

**THE IMPACT OF FOREIGN DIRECT INVESTMENT ON INDONESIA'S
ECONOMIC GROWTH**

By

Gandy Setiawan

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
for the degree of

MASTER OF PUBLIC POLICY

2002

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TABLE OF CONTENTS

Abstract	i
Acknowledgement	ii
List of Tables	v
List of Figure	vi
Abbreviates	vii
Chapter I: Introduction	1
Chapter II: Historical Overview Toward FDI Policies in Indonesia	6
i. The First Liberalization Policies, 1967 to 1973	6
ii. The Protectionist Policies, 1974 to 1986	9
iii. The Second Liberