDP and 18.81% of GDP, over 1990-1995, 1996-2000 and 2001-2004, respectively.

For OECD countries, the average degree of openness variables are 66.78%, 80.83% and 87.42%, over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average degree of openness variables are 65.96% of GDP, 73.48% and 76.38%, over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average degree of openness variables of both OECD countries and NON-OECD countries increased over time. In addition, the averages degree of openness in OECD countries are higher than that in NON-OECD countries in every period.

The financial development indicators consist of eight variables as follows:

The first financial development indicator is DEPTH, the ratio of liquid liabilities to GDP. It represents the overall size of the financial sector. For OECD countries, the average DEPTH variables are 68.18, 74.23 and 70.00 over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average DEPTH variables are 52.38, 58.34

and 61.50 over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average DEPTH of both OECD countries and NON-OECD countries increased over time. In addition, the averages DEPTH of OECD countries are higher than that of NON-OECD countries in every period. In the other word, the OECD's size of financial sector is larger than that NON-OECD's size of financial sector.

The second financial development indicator is BANK, the ratio of deposit money bank domestic assets to deposit money bank domestic assets plus central bank domestic assets. It measures the degree of to which the central bank versus commercial banks are allocating credits. For OECD countries, the average BANK variables are 92.36, 95.14 and 96.60 over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average BANK variables are 78.82, 82.71 and 85.18 over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average BANK of both OECD countries and NON-OECD countries increased over time. In addition, the averages BANK of OECD countries are higher than that of NON-OECD countries in every period. In the other word, the allocation of existing funds for investment projects of OECD countries is better than that of NON-OECD countries.

The third financial development indicator is PRIVATE, the credit issued to private enterprises divided by credit issued to central and local governments plus credit issued to public and private enterprises. For OECD countries, the average PRIVATE variables are 67.23, 49.13 and 65.45 over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average PRIVATE variables are 63.44, 70.52 and 73.22 over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that average PRIVATE of OECD countries is lower than that of NON-OECD countries. In the other word, a redistribution of credit from public enterprises and government to private firms of OECD country is lower than that of NON-OECD countries.

The fourth financial development indicator is PRIVY, the credit issued to private enterprises divided by GDP. For OECD countries, the average PRIVY variables are 77.82, 81.57 and 93.59 over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-

OECD countries, the average PRIVY variables are 40.28, 52.05 and 50.00 over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average PRIVY of both OECD countries and NON-OECD countries increased over time. In addition, the averages PRIVY of OECD countries is higher than that of NON-OECD countries in every period. In the other word, the credit to the private sector as a share of GDP of OECD country is greater than that of NON-OECD countries.

The fifth financial development indicator is SPREAD, the variation between lending rate and deposit rate. It measures the efficiency of the financial sector. For OECD countries, the average SPREAD variables are 7.75, 4.35 and 3.96 over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average SPREAD variables are 30.13, 8.95 and 9.63 over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average PRIVY of OECD countries and NON-OECD countries decreased over time. In addition, the averages SPREAD of OECD countries are lower than that of NON-OECD countries in every period. In the other word, the efficiency of the financial sector of OECD country is better than that of NON-OECD countries.

The sixth financial development indicator is CAP, the value of listed shares divided by GDP. It measures the stock market size. For OECD countries, the average CAP variables are 36.29, 71.45 and 69.40 over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average CAP variables are 37.29, 46.06 and 49.81 over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average CAP of OECD countries and NON-OECD countries increased over time. In addition, the averages CAP of OECD countries are higher than that of NON-OECD countries in every period. In the other word, the stock market size of OECD country is larger than that of NON-OECD country. Therefore, the ability to mobilize capital and diversify risk of OECD countries is larger than that of NON-OECD countries.

The seventh financial development indicator is TURN. The turnover ratio equals the total value of shares traded on a country's stock exchanges divided by the stock market capitalization. It captures the relative size of stock market. For OECD countries, the

average TURN variables are 47.57, 73.58 and 83.24 over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average TURN variables are 25.58, 37.97 and 48.61 over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average TURN of both OECD countries and NON-OECD countries increased over time. In addition, the averages TURN of OECD countries are higher than that of NON-OECD countries in every period. In the other word, transaction cost in the stock market trading of OECD countries is lower than that of NON-OECD countries.

The last financial development indicator is LIQ, the valued traded ratio. It equals the total value of shares traded on a country's stock exchanges divided by GDP. It measures trading relative to the size of the economy. For OECD countries, the average LIQ variables are 14.33, 48.85 and 56.69 over 1990-1995, 1996-2000 and 2001-2004, respectively. For NON-OECD countries, the average LIQ variables are 12.75, 18.14 and 19.38 over 1990-1995, 1996-2000 and 2001-2004, respectively. This shows that the average TURN of both OECD countries and NON-OECD countries increased over time. In addition, the averages LIQ of OECD countries are higher than that of NON-OECD countries in every period. In the other word, the stock market size of OECD country is larger than that of NON-OECD countries.

5.2 Regression Analysis

This section divided into two parts; OECD countries regression results and NON-OECD countries regression results.

5.2.1 OECD Countries Results

The first financial development indicator is DEPTH (the ratio of liquid liabilities to GDP). The regression result is as follows;

$$GROWTH = -1.558 + 0.003*GDP - 0.369*POP + 0.101*INF + 0.498*INV + 0.004*DEPTH$$
$$(13.964)^{***} \quad (-1.421) \quad (4.450)^{***} \quad (10.386)^{***} \quad (0.627)$$
$$+ 0.001*(DEPTH*FDI) - 0.063*FDI - 0.025*OPEN - 0.092*INF(-1) - 0.415*INV(-1) -$$
$$(0.312) \quad (-0.581) \quad (-1.383) \quad (-3.995)^{***} \quad (-9.003)^{***}$$
$$0.003*GDP(-1) + 0.041*OPEN(-1) - 0.042*FDI(-1) + 0.005*INF(-2)$$
$$(-13.987)^{***} \quad (2.258)^{**} \quad (-0.842) \quad (0.679)$$

..... (5.1)

$R^2 = 0.7474$ D.W. stat = 2.255 F-stat = 67.281

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.1, this study finds that DEPTH, FDI, FDI(-1) and DEPTH*FDI do not have significantly positive effect on GROWTH at 10% significance level. The result shows that the size of the financial sector (DEPTH), FDI, one-period lagged FDI and the interaction between size of the financial sector (DEPTH) and FDI are not positively correlated with the economic growth.

The second financial development indicator is BANK (the ratio of deposit money bank domestic assets to deposit money bank domestic assets plus central bank domestic assets). The regression result is as follows;

GROWTH = -2.603 + 0.004*GDP + 0.064*POP + 0.115*INF + 0.486*INV + 3.095*BANK

(16.544)*** (0.241) (7.549)*** (12.419)*** (2.352)**

+ 0.204*(BANK*FDI) - 0.224*FDI - 0.021*OPEN - 0.119*INF(-1) - 0.445*INV(-1) -

(0.911) (-1.016) (-1.798)* (-7.358)*** (-11.746)***

0.004*GDP(-1) + 0.031*OPEN(-1) - 0.138*POP(-1) + 0.012*FDI(-1) + 0.006*INF(-2)

(-16.602)*** (2.605)*** (-0.521) (0.733) (0.870)

..... (5.2)

R^2 = 0.7125 D.W. stat = 2.259 F-stat = 85.380

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.2, this study finds that bank deposit (BANK) has a significantly positive effect on GROWTH at 5% significance level. The result shows that BANK is positively correlated with the growth. However, FDI, FDI(-1) and BANK*FDI do not have significantly positive effect on GROWTH at 10% significance level. It means that FDI, one-period lagged FDI and the interaction between BANK and FDI do not have any effect on the economic growth.

The third financial development indicator is PRIVATE (the credit issued to private enterprises divided by credit issued to central and local governments plus credit issued to public and private enterprises). The regression result is as follows;

GROWTH = -2.054 + 0.003*GDP + 0.379*POP + 0.139*INF + 0.628*INV +

(10.371)*** (0.813) (5.689)*** (10.177)***

1.833*PRIVATE – 0.576*(PRIVATE*FDI) + 0.200*FDI + 0.024*OPEN - 0.004*GDP(-1) –

(1.141) (-3.667)*** (1.802)* (2.713)*** (-10.380)***

0.151*INF(-1) – 0.520*INV(-1) + 0.107*FDI(-1)

(-6.263)*** (-8.974)*** (2.286)**

..... (5.3)

R^2 = 0.8011 D.W. stat = 2.156 F-stat = 55.922

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.3, this study finds that PRIVATE does not have significantly positive effect on GROWTH at 10% significance level. The result shows that private credit (PRIVATE) is not positively correlated with the growth. However, FDI and FDI(-1) have significantly positive effect on GROWTH at 10% and 5% significance level, respectively. The result shows that FDI and one-period lagged FDI are positively correlated with the economic growth. In addition, PRIVATE*FDI has a significantly negative effect on GROWTH at 1% significance level. It means that the interaction between private credit (PRIVATE) and FDI is negatively correlated with the economic growth.

The fourth financial development indicator is PRIVY (private enterprises divided by GDP). The regression result is as follows;

GROWTH = -1.171 + 0.003*GDP - 0.004*POP + 0.1099*INF + 0.517*INV + 0.504*PRIVY
(16.373)*** (-0.020) (7.423)*** (13.365)*** (1.175)
+ 0.030*(PRIVY*FDI) - 0.036*FDI + 0.013*OPEN - 0.435*INV(-1) - 0.107*INF(-1) +
(0.810) (-1.878)* (2.688)*** (-11.750)*** (-7.155)***
0.012*FDI(-1) - 0.004*GDP(-1) + 1.217e-05*GDP(-2)
(0.762) (-16.163)*** (0.349)

..... (5.4)

R^2 = 0.7179 D.W. stat = 2.251 F-stat = 97.084

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.4, this study finds that that PRIVY, FDI(-1) and PRIVY*FDI do not have significantly positive effect on GROWTH at 10% significance level. The result shows that between private credit divided by GDP (PRIVY), one-period lagged FDI and the interaction between PRIVY and FDI do not have any positively effect on the economic growth. However, FDI it has a significantly negative effect on GROWTH at 10% significance level. That is, FDI is negatively correlated with the economic growth.

The fifth financial development indicator is SPREAD (the variation between lending rate and deposit rate). The regression result is as follows;

GROWTH = -0.193 + 0.003*GDP - 0.118*POP + 0.039*INF + 0.460*INV - 0.008*SPREAD

(16.327)*** (-0.500) (2.116)** (11.827)*** (-0.159)

– 0.017*(SPREAD*FDI) + 0.064*FDI - 0.007*OPEN - 0.381*INV(-1) - 0.039*INF(-1) -

(-1.310) (1.118) (-0.580) (-10.243)*** (-2.127)**

0.003*FDI(-1) + 0.003*OPEN(-1) - 0.004*GDP(-1) + 0.023*OPEN(-2)

(-0.218) (0.179) (-16.478)*** (2.280)**

..... (5.5)

R^2 = 0.7440 D.W. stat = 2.185 F-stat = 88.330

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.5, this study finds that SPREAD, FDI, FDI(-1) and SPREAD*FDI do not have significantly effect on GROWTH at 10% significance level. The result shows that interest rate spread (SPREAD), FDI, one-period lagged FDI and interaction between SPREAD and FDI do not have any effect on the economic growth.

The sixth financial development indicator is CAP (the value of listed shares divided by GDP, measuring the stock market size). The regression result is as follows;

GROWTH = -1.556 + 0.003*GDP + 0.247*POP + 0.116*INF + 0.615*INV - 0.181*CAP +

(16.656)*** (0.967) (7.875)*** (14.929)*** (-0.463)

0.096*(CAP*FDI) - 0.095*FDI - 0.027*OPEN - 0.379*INV(-1) - 0.117*INF(-1) -

(2.135)** (-2.551)** (-1.831)* (-8.309)*** (-7.825)***

0.004*GDP(-1) + 0.039*OPEN(-1) + 0.011*FDI(-1) - 0.305*POP(-1) - 0.100*INV(-2) +

(-13.154)*** (2.676)*** (0.747) (-1.173) (-2.700)***

0.009*GDP(-2)

(3.719)***

..... (5.6)

R^2 = 0.7822 D.W. stat = 2.255 F-stat = 79.855

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.6, this study finds that CAP and FDI(-1) do not have a significantly positive effect on GROWTH at 10% significance level. It means that stock market size (CAP) and one-period lagged FDI are not positively correlated with the economic growth. For FDI, it has a significantly negative effect on GROWTH at 5% significance level. It means that FDI growth is negatively correlated with the economic growth. However, CAP*FDI has a significantly positive effect on GROWTH at 5% significance level. It means that the interaction between stock market size (CAP) and FDI is positively correlated with the economic growth.

The seventh financial development indicator is LIQ (the valued traded ratio, it equals the total value of shares traded on a country's stock exchanges divided by GDP). The regression result is as follows;

GROWTH = -1.141 + 0.004*GDP + 0.091*POP + 0.115*INF + 0.551*INV + 0.580*LIQ –
(15.027)*** (0.429) (7.815)*** (13.211)*** (1.727)*
0.026*(LIQ*FDI) - 0.014*FDI - 0.022*OPEN - 0.326*INV(-1) - 0.125*INF(-1) –
(-0.652) (-0.795) (-1.529) (-6.971)*** (-8.240)***
0.005*GDP(-1) + 0.014*FDI(-1) + 0.036*OPEN(-1) - 0.112*INV(-2) + 0.001*GDP(-2) +
(-13.602)*** (0.946) (2.514)** (2.696)*** (4.259)***
0.012*INV(-3)
(0.366)

..... (5.7)

R^2 = 0.7735 D.W. stat = 2.218 F-stat = 76.743

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.7, this study finds that LIQ has a significantly positive effect on GROWTH at 10% significance level. The result shows that the valued traded ratio (LIQ) has a positively effect on the economic growth. It is consistent with Levine (1991) who finds that greater value of LIQ indicates higher economic growth. However, FDI, FDI(-1) and LIQ*FDI do not have significantly positive effect on GROWTH at 10% significance

level. It means that FDI, one-period lagged FDI and interaction between the valued traded ratio (LIQ) and FDI are not positively correlated with the economic growth.

The eighth indicator is TURN (the turnover ratio equals the total value of shares traded on a country's stock exchanges divided by the stock market capitalization). The regression result is as follows;

$$GROWTH = -1.768 + 0.004*GDP + 0.071*POP + 0.120*INF + 0.565*INV + 0.734*TURN$$
$$(3.033)^{***} \quad (0.330) \quad (8.268)^{***} \quad (13.512)^{***} \quad (3.033)^{***}$$
$$- 0.064*(TURN*FDI) + 0.002*FDI - 0.021*OPEN - 0.327*INV(-1) - 0.127*INF(-1) -$$
$$(-1.727)^{*} \quad (0.092) \quad (-1.478) \quad (-7.138)^{***} \quad (-8.656)^{***}$$
$$0.005*GDP(-1) + 0.0119*FDI(-1) + 0.035*OPEN(-1) - 0.113*INV(-2) + 0.001*GDP(-2)$$
$$(-13.834)^{***} \quad (0.803) \quad (2.480)^{**} \quad (-3.092)^{***} \quad (3.809)^{***}$$
$$\ldots\ldots\ldots\ldots\ldots\ldots (5.8)$$

$R^2 = 0.7911$ D.W. stat = 2.237 F-stat = 88.068

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.8, this study finds that TURN has a significantly positive effect on GROWTH at 1% significance level. The result shows that TURN is positively correlated with the economic growth. For FDI and FDI(-1), they do not have a significantly positive effect on GROWTH at 10% significance level. It means that FDI and one-period lagged FDI do not have any positive effect on the economic growth.

However, TURN*FDI has a significantly negative effect on GROWTH at 10% significance level. It means that the interaction between the turnover ratio (TURN) and FDI is negatively correlated with the growth. There are alternative views about the effect of liquidity on long-term economic growth. Some analysts argue that very liquid markets encourage investor myopia. Bhide (1993) found that in liquid markets, investors can inexpensively sell their shares, so that they have fewer incentives to exert rigorous

corporate control. Thus, greater market development may hinder corporate control and economic growth.

From the regression results, they provide several findings about the relationship between financial market, FDI and the interaction between them; and the economic growth of OECD countries. For financial market indicators; bank deposit (BANK), valued traded ratio (LIQ) and turnover ratio (TURN) have significantly positive effect on the economic growth. That is, both banking sector and capital market can stimulate the economic growth. For FDI and one-period lagged FDI, they do not matter the economic growth so much. And for the interaction between FDI and financial market indicators; the interaction between FDI and market capitalization as a share of national output (CAP) has a significantly positive effect on the economic growth. That is, higher value of market capitalization accelerates the economic growth by attracting FDI inflows. Moreover the interaction between FDI and private credit (PRIVATE); and interaction between FDI and the turnover ratio (TURN) have significantly negative effect on the economic growth.

5.2.2 NON-OECD Countries Results

The first financial development indicator is DEPTH (the ratio of liquid liabilities to GDP). The regression result is as follows;

GROWTH = 1.836 - 0.003*GDP - 1.144*POP + 0.097*INF + 0.426*INV - 0.003*DEPTH +
(-2.442)** (-3.914)*** (6.671)*** (8.906)*** (-0.241)

0.002*(DEPTH*FDI) - 0.112*FDI - 0.017*OPEN - 0.369*INV(-1) - 0.048*INF(-1) +
(0.902) (-0.766) (-0.896) (-7.869)*** (-2.859)***

0.641*POP(-1) + 0.002*GDP(-1) + 0.259*FDI(-1) + 0.025*OPEN(-1) - 0.056*INF(-2) –
(2-240)** (2.315)** (3.099)*** (1.284) (-3.990)***

0.138*FDI(-2)
(-1.414)

..... (5.9)

R^2 = 0.4382 D.W. stat = 1.993 F-stat = 23.124

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.9, this study finds that that DEPTH, FDI and DEPTH*FDI do not have significantly positive effect on GROWTH at 10% significance level. The result shows that the size of the financial sector (DEPTH), FDI and the interaction between DEPTH and FDI are not positively correlated with the economic growth. However, FDI(-1) have significantly positive effect on GROWTH at 1% significance level. The result shows that one-period lagged FDI is positively correlated with the economic growth.

The second financial development indicator is BANK (the ratio of deposit money bank domestic assets to deposit money bank domestic assets plus central bank domestic assets). The regression result is as follows;

GROWTH = 3.425 - 0.003*GDP - 1.170*POP + 0.090*INF + 0.422*INV - 2.965*BANK +
(-2.460)** (-4.066)*** (6.820)*** (8.815)*** (-1.585)
0.729*(BANK*FDI) - 0.625*FDI - 0.0146*OPEN - 0.046*INF(-1) + 0.261*FDI(-1) -
(1.176) (-1.162) (-0.767) (-2.797)*** (3.155)***
0.345*INV(-1) + 0.631*POP(-1) + 0.003*GDP(-1) + 0.023*OPEN(-1) - 0.146*FDI(-2) -
(-7.427)*** (2.225)** (-2.357)** (1.173) (-1.530)
0.058*INF(-2)
(-4.120)***

..... (5.10)

R^2 = 0.4423 D.W. stat = 2.020 F-stat = 22.857

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.10, this study finds that bank deposit (BANK), FDI and BANK*FDI do not have significantly positive effect on GROWTH at 10% significance level. This result shows that BANK, FDI and the interaction between BANK and FDI do not have any effect on the economic growth. However, FDI(-1) have significantly positive effect on GROWTH

at 1% significance level. The result shows that one-period lagged FDI is positively correlated with the economic growth.

The third financial development indicator is PRIVATE (the credit issued to private enterprises divided by credit issued to central and local governments plus credit issued to public and private enterprises). The regression result is as follows;

GROWTH = 0.149 - 0.0002*GDP - 0.920*POP + 0.131*INF + 0.451*INV - 0.333*PRIVATE
(-1.556) (-2.521)** (7.016)*** (7.900)*** (-0.119)
– 0.271*(PRIVATE*FDI) + 0.179*FDI + 0.005*OPEN - 0.075*INF(-1) + 1.064*POP(-1) –
(-0.365) (0.354) (0.495) (-3.536)*** (3.091)***
0.050*INF(-2) - 0.618*POP(-2) + 0.312*FDI(-1) - 0.389*INV(-1)
(-2.804)*** (-1.796)* (3.358)*** (-7.304)***

..... (5.11)

R^2 = 0.4695 D.W. stat = 2.003 F-stat = 19.351

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.11, this study finds that PRIVATE, PRIVATE*FDI and FDI do not have significantly positive effect on GROWTH at 10% significance level. This result shows that private credit (PRIVATE), FDI and the interaction between PRIVATE and FDI do not have any effect on the economic growth. However, FDI(-1) have significantly positive effect on GROWTH at 1% significance level. The result shows that one-period lagged FDI is positively correlated with the economic growth.

The fourth financial development indicator is PRIVY (private enterprises divided by GDP). The regression result is as follows;

GROWTH = 2.273 - 0.0001*GDP - 0.968*POP + 0.097*INF + 0.429*INV - 0.746*PRIVY +
(-1.349) (-3.262)*** (7.071)*** (9.074)*** (-0.652)
0.200*(PRIVY*FDI) - 0.144*FDI + 0.006*OPEN - 0.060*INF(-1) + 0.855*POP(-1) +
(1.161) (-1.027) (0.916) (-3.910)*** (3.000)***

0.245*FDI(-1) - 0.340*INV(-1) - 0.047*INF(-2) - 0.655*POP(-2) - 0.173*FDI(-2)

(3.039)*** (-7.350)*** (-3.496)*** (-2.229)** (-1.846)*

..... (5.12)

R^2 = 0.4720 D.W. stat = 2.071 F-stat = 25.752

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.12, this study finds that PRIVY, PRIVY*FDI and FDI do not have significantly positive effect on GROWTH at 10% significance level. The result shows that PRIVY, interaction between PRIVY and FDI are not positively correlated with the economic growth. However, FDI(-1) have significantly positive effect on GROWTH at 1% significance level. The result shows that one-period lagged FDI is positively correlated with the economic growth.

The fifth financial development indicator is SPREAD (the variation between lending rate and deposit rate). The regression result is as follows;

GROWTH = 1.561 - 0.003*GDP - 0.998*POP + 0.109*INF + 0.490*INV - 0.002*SPREAD –

(-2.768)*** (-3.570)*** (7.054)*** (9.552)*** (-1.047)

0.001*(SPREAD*FDI) + 0.010*FDI + 0.006*OPEN - 0.403*INV(-1) - 0.065*INF(-1) +

(-0.063) (0.102) (0.813) (-8.112)*** (-3.913)***

0.664*POP(-1) + 0.256*FDI(-1) + 0.003*GDP(-1) - 0.062*INF(-2) - 0.122*FDI(-2)

(2.413)** (3.180)*** (2.674)*** (-3.903)*** (-1.296)

..... (5.13)

R^2 = 0.5119 D.W. stat = 2.010 F-stat = 26.940

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.13, this study finds that SPREAD, SPREAD*FDI and FDI do not have significantly positive effect on GROWTH at 10% significance level. The result shows that interest rate spread (SPREAD), interaction between SPREAD and FDI, and FDI are not positively correlated with the economic growth. However, FDI(-1) have significantly

positive effect on GROWTH at 1% significance level. The result shows that one-period lagged FDI is positively correlated with the economic growth.

The sixth financial development indicator is CAP (the value of listed shares divided by GDP, measuring the stock market size). The regression result is as follows;

GROWTH = 0.049 - 0.003*GDP - 1.163*POP + 0.121*INF + 0.448*INV + 0.026*CAP +
(-2.316)** (-3.867)*** (7.314)*** (8.891)*** (0.025)
0.086*(CAP*FDI) - 0.083*FDI - 0.022*OPEN + 0.674*POP(-1) - 0.373*INV(-1) -
(0.514) (-0.657) (-1.025) (2.304)** (-7.494)***
0.055*INF(-1) + 0.003*GDP(-1) + 0.257*FDI(-1) + 0.026*OPEN(-1) - 0.056*INF(-2) -
(-2.779)*** (2.251)** (2.977)*** (1.218) (-3.519)***
0.169*FDI(-2)
(-1.660)

..... (5.14)

R^2 = 0.4416 D.W. stat = 1.979 F-stat = 19.167

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.14, this study finds that CAP, FDI and CAP*FDI do not have significantly positive effect on GROWTH at 10% significance level. It means that the stock market size (CAP), FDI and the interaction between CAP and FDI are not positively correlated with the economic growth. However, FDI(-1) have significantly positive effect on GROWTH at 1% significance level. The result shows that one-period lagged FDI is positively correlated with the economic growth.

The seventh financial development indicator is LIQ (the valued traded ratio, it equals the total value of shares traded on a country's stock exchanges divided by GDP). The regression result is as follows;

GROWTH = 1.150 - 0.003*GDP - 0.862*POP + 0.106*INF + 0.431*INV + 2.032*LIQ -

(-2.848)*** (-2.695)*** (6.933)*** (8.391)*** (1.339)

0.074*(LIQ*FDI) - 0.019*FDI + 0.005*OPEN + 0.830*POP(-1) - 0.058*INF(-1) +

(-0.276) (-0.098) (0.667) (2.751)*** (-3.380)***

0.244*FDI(-1) + 0.003*GDP(-1) - 0.362*INV(-1) - 0.193*FDI(-2) - 0.707*POP(-2) -

(2.647)*** (2.777)*** (-7.288)*** (-1.771)* (-2.276)**

0.049*INF(-2)

(-3.105)***

..... (5.15)

R^2 = 0.4547 D.W. stat = 1.976 F-stat = 19.569

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.15, this study finds that that LIQ, FDI and LIQ*FDI do not have significantly positive effect on GROWTH at 10% significance level. It means that the valued traded ratio (LIQ), FDI and interaction between LIQ and FDI do not have any effect on the economic growth. However, FDI(-1) have significantly positive effect on GROWTH at 1% significance level. The result shows that one-period lagged FDI is positively correlated with the economic growth.

The eighth indicator is TURN (the turnover ratio equals the total value of shares traded on a country's stock exchanges divided by the stock market capitalization). The regression result is as follows;

GROWTH = 0.037 - 0.0001*GDP - 1.147*POP + 0.127*INF + 0.432*INV + 0.157*TURN +

(-1.444) (-3.830)*** (8.055)*** (8.443)*** (0.302)

0.045*(TURN*FDI) - 0.020*FDI + 0.0004*OPEN - 0.375*INV(-1) - 0.072*INF(-1) +

(0.259) (-0.215) (0.064) (-7.473)*** (-3.879)***

0.792*POP(-1) + 0.276*FDI(-1) - 0.044*INF(-2) - 0.158*FDI(-2)

(2.671)*** (3.161)*** (-2.707)*** (-1.582)

..... (5.16)

R^2 = 0.4332 D.W. stat = 1.997 F-stat = 20.380

Notes: T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

From equation 5.16, this study finds that TURN, FDI and TURN*FDI do not have significantly positive effect on GROWTH at 10% significance level. It means that TURN, FDI and the interaction between TURN and FDI are not positively correlated with the economic growth. However, FDI(-1) have significantly positive effect on GROWTH at 1% significance level. The result shows that one-period lagged FDI is positively correlated with the economic growth.

From the regression results, they provide several findings about the relationship between financial market, FDI, the interaction between them; and the economic growth of NON-OECD countries. For financial market indicators; all financial market indicators do not have significantly positive effect on the economic growth. Similarly, for FDI, it does not have significantly positive effect on the economic growth. But one-period lagged FDI has a significantly positive effect on the economic growth. And for the interaction between FDI and financial market indicators; the interaction between FDI and all financial market indicators do not have significantly positive effect on the economic growth. That is, only one-period lagged FDI is positively correlated with the economic growth.

Since this study uses OECD countries and NON-OECD countries to represent the well functioning financial market and poor functioning financial market, respectively. We can conclude that the better-developed financial market economies are able to benefit more from FDI to promote their economic growth, comparing with poorer-developed financial market economies. Therefore, the financial market development facilitates FDI to promote the economic growth.

CHAPTER VI
CONCLUSION AND RECOMMENDATION

This chapter provides the conclusion, policy recommendation and limitation of this study.

6.1 Conclusion

Foreign direct investment (FDI) has played an important role to the economic growth of the host countries because of several positive effects. For example, FDI provides productivity gains, technology transfers, know-how, employee training, and more competition, which promote the economic growth of the host countries. Therefore, most countries continue to liberalize their investment environment in order to attract FDI inflows. Although such policies can be very effective in attracting FDI, the potential of a country to take advantage from the technology spillovers might be limited by local conditions, such as economic, institutional, and technological conditions in the host country.

In an effort to further examine the effects of FDI on economic growth, this study emphasizes on the role of financial institutions as a channel of economic growth. This paper examines how financial development will facilitate FDI in order to promote economic growth. This is, the better-developed financial markets economies are able to benefit more from FDI to accelerate the economic growth.

This study focuses on the role of FDI on economic growth through the financial markets of the developed countries (OECD countries) and the developing countries (NON-OECD countries) between 1980 and 2004. The sources of data are provided from World Bank Financial structure Database and WDI 2004 CD-ROM. This study uses the model to quantitatively measure how the response of growth to FDI varies with the level of development of the financial markets. For the set of financial market variables, it is divided into two categories, which are money market (banking sector) and capital market (stock market). The banking sector variables in this paper use (1) liquid liabilities of banks and

non-bank financial intermediaries (currency + demand and interest-bearing liabilities) over GDP, (2) bank credit over the sum of bank credit and central bank domestic assets, (3) credit issued to private enterprises divided by credit issued to central and local governments plus credit issued to public and private, and (4) credit to private enterprises over GDP, and (5) the variation between lending rate and deposit rate.

For the stock market development indicators, this paper uses the market capitalization ratio, equals the value of listed shares divided by GDP, the total value traded/GDP ratio equals total shares traded on the stock market exchange divided by GDP, and the turnover ratio, equals the value of total shares traded on a country's stock exchanges divided by stock market capitalization (the value of listed shares on a country's stock exchanges), All hypotheses are tested by running OLS regression of financial market indicators and FDI plus core explanatory variables; investment, inflation rate, population growth, real per capita GDP and degree of openness.

The regression results provide several findings about the relationship between FDI, financial market indicators and the interaction between them; and the economic growth as follows:

- For OECD countries, the financial market indicators; bank deposits (BANK), valued traded ratio (LIQ) and turnover ratio (TURN) have significantly positive effect on the economic growth. We can see that both banking sector and capital market can stimulate the economic growth. For FDI and one-period lagged FDI, they do not matter the economic growth so much. And for the interaction between FDI and financial market indicators; the interaction between FDI and market capitalization as a share of national output (CAP) has a significantly positive effect on the economic growth. However, the interaction between FDI and private credit (PRIVATE); and interaction between FDI and turnover ratio (TURN) have significantly negative effect on the economic growth.

- For NON-OECD countries, the financial market indicators; all financial market indicators do not have significantly positive effect on the economic growth. Similarly, FDI

does not have significantly positive effect on the economic growth. But one-period lagged FDI has a significantly positive effect on the economic growth. And for the interaction between FDI and financial market indicators; the interaction between FDI and all financial market indicators do not have significantly positive effect on the economic growth.

This study uses OECD countries and NON-OECD countries to represent the well functioning financial market and poor functioning financial market, respectively. We can conclude that the better-developed financial market economies are able to benefit more from FDI to promote their economic growth, comparing with poorer-developed financial market economies. Therefore, the financial market development facilitates FDI to promote economic growth.

From the regression results above, we can conclude that the different structure of economic development leads to different ways in order to promote the economic growth. For OECD countries, which financial markets are well-functioning, comparing with NON-OECD countries, the financial market development plays an important role for economic development. From our empirical study, bank deposits (BANK), valued traded ratio (LIQ) and turnover ratio (TURN) have significantly positive effect on the economic growth. That is, financial market development in both banking sector and capital market can stimulate the economic growth. Moreover, higher value of market capitalization (CAP) accelerates the economic growth by attracting FDI inflows.

For NON-OECD countries, which financial markets are poor-functioning, comparing with OECD countries, the financial market development and the interaction between financial market and FDI do not have any effect on the economic growth. However, one-period lagged FDI plays a major role for accelerating economic growth. That is higher value of FDI inflows in last year leads to higher economic growth.

Therefore, in order to accelerate the economic growth, the policy maker should investigate whether a country is an OECD country or a NON-OECD country, and apply the appropriate policy. That is, if the country is an OECD country, the policy maker should

pursue the financial market development policy in order to accelerate the economic growth. Conversely, if the country is a NON-OECD country, the policy maker should pursue attracting FDI policy in order to accelerate the economic growth.

6.2 Policy Recommendation

From our empirical study, the better-developed financial market economies are able to benefit more from FDI to promote their economic growth, comparing with poorer-developed financial market economies. The policy maker should pursue the financial market development policy, both banking sector and capital market, in order to accelerate the economic growth. There needs to be adequate regulation for listed companies and good governance of institutional investors to ensure proper intermediation. These elements increase the rights of shareholders in the case of poor management performance and enhance their influence on the company's policy. In addition, price stability and confidence in the consistency of future economic policies are necessary preconditions for establishing an environment conducive to investment. A sustainable external debt situation and an efficient debt management system are other characteristics of macro-economic stability.

Conversely, if the country has low economic development, the policy maker should pursue attracting FDI policy in order to accelerate the economic growth. The policy maker should encourage sound macroeconomic policies that promote sustainable growth and address macro vulnerabilities. Improve the general investment environment on the regulatory side by eliminating macro-economic imbalances, increasing the predictability of economic policy and developing the intermediating financial sector. Moreover, the policy maker should promote infrastructure and local business development, and adapting to changing demands of investors. The infrastructure with appropriate structure (physical, technological, transport-forwarding, telecommunication, information technologies) plays a major role, and so does education (education, training, labour force in an appropriate qualification structure).

6.3 Limitation

The limitation of this study is related to data. Because we collect data of OECD countries and NON-OECD countries between 1980 and 2004, some variables in many countries do not available.

In addition, this study focuses on the role of local financial institution in allowing FDI benefit to the host country. However, a country's capacity to take advantage from FDI spillovers is limited by many local conditions, such as economic, institutional, and technological conditions.

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APPENDICES

Table 4: Control Variables of OECD Countries over 1990-1995 Periods.

Country	FDI	GDP	POP	INF	INV	OPEN
Australia	1.98	16703.16	1.19	87.14	22.02	36.86
Austria	0.64	20269.46	0.68	88.91	24.06	74.88
Belgium	4.36	18983.32	0.33	88.06	20.82	132.99
Canada	1.10	22686.47	1.16	88.44	19.12	59.92
Czech Republic	1.45	13185.88	-0.05	73.73	27.32	102.38
Denmark	1.59	25155.32	0.31	86.06	18.53	66.33
Finland	0.68	18423.58	0.48	85.91	20.26	55.43
France	1.38	19419.32	0.41	90.60	20.52	42.44
Germany	0.20	20365.07	0.60	90.31	23.37	48.82
Greece	1.09	8827.47	0.88	59.53	21.16	43.52
Hungary	4.84	3737.20	-0.27	32.62	21.11	67.22
Iceland	0.80	14500.76	0.98	79.79	18.25	65.83
Ireland	2.13	15499.66	0.43	76.09	17.68	121.43
Italy	0.35	16507.98	0.16	78.19	20.15	41.71
Japan	0.03	34432.64	0.31	103.19	30.33	17.43
Korea	0.27	7818.66	1.03	71.77	37.48	55.84
Luxembourg	NA	32655.59	1.35	80.28	24.38	202.19
Mexico	1.79	5100.13	1.83	76.45	22.15	40.07
Netherlands	2.38	19175.34	0.67	85.61	21.21	104.08
New Zealand	4.75	11692.48	1.30	87.68	19.66	57.74
Norway	0.78	29479.67	0.52	73.49	21.62	70.80
Poland	1.32	3046.64	0.27	76.30	18.73	47.30
Portugal	2.07	8483.26	0.15	72.46	24.70	65.46
Slovak Republic	0.74	3124.91	0.21	86.74	27.16	108.01
Spain	2.01	11446.89	0.19	77.17	23.56	38.90
Sweden	2.36	22473.88	0.65	87.86	18.48	60.51
Switzerland	1.23	32057.99	0.96	94.69	25.20	66.96
Turkey	2.36	2574.62	1.96	103.12	24.25	35.35
United Kingdom	1.86	20018.66	0.26	82.42	17.10	51.53
United States	2.26	28783.53	1.26	87.20	17.27	21.32
Mean	1.68	16887.65	0.67	81.73	22.26	66.78
Maximum	4.84	34432.64	1.96	103.19	37.48	202.19
Minimum	0.03	2574.62	-0.27	32.62	17.10	17.43
Std. Dev.	1.24	9220.01	0.54	13.04	4.31	37.66

Table 5: Control Variables of OECD Countries over 1996-2000 Periods.

Country	FDI	GDP	POP	INF	INV	OPEN
Australia	1.85	19412.41	1.20	94.75	23.12	41.89
Austria	2.26	22457.51	0.16	98.11	24.25	88.50
Belgium	34.03	21005.55	0.23	97.30	20.49	148.76
Canada	4.05	25399.66	0.94	95.84	20.29	80.72
Czech Republic	6.07	14792.44	-0.11	108.65	29.56	114.60
Denmark	7.69	28305.87	0.42	95.84	20.42	71.90
Finland	4.63	21285.39	0.25	95.95	19.29	69.75
France	2.30	20980.54	0.36	98.30	19.19	49.51
Germany	3.17	21791.30	0.14	99.34	21.64	57.26
Greece	0.78	9613.59	0.53	92.69	21.53	50.18
Hungary	4.47	4217.74	-0.40	82.46	28.11	123.81
Iceland	2.41	21123.06	0.95	93.85	22.35	75.05
Ireland	13.16	17607.52	1.14	91.73	23.06	158.83
Italy	0.53	17857.46	0.17	95.92	19.34	49.87
Japan	0.12	36748.89	0.23	102.50	27.39	19.54
Korea	1.29	10021.11	0.83	96.46	31.99	70.80
Luxembourg	0.00	39422.99	1.35	94.12	23.28	242.91
Mexico	2.90	5497.48	1.44	83.92	24.19	62.66
Netherlands	8.78	21905.65	0.59	95.08	21.74	117.74
New Zealand	3.67	12997.41	0.98	96.16	21.05	60.87
Norway	3.19	35633.76	0.59	85.61	23.45	73.66
Poland	3.98	3958.95	0.03	105.73	23.52	55.44
Portugal	2.81	9759.72	0.40	93.56	27.05	69.89
Slovak Republic	3.26	3571.99	0.10	109.20	31.40	128.66
Spain	2.69	12968.15	0.65	94.46	23.52	54.58
Sweden	9.37	25014.13	0.09	97.96	17.20	77.81
Switzerland	4.11	32871.62	0.39	99.10	22.71	76.04
Turkey	9.37	2898.19	1.76	100.80	24.34	52.37
United Kingdom	4.99	23034.00	0.22	95.99	17.46	56.77
United States	4.34	32687.74	1.16	96.72	19.76	24.50
Mean	5.08	19161.39	0.56	96.27	23.09	80.83
Maximum	34.03	39422.99	1.76	109.20	31.99	242.91
Minimum	0.00	2898.19	-0.40	82.46	17.20	19.54
Std. Dev.	6.25	10315.13	0.51	5.91	3.75	45.31

Table 6: Control Variables of OECD Countries over 2001-2004 Periods.

Country	FDI	GDP	POP	INF	INV	OPEN
Australia	3.31	21426.86	1.19	106.99	23.72	42.49
Austria	1.96	24220.88	0.32	104.62	23.03	103.39
Belgium	32.42	22600.34	0.37	104.63	19.99	164.76
Canada	2.05	28240.50	0.90	104.34	19.94	80.53
Czech Republic	7.86	16926.85	-0.22	138.69	27.97	129.67
Denmark	2.99	30345.33	0.27	104.90	20.33	82.09
Finland	3.48	24132.48	0.21	104.33	19.46	69.16
France	2.73	22792.65	0.46	104.62	19.83	52.28
German	0.90	22971.50	0.13	103.29	18.48	67.93
Greece	0.60	11244.22	0.36	109.24	24.72	50.45
Hungary	4.15	5035.44	0.12	121.82	25.37	141.61
Iceland	2.45	27614.95	0.79	114.17	20.70	77.76
Ireland	14.51	17578.25	1.31	111.18	23.05	175.25
Italy	1.24	19103.68	-0.05	107.19	19.75	52.86
Japan	0.17	38047.92	0.18	95.84	24.55	21.10
Korea	0.73	12035.50	0.60	107.90	29.22	72.08
Luxembourg	275.85	46191.01	0.68	104.11	22.18	275.35
Mexico	2.76	5854.44	1.44	108.75	20.99	58.39
Netherlands	7.78	23227.82	0.51	109.93	21.20	122.75
New Zealand	2.04	14422.34	1.28	107.03	21.26	65.29
Norway	0.66	38438.24	0.50	102.27	18.89	70.63
Poland	2.40	4595.05	-0.32	117.69	19.50	53.75
Portugal	3.01	10419.88	0.52	110.45	26.49	69.71
Slovak Republic	8.78	4180.90	0.00	130.60	27.78	159.69
Spain	3.60	14590.25	0.48	111.13	25.70	59.14
Sweden	3.97	27939.33	0.32	104.80	16.84	82.57
Switzerland	3.31	34135.20	0.69	102.51	21.47	83.13
Turkey	3.97	2930.33	1.55	104.30	21.65	59.65
United Kingdom	2.55	25592.60	0.22	107.31	16.64	55.34
United States	3.20	35386.50	0.98	105.06	18.40	23.82
Mean	13.51	21074.04	0.53	108.99	21.97	87.42
Maximum	275.85	46191.01	1.55	138.69	29.22	275.35
Minimum	0.17	2930.33	-0.32	95.84	16.64	21.10
Std. Dev.	49.91	11238.64	0.48	8.58	3.29	53.03

Table 7: Control Variables of NON-OECD Countries over 1990-1995 Periods.

Country	FDI	GDP	POP	INF	INV	OPEN
Argentina	1.86	6777.92	1.10	94.97	17.04	16.26
Bangladesh	0.02	275.16	1.87	104.00	17.79	22.11
Brazil	0.58	6561.02	1.53	99.65	20.69	17.75
Cameroon	0.47	577.66	2.84	144.50	24.64	38.67
Chile	4.01	3660.56	1.64	87.58	15.86	60.29
Colombia	1.63	1950.78	1.95	82.33	20.63	35.12
Cyprus	2.12	9496.42	1.45	101.22	25.53	101.78
Egypt	1.40	1265.00	2.11	66.55	19.69	56.11
Ghana	1.49	223.47	2.65	168.67	18.22	51.22
India	0.26	333.84	1.88	99.68	30.86	51.36
Indonesia	1.48	715.10	1.60	114.17	23.49	19.22
Israel	1.68	15499.66	3.41	84.25	25.19	77.89
Jamaica	3.19	2970.36	0.72	63.77	27.45	107.82
Jordan	0.95	1639.68	5.28	85.70	32.34	134.17
Kenya	0.24	362.63	2.73	84.13	17.51	65.59
Malaysia	6.70	2957.60	2.57	109.08	38.26	164.47
Pakistan	0.77	488.65	2.51	87.90	19.52	164.47
Peru	2.57	1745.92	1.99	95.70	19.58	28.78
Philippines	1.88	897.11	2.27	95.72	22.70	68.63
Singapore	14.94	16525.57	3.08	102.87	35.22	NA
South Africa	1.03	2989.05	2.10	117.00	16.54	41.33
Sri Lanka	1.07	666.92	1.18	91.50	24.67	73.93
Thailand	1.99	1709.75	1.18	123.00	41.09	80.90
Trinidad Tobago	5.97	4920.44	0.67	84.18	16.27	80.42
Uruguay	0.40	5297.31	0.75	83.58	14.94	39.53
Venezuela	2.35	5129.82	2.22	55.50	17.27	54.78
Zimbabwe	0.28	576.92	2.41	119.17	20.48	62.31
Mean	2.27	3563.49	2.06	98.01	23.09	65.96
Maximum	14.94	16525.57	5.28	168.67	41.09	164.47
Minimum	0.02	223.47	0.67	55.50	14.94	16.26
Std. Dev.	3.00	4320.06	0.97	23.59	7.07	40.85

Table 8: Control Variables of NON-OECD Countries over 1996-2000 Periods.

Country	FDI	GDP	POP	INF	INV	OPEN
Argentina	4.78	7870.77	0.99	101.20	18.32	22.36
Bangladesh	0.36	324.00	1.74	106.00	21.84	31.29
Brazil	4.17	7158.00	1.29	122.18	21.10	19.29
Cameroon	NA	563.41	2.39	110.80	25.07	49.72
Chile	10.90	4815.85	1.36	102.58	16.85	57.49
Colombia	4.25	2041.12	1.87	113.40	17.87	36.92
Cyprus	10.87	11182.75	0.67	109.00	16.15	77.33
Egypt	1.24	1455.39	1.90	91.86	18.95	42.58
Ghana	2.33	243.76	2.25	149.00	22.79	87.37
India	0.67	420.25	1.72	102.60	22.39	68.76
Indonesia	3.70	826.75	1.36	100.64	22.41	24.69
Israel	3.77	17607.52	2.52	99.84	23.42	76.34
Jamaica	5.68	3004.36	0.79	94.06	28.23	93.89
Jordan	4.20	1715.51	3.05	97.70	24.37	115.22
Kenya	0.33	358.03	2.40	101.98	16.20	61.77
Malaysia	5.26	3734.97	2.43	106.94	32.16	204.67
Pakistan	0.97	521.11	2.41	94.44	17.51	204.67
Peru	4.03	2031.84	1.69	108.32	22.48	32.38
Philippines	2.45	963.24	2.29	108.62	21.81	104.13
Singapore	22.41	20947.42	2.61	109.48	34.54	NA
South Africa	2.18	3003.32	2.35	110.20	16.65	49.92
Sri Lanka	1.58	821.89	1.33	104.20	25.82	80.99
Thailand	3.93	2021.54	0.71	113.34	27.85	102.04
Trinidad Tobago	11.60	5738.61	0.44	88.26	25.76	101.01
Uruguay	0.91	6126.32	0.64	105.00	15.09	39.73
Venezuela	5.31	4981.59	1.96	79.86	24.94	46.35
Zimbabwe	NA	609.17	1.95	95.92	16.50	79.46
Mean	4.72	4114.39	1.74	104.72	22.11	73.48
Maximum	22.41	20947.42	3.05	149.00	34.54	204.67
Minimum	0.33	243.76	0.44	79.86	15.09	19.29
Std. Dev.	4.85	5194.76	0.71	12.45	5.00	47.54

Table 9: Control Variables of NON-OECD Countries over 2001-2004 Periods.

Country	FDI	GDP	POP	INF	INV	OPEN
Argentina	6.48	7058.26	0.85	60.78	14.75	35.08
Bangladesh	0.16	376.33	1.74	98.45	23.27	34.76
Brazil	3.82	7496.86	1.24	82.68	19.40	31.45
Cameroon	NA	626.66	2.04	113.23	22.55	54.58
Chile	7.30	5193.17	1.19	91.73	17.66	67.11
Colombia	3.40	2010.17	1.70	95.85	14.98	41.89
Cyprus	14.13	12834.98	0.61	122.70	NA	NA
Egypt	0.53	1616.07	1.79	80.30	17.00	44.19
Ghana	1.48	271.98	1.80	123.50	24.13	97.07
India	0.89	498.09	1.52	107.65	20.89	64.21
Indonesia	2.68	860.98	1.34	116.45	17.00	30.36
Israel	4.30	17578.25	1.94	95.65	18.62	80.98
Jamaica	8.50	2928.56	0.81	100.43	24.42	97.62
Jordan	1.77	1821.14	2.68	103.50	22.13	112.99
Kenya	0.31	342.33	1.88	123.25	13.35	57.50
Malaysia	5.74	3980.31	2.00	103.28	22.43	213.57
Pakistan	0.82	542.77	2.41	100.60	17.13	213.57
Peru	3.14	2110.39	1.50	105.00	18.72	35.04
Philippines	1.64	1030.18	1.99	94.48	17.50	101.29
Singapore	22.35	22426.33	1.90	98.35	20.56	NA
South Africa	4.48	3160.56	1.36	105.00	16.56	57.76
Sri Lanka	1.25	905.90	1.29	101.70	22.56	78.89
Thailand	2.07	2217.09	0.67	99.53	25.02	124.04
Trinidad Tobago	11.34	7107.61	0.66	109.00	19.76	98.39
Uruguay	2.07	5497.24	0.57	74.10	13.28	46.60
Venezuela	3.66	4452.86	1.80	89.63	21.32	46.32
Zimbabwe	NA	248.15	0.97	105.75	4.02	44.17
Mean	4.57	4266.42	1.49	100.10	18.81	76.38
Maximum	22.35	22426.33	2.68	123.50	25.02	213.57
Minimum	0.16	248.15	0.57	60.78	4.02	30.36
Std. Dev.	5.09	5464.80	0.57	14.47	4.53	49.59

Table 10: Financial Development Indicators of OECD Countries over 1990-1995 Periods.

Country	DEPTH	BANK	PRIVATE	PRIVY	SPREAD	CAP	TURN	LIQ
Australia	56.62	96.56	NA	62.99	4.49	51.71	37.43	19.75
Austria	NA	99.67	NA	88.66	NA	10.97	63.04	6.83
Belgium	NA	98.78	NA	10.75	5.65	33.65	12.92	4.34
Canada	77.24	94.20	67.68	91.76	3.49	50.54	40.54	21.08
Czech Republic	NA	96.45	NA	67.88	6.31	19.57	33.56	4.90
Denmark	59.04	96.82	NA	39.91	5.25	29.54	41.73	12.26
Finland	58.36	98.74	NA	81.55	4.57	21.73	29.01	7.24
France	NA	98.94	NA	90.67	4.78	29.68	48.12	14.65
German	69.72	99.27	NA	94.10	5.94	20.97	106.93	22.40
Greece	NA	72.58	NA	31.13	8.45	13.14	28.06	3.70
Hungary	50.54	41.61	NA	33.00	7.10	2.65	15.40	0.43
Iceland	38.36	94.01	NA	44.02	6.45	8.81	7.29	0.48
Ireland	50.83	98.23	85.17	64.49	6.21	NA	NA	13.77
Italy	70.74	88.29	NA	57.51	6.72	14.37	38.42	5.71
Japan	186.72	96.78	57.82	196.48	2.82	80.84	33.42	27.77
Korea	60.53	97.92	58.11	97.86	0.03	37.09	116.40	42.27
Luxembourg	NA	99.21	NA	110.06	2.10	117.50	1.99	2.28
Mexico	27.49	89.69	NA	24.74	8.31	30.76	41.30	12.37
Netherlands	NA	99.00	63.89	133.44	6.81	53.99	47.65	28.34
New Zealand	77.39	96.46	104.82	86.05	4.21	39.43	25.32	10.37
Norway	58.32	97.33	69.80	93.78	3.69	21.82	46.56	10.16
Poland	34.02	83.46	NA	16.56	78.70	1.91	122.58	2.00
Portugal	NA	95.56	NA	56.72	6.89	13.33	31.51	4.13
Slovak Republic	NA	86.99	NA	40.17	6.49	6.04	71.10	2.53
Spain	NA	96.71	NA	76.15	3.47	24.49	36.65	9.00
Sweden	50.80	89.60	42.29	126.14	6.54	47.45	41.32	21.06
Switzerland	138.95	99.19	NA	159.53	1.77	88.20	64.30	62.27
Turkey	NA	82.06	92.88	13.42	NA	12.82	95.06	12.46
United Kingdom	NA	97.48	NA	110.06	1.96	100.45	37.64	0.03
United States	61.59	89.28	29.83	134.88	NA	68.96	64.39	45.20
Mean	68.18	92.36	67.23	77.82	7.75	36.29	47.57	14.33
Maximum	186.72	99.67	104.82	196.48	78.70	117.50	122.58	62.27
Minimum	27.49	41.61	29.83	10.75	0.03	1.91	1.99	0.03
Std. Dev.	37.87	11.49	22.62	44.63	14.33	30.04	30.40	14.72

Table 11: Financial Development Indicators of OECD Countries over 1996-2000 Periods.

Country	DEPTH	BANK	PRIVATE	PRIVY	SPREAD	CAP	TURN	LIQ
Australia	65.37	95.77	NA	77.62	4.64	84.45	53.37	45.12
Austria	NA	99.61	NA	95.84	3.60	16.13	42.15	6.72
Belgium	NA	99.46	NA	7.94	4.32	67.67	24.59	16.84
Canada	75.75	95.35	64.04	95.94	3.40	93.13	61.30	57.68
Czech Republic	NA	97.15	NA	60.73	4.78	23.32	45.14	10.61
Denmark	56.84	96.62	NA	42.67	5.09	53.43	65.99	36.33
Finland	50.47	99.28	NA	53.72	3.98	130.51	51.39	71.08
France	NA	99.41	NA	81.87	3.41	67.38	64.20	44.88
Germany	76.20	99.67	NA	110.59	6.47	47.84	83.39	37.83
Greece	NA	81.48	NA	37.93	7.32	69.56	77.46	60.97
Hungary	46.47	57.47	NA	23.34	5.19	24.75	81.37	22.01
Iceland	41.35	97.88	NA	64.27	8.56	33.60	18.68	8.15
Ireland	98.17	99.74	57.82	83.38	5.07	62.37	49.13	30.81
Italy	NA	91.74	NA	60.63	4.72	41.69	79.76	36.60
Japan	189.90	93.26	17.27	157.47	2.12	71.14	49.07	35.60
Korea	80.88	97.71	48.76	129.56	1.29	37.05	232.31	100.38
Luxembourg	NA	99.61	NA	96.27	1.99	181.73	2.62	4.75
Mexico	31.73	96.14	72.45	20.53	9.50	28.44	34.38	9.88
Netherlands	NA	99.58	21.96	130.41	2.26	136.64	82.31	113.45
New Zealand	87.73	97.66	38.33	103.48	4.02	49.55	36.18	17.71
Norway	53.36	98.71	66.64	86.59	2.38	36.71	82.05	30.17
Poland	37.30	91.84	NA	21.13	5.90	10.83	61.97	5.92
Portugal	NA	99.16	NA	95.04	4.17	42.34	67.98	31.08
Slovak Republic	NA	97.79	NA	48.70	5.58	6.37	98.71	6.54
Spain	NA	97.17	NA	80.96	2.18	59.18	174.45	107.93
Sweden	48.01	95.86	43.40	93.34	4.20	114.59	77.77	92.28
Switzerland	162.11	99.02	NA	162.90	2.88	225.19	90.91	201.28
Turkey	NA	93.45	90.19	18.19	NA	29.61	143.34	43.67
United Kingdom	NA	97.60	NA	117.25	2.86	160.52	50.50	0.24
United States	60.28	89.03	19.55	188.71	NA	137.88	124.81	178.94
Mean	74.23	95.14	49.13	81.57	4.35	71.45	73.58	48.85
Maximum	189.90	99.74	90.19	188.71	9.50	225.19	232.31	201.28
Minimum	31.73	57.47	17.27	7.94	1.29	6.37	2.62	0.24
Std. Dev.	42.71	8.13	23.69	45.02	1.96	54.02	46.40	49.76

Table 12: Financial Development Indicators of OECD Countries over 2001-2004 Periods.

Country	DEPTH	BANK	PRIVATE	PRIVY	SPREAD	CAP	TURN	LIQ
Australia	74.00	97.64	NA	93.43	5.16	99.13	73.22	72.44
Austria	NA	99.45	NA	102.53	NA	17.41	26.44	4.79
Belgium	NA	99.73	NA	11.85	5.14	80.58	21.47	16.10
Canada	78.30	95.70	66.18	98.18	3.44	97.93	62.14	60.72
Czech Republic	NA	96.30	NA	34.25	4.60	18.80	51.49	10.00
Denmark	52.68	99.22	NA	146.77	4.80	55.27	65.74	36.52
Finland	NA	99.96	NA	60.06	3.59	129.81	101.88	124.88
France	NA	99.72	NA	86.27	3.96	80.61	83.60	67.20
Germany	NA	99.86	NA	115.46	6.75	46.81	127.98	59.52
Greece	NA	89.84	NA	64.27	4.74	63.25	37.54	23.63
Hungary	46.99	88.40	NA	36.66	2.21	20.25	51.32	10.38
Iceland	54.80	99.85	NA	119.65	9.00	73.71	59.74	47.32
Ireland	NA	99.99	NA	111.53	3.46	58.66	45.32	25.37
Italy	NA	95.37	NA	80.95	4.33	45.56	106.41	47.32
Japan	168.49	88.36	NA	106.51	1.80	63.73	81.73	52.64
Korea	87.79	98.94	66.84	128.42	1.94	47.63	268.72	124.29
Luxembourg	NA	99.90	NA	112.86	NA	128.41	1.15	1.54
Mexico	28.67	97.50	80.63	16.64	4.84	19.51	26.24	5.18
Netherlands	NA	99.86	NA	147.98	1.01	108.08	125.96	143.47
New Zealand	87.40	98.26	NA	112.24	4.59	35.51	40.28	14.32
Norway	54.44	98.71	66.43	97.25	2.42	39.98	87.14	35.51
Poland	42.89	97.87	NA	27.65	4.93	17.03	25.79	4.49
Portugal	NA	99.88	NA	144.01	NA	39.94	47.52	19.13
Slovak Republic	NA	99.02	NA	36.57	4.11	6.03	65.11	2.88
Spain	NA	98.44	NA	104.44	1.94	77.78	171.33	132.29
Sweden	48.43	100.00	85.25	94.36	3.28	97.31	111.91	115.95
Switzerland	156.92	98.75	NA	156.13	3.01	220.17	87.34	185.55
Turkey	NA	74.57	72.67	16.22	NA	28.12	168.05	45.58
United Kingdom	NA	98.56	NA	139.01	NA	136.07	112.64	1.18
United States	68.15	88.46	20.14	205.61	NA	128.86	162.10	210.56
Mean	75.00	96.60	65.45	93.59	3.96	69.40	83.24	56.69
Maximum	168.49	100.00	85.25	205.61	9.00	220.17	268.72	210.56
Minimum	28.67	74.57	20.14	11.85	1.01	6.03	1.15	1.18
Std. Dev.	40.97	5.54	21.33	47.64	1.73	47.56	56.55	57.58

Table 13: Financial Development Indicators of NON-OECD Countries over 1990-1995 Periods.

Country	DEPTH	BANK	PRIVATE	PRIVY	SPREAD	CAP	TURN	LIQ
Argentina	16.09	82.52	81.82	15.28	3.96	10.01	37.46	3.43
Bangladesh	26.13	95.76	NA	15.12	5.87	1.63	6.27	0.14
Brazil	39.64	66.10	57.03	30.71	NA	15.38	51.93	9.01
Cameroon	19.62	70.81	NA	17.63	10.26	NA	NA	7.75
Chile	40.22	69.08	58.75	50.83	6.03	78.50	9.21	NA
Colombia	31.89	89.12	45.59	25.62	10.12	10.76	10.14	1.19
Cyprus	129.70	88.30	61.77	103.85	3.14	10.76	8.20	1.48
Egypt	87.08	62.99	59.74	27.64	3.31	7.11	9.09	0.68
Ghana	19.04	25.59	NA	4.33	NA	12.12	4.60	0.60
India	44.84	72.71	NA	22.96	NA	25.11	37.45	4.70
Indonesia	43.43	95.40	NA	43.88	3.89	13.71	42.35	7.78
Israel	71.07	94.06	NA	55.46	8.44	33.72	85.86	22.82
Jamaica	45.73	83.03	67.66	24.69	12.37	35.43	12.96	5.00
Jordan	117.74	77.23	71.76	64.86	12.37	63.40	23.49	14.58
Kenya	49.89	69.69	50.20	31.60	21.10	15.28	2.33	0.38
Malaysia	70.54	98.56	74.15	90.24	2.87	182.41	44.53	94.83
Pakistan	43.34	68.25	NA	22.32	2.87	15.63	18.10	3.17
Peru	20.10	97.82	87.30	8.92	521.00	9.32	29.30	3.48
Philippines	45.02	79.09	69.40	26.67	4.99	45.03	22.15	11.15
Singapore	119.96	100.00	83.94	96.60	2.93	133.81	53.91	75.30
South Africa	41.71	95.64	44.72	86.38	3.96	129.05	6.82	8.79
Sri Lanka	40.01	69.80	NA	12.78	3.74	17.10	12.39	2.37
Thailand	80.34	97.84	70.31	97.00	2.31	58.32	90.05	46.86
Trinidad Tobago	52.10	80.84	56.46	47.30	9.22	12.28	10.15	1.30
Uruguay	44.51	64.96	69.28	21.37	55.75	1.07	4.24	0.06
Venezuela	36.48	61.72	49.16	19.26	9.41	12.08	26.55	3.40
Zimbabwe	38.00	71.36	46.33	24.38	3.19	20.58	5.43	1.21
Mean	52.38	78.82	63.44	40.28	30.13	37.29	25.58	12.75
Maximum	129.70	100.00	87.30	103.85	521.00	182.41	90.05	94.83
Minimum	16.09	25.59	44.72	4.33	2.31	1.07	2.33	0.06
Std. Dev.	30.73	16.56	13.16	30.07	105.13	45.97	24.10	23.56

Table 14: Financial Development Indicators of NON-OECD Countries over 1996-2000 Periods.

Country	DEPTH	BANK	PRIVATE	PRIVY	SPREAD	CAP	TURN	LIQ
Argentina	28.33	92.15	90.61	22.50	2.85	23.47	31.05	5.83
Bangladesh	31.49	91.31	NA	22.08	6.10	4.36	51.14	1.59
Brazil	25.51	84.30	68.03	34.12	NA	30.83	61.20	18.28
Cameroon	14.78	63.74	NA	7.43	16.92	NA	NA	9.14
Chile	43.98	81.40	70.07	63.83	4.50	89.54	10.14	NA
Colombia	33.94	95.20	58.15	33.18	8.34	15.86	7.28	1.19
Cyprus	160.13	90.27	64.79	138.98	1.52	15.86	34.20	37.11
Egypt	83.10	77.28	72.36	47.27	4.03	26.10	29.03	7.76
Ghana	23.91	31.10	NA	8.36	NA	17.65	2.62	0.46
India	50.38	81.42	NA	23.46	NA	32.15	164.98	13.61
Indonesia	56.16	86.63	NA	41.77	0.95	29.67	46.06	54.65
Israel	88.08	96.68	NA	71.08	5.26	44.58	28.23	12.92
Jamaica	45.46	70.51	65.84	26.28	14.96	30.77	2.44	0.74
Jordan	102.26	80.45	75.50	73.23	14.96	68.76	8.99	6.22
Kenya	49.01	84.92	76.03	33.30	13.58	16.74	4.24	0.71
Malaysia	122.72	93.52	66.18	137.79	3.62	179.74	51.27	98.55
Pakistan	45.86	69.53	NA	23.08	3.62	13.11	219.57	24.14
Peru	30.43	98.71	96.82	24.04	14.19	24.02	21.68	5.19
Philippines	65.54	87.66	81.28	48.22	4.42	65.04	33.10	21.45
Singapore	116.22	99.47	83.73	120.28	3.36	158.58	49.50	79.15
South Africa	43.94	97.34	45.91	117.35	5.12	166.50	24.94	41.11
Sri Lanka	46.37	89.01	NA	27.50	5.48	11.57	12.14	1.40
Thailand	105.28	97.21	72.14	143.50	3.75	41.73	58.16	22.54
Trinidad Tobago	57.44	94.26	70.38	41.33	10.10	46.88	4.95	2.03
Uruguay	44.46	77.44	77.44	36.30	41.87	1.01	1.49	0.02
Venezuela	20.17	71.24	63.73	11.22	10.42	10.06	16.43	1.83
Zimbabwe	40.20	50.44	40.86	27.84	14.90	32.94	12.50	4.13
Mean	58.34	82.71	70.52	52.05	8.95	46.06	37.97	18.14
Maximum	160.13	99.47	96.82	143.50	41.87	179.74	219.57	98.55
Minimum	14.78	31.10	40.86	7.43	0.95	1.01	1.49	0.02
Std. Dev.	36.01	15.76	13.46	42.20	8.58	49.46	49.68	25.29

Table 15: Financial Development Indicators of NON-OECD Countries over 2001-2004 Periods.

Country	DEPTH	BANK	PRIVATE	PRIVY	SPREAD	CAP	TURN	LIQ
Argentina	29.00	72.41	71.70	15.78	9.28	74.17	6.97	2.92
Bangladesh	39.65	90.90	NA	26.40	7.75	3.01	44.73	1.29
Brazil	24.57	72.78	52.17	34.47	NA	39.36	32.15	12.67
Cameroon	18.79	65.58	NA	8.26	13.67	NA	NA	8.08
Chile	38.61	85.29	70.63	70.13	4.07	92.11	8.54	NA
Colombia	32.04	96.22	76.48	23.48	7.59	15.87	4.05	0.69
Cyprus	138.98	91.21	69.88	132.08	3.28	15.87	16.46	13.01
Egypt	99.89	67.60	63.66	58.20	4.81	32.91	13.49	4.56
Ghana	30.15	59.48	NA	11.15	NA	14.56	2.90	0.45
India	62.99	92.75	NA	30.31	NA	33.42	105.40	43.80
Indonesia	47.28	73.74	NA	18.56	5.13	17.84	279.06	35.73
Israel	101.90	97.99	NA	91.54	3.89	58.03	69.23	39.05
Jamaica	48.29	71.26	68.31	16.67	10.37	90.17	3.03	3.02
Jordan	123.28	86.01	NA	70.87	10.37	89.38	25.30	24.60
Kenya	42.02	89.85	85.03	27.10	12.13	16.57	5.42	1.04
Malaysia	127.71	93.90	71.54	131.38	3.34	139.44	26.85	37.90
Pakistan	46.16	83.76	NA	22.68	3.34	14.72	343.75	52.89
Peru	30.58	99.51	98.22	22.11	10.73	22.72	7.41	1.64
Philippines	60.78	91.97	84.92	35.87	4.09	40.26	10.25	3.99
Singapore	117.19	97.23	80.14	130.80	4.57	142.31	54.77	77.35
South Africa	53.06	98.50	52.10	130.11	4.83	139.47	48.63	67.25
Sri Lanka	49.10	88.41	NA	27.62	5.27	11.22	21.68	2.50
Thailand	112.58	96.88	72.94	98.12	4.68	47.87	107.90	50.67
Trinidad Tobago	49.03	94.51	69.59	36.94	7.62	74.60	4.00	3.00
Uruguay	63.93	72.72	72.71	48.68	48.68	1.91	0.00	0.00
Venezuela	20.42	87.73	85.18	9.80	7.10	5.16	5.09	0.26
Zimbabwe	52.46	81.55	72.84	20.88	34.52	62.15	16.77	15.45
Mean	61.50	85.18	73.22	50.00	9.63	49.81	48.61	19.38
Maximum	138.98	99.51	98.22	132.08	48.68	142.31	343.75	77.35
Minimum	18.79	59.48	52.10	8.26	3.28	1.91	0.00	0.00
Std. Dev.	36.28	11.59	11.23	41.63	10.50	43.55	83.31	23.31

Table 16: The Relationship between growth and the interaction between FDI and Financial Market of OECD countries over 1980-2004 Periods.

Table 3 reports OLS regressions of growth, FDI, financial market (DEPTH, BANK, PRIVATE, PRIVY, SPREAD, CAP, TURN, LIQ), interaction between FDI and financial market plus control variables; GDP, POP, INF, INV, OPEN over the 1980-2004 Periods. T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

	GROWTH							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Intercept	-1.5575	-2.6028**	-2.0539	-1.1709	-0.1927	-1.5552	-1.7682*	-1.1413
	(-1.2682)	(-2.0251)	(-1.0593)	(-1.3665)	(-0.1850)	(-1.5102)	(-1.6638)	(-1.0609)
DEPTH	0.0041							
	(0.6274)							
BANK		3.0946**						
		(2.3517)						
PRIVATE			1.8330					
			(1.1414)					
PRIVY				0.5044				
				(1.1746)				
SPREAD					-0.0082			
					(-0.1589)			
CAP						-0.1805		
						(-0.4628)		
TURN							0.7337***	
							(3.0334)	
LIQ								0.5804*
								(1.7266)
DEPTH*FDI	0.0006							
	(0.3118)							
BANK*FDI		0.2036						
		(0.9114)						
PRIVATE*FDI			-0.5760***					
			(-3.6673)					

Table 16 – Continued

	GROWTH							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PRIVY*FDI				0.0301				
				(0.8099)				
SPREAD*FDI					-0.0169			
					(-1.3102)			
CAP*FDI						0.0962**		
						(2.1348)		
TURN*FDI							-0.0640*	
							(-1.7274)	
LIQ*FDI								-0.0257
								(-0.6521)
FDI	-0.0629	-0.2235	0.2004*	-0.0360*	0.0636	-0.0954**	0.0018	-0.0141
	(-0.5812)	(-1.0156)	(1.8018)	(-1.8783)	(1.1182)	(-2.5509)	(0.0920)	(-0.7949)
FDI(-1)	-0.0424	0.0123	0.1074**	0.0123	-0.0035	0.0112	0.0119	0.0143
	(-0.8416)	(0.7334)	(2.2857)	(0.7617)	(-0.2185)	(0.7475)	(0.8033)	(0.9464)
GDP	0.0033***	0.0036***	0.0035***	0.0035***	0.0035***	0.0034***	0.0036***	0.0035***
	(13.9647)	(16.5443)	(10.3707)	(16.3727)	(16.3265)	(14.6558)	(15.5814)	(15.0266)
GDP(-1)	-0.0034***	-0.0037***	-0.0035***	-0.0035***	-0.0035***	-0.0043***	-0.0045***	-0.0046***
	(-13.9875)	(-16.6026)	(-10.3795)	(-16.1635)	(-16.4781)	(-13.1539)	(-13.8336)	(-13.6018)
GDP(-2)				0.0000		0.0009***	0.0009***	0.0010***
				(0.3490)		(3.7188)	(3.8088)	(4.2590)
POP	-0.3693	0.0642	0.3791	-0.0041	-0.1183	0.2475	0.0713	0.0908
	(-1.4219)	(0.2481)	(0.8126)	(-0.0205)	(-0.5001)	(0.9668)	(0.3299)	(0.4287)
POP(-1)		-0.1381				-0.3052		
		(-0.5209)				(-1.1733)		
INF	0.1013***	0.1149***	0.1388***	0.1099***	0.0387**	0.1155***	0.1203***	0.1148***
	(4.4505)	(7.5486)	(5.6891)	(7.4227)	(2.1159)	(7.8752)	(8.2680)	(7.8155)
INF(-1)	-0.0924***	-0.1192***	-0.1514***	-0.1073***	-0.0394**	-0.1166***	-0.1274***	-0.1253***
	(-3.9948)	(-7.3585)	(-6.2626)	(-7.1551)	(-2.1273)	(-7.8249)	(-8.6559)	(-8.2397)
INF(-2)	0.005	0.0058						
	(0.6791)	(0.8698)						

Table 16 – Continued

	GROWTH							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
INV	0.4977***	0.4861***	0.6246***	0.5166***	0.4604***	0.6146***	0.5645***	0.5512***
	(10.3863)	(12.4187)	(10.2018)	(13.3650)	(11.8268)	(14.9287)	(13.5116)	(13.2109)
INV(-1)	-0.4151***	-0.4448***	-0.5229***	-0.4345***	-0.3805***	-0.3787***	-0.3273***	-0.3258***
	(-9.00256)	(-11.7462)	(-9.1024)	(-11.7506)	(-10.2434)	(-8.3089)	(-7.1380)	(-6.9711)
INV(-2)						-0.0998***	-0.1125***	-0.1121***
						(-2.6996)	(-3.0916)	(-2.6960)
INV(-3)								0.0122
								(0.3665)
OPEN	-0.0249	-0.0214*	0.0255***	0.0128***	-0.0075	-0.0266*	-0.0208	-0.022
	(-1.3833)	(-1.7976)	(2.8030)	(2.6877)	(-0.5795)	(-1.8305)	(-1.4780)	(-1.529)
OPEN(-1)	0.0410**	0.0311***			0.0026	0.0386***	0.0348**	0.0361**
	(2.2583)	(2.6047)			(0.1788)	(2.6762)	(2.4800)	(2.5138)
OPEN(-2)					0.0227**			
					(2.2805)			
R-square	0.7474	0.7125	0.8066	0.7179	0.744	0.7822	0.7735	0.7911

Table 17: The Relationship between growth and the interaction between FDI and Financial Market of NON-OECD countries over 1980-2004 Periods.

Table 3 reports OLS regressions of growth, FDI, financial market (DEPTH, BANK, PRIVATE, PRIVY, SPREAD, CAP, TURN, LIQ), interaction between FDI and financial market plus control variables; GDP, POP, INF, INV, OPEN over the 1980-2004 Periods. T-statistics are in parentheses. ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

	GROWTH							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Intercept	1.836	3.4252	0.1486	2.2728	1.5615	0.0485	0.0367	1.1505
	(1.1726)	(1.6168)	(0.0569)	(1.5113)	(0.8955)	(0.0288)	(0.0240)	(0.6443)
DEPTH	-0.0029							
	(-0.2411)							
BANK		-2.9653						
		(-1.5845)						
PRIVATE			-0.3326					
			(-0.1194)					
PRIVY				-0.7455				
				(-0.6524)				
SPREAD					-0.002			
					(-1.0468)			
CAP						0.0256		
						(0.0253)		
TURN							0.1567	
							(0.3023)	
LIQ								2.0324
								(.3386)
DEPTH*FDI	0.0016							
	(0.9022)							
BANK*FDI		0.7294						
		(.1755)						
PRIVATE*FDI			-0.2711					
			(-0.3648)					
PRIVY*FDI				0.2002				
				(1.1613)				
SPREAD*FDI					-0.0005			
					(-0.0627)			

Table 17 – Continued

	GROWTH							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CAP*FDI						0.0862		
						(0.5141)		
TURN*FDI							0.0448	
							(0.2595)	
FDI	-0.1118	-0.6252	0.1792	-0.1437	0.0097	-0.0827	-0.0203	-0.0095
	(-0.7661)	(-1.1616)	(0.3537)	(-1.0270)	(0.1017)	(-0.6560)	(-0.2154)	(-0.0983)
FDI(-1)	0.2587***	0.2611***	0.3123***	0.2453***	0.2558***	0.2570***	0.2759***	0.2442***
	(3.0989)	(3.1554)	93.3576)	(3.0395)	(3.1801)	(2.9767)	(3.1612)	(2.6468)
FDI(-2)	-0.1382	-0.1476		-0.1734	-0.1219	-0.1688	-0.1584	-0.1930*
	(-1.4136)	(-1.5296)		(-1.8458)	(-1.2958)	(-1.6603)	(-1.5820)	(-1.7710)
GDP	-0.0026**	-0.0026**	-0.0002	-0.0001	-0.0030***	-0.0028**	-0.0001	-0.0033***
	(-2.4416)	(-2.4599)	(-1.5560)	(-1.3489)	(-2.7683)	(-2.3158)	(-1.4436)	(-2.8482)
GDP(-1)	0.0025**	0.0025**			0.0030***	0.0027**		0.0032***
	(2.3154)	(2.3571)			(2.6737)	(2.2511)		(2.7766)
POP	-1.1438***	-1.1696***	-0.9205**	-0.9679***	-0.9982***	-1.1626***	-1.1466***	0.8301***
	(-3.9141)	(-4.0657)	(-2.5208)	(-3.2621)	(-3.5600)	(-3.8671)	(-3.8297)	(2.7512)
POP(-1)	0.6409**	0.6307**	1.0644***	0.8552***	0.6644**	0.6742**	0.7925***	-0.7071***
	(2.2395)	(2.2254)	(3.0914)	(2.9991)	(2.4126)	(2.3041)	(2.6710)	(-2.2764)
POP(-2)			-0.6180*	-0.6546**				
			(-1.7955)	(-2.2285)				
INF	0.0971***	0.0988***	0.1312***	0.0969***	0.1086***	0.1211***	0.1274***	0.1063***
	(6.6711)	(6.8203	-7.0161	-7.0711	-7.0538	-7.3144	-8.0554	-6.9334
INF(-1)	-0.0480***	-0.0465***	-0.0750***	-0.0596***	-0.0653***	-0.0549***	-0.0717***	-0.0581***
	(-2.8590)	(-2.7974)	(-3.5361)	(-3.9099)	(-3.9129)	(-2.7790)	(-3.8787)	(-3.3796)
INF(-2)	-0.0564***	-0.0577***	-0.0498***	-0.0467***	-0.0617***	-0.0564***	-0.0437***	-0.0490***
	(-3.9903)	(-4.1120)	(-2.8039)	(-3.4958)	(-3.9029)	(-3.5186)	(-2.7967)	(-3.1046)
INV	0.4257***	0.4219***	0.4511***	0.4294***	0.4898***	0.4483***	0.4320***	0.4309***
	(8.9063)	(8.8148)	(7.8996)	(9.0735)	(9.5517)	(8.8911)	(8.4428)	(8.3907)
INV(-1)	-0.3689***	-0.3452***	-0.3888***	-0.3404***	-0.4033***	-0.3732***	-0.3747***	-0.3616***
	(-7.8694)	(-7.4271)	(-7.3042)	(-7.3497)	(-8.1117)	(-7.4938)	(-7.4731)	(-7.2877)

Table 17 – Continued

	GROWTH							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OPEN	-0.0172	-0.0146	0.0046	0.0064	0.0063	-0.0215	0.0004	0.0049
	(-0.8959)	(-0.7669)	(0.4950)	(0.9165)	(0.8125)	(-1.0252)	(0.0638)	(0.6666)
OPEN(-1)	0.0253	0.0228				0.0261		
	(1.2844)	(1.173)				(1.2179)		
R-square	0.4382	0.4423	0.4695	0.472	0.5119	0.4416	0.4547	0.4332

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Mr. Tosapol Wikromkitsin was born on July 30, 1979 in Bangkok. At the undergraduate level, he graduated from the Faculty of Economics, Thammasat University in Feb 2004 with a Bachelor of Arts Degree, majoring in International Trade. He joined in Master of Science in Finance program, Chulalongkorn University in June 2004.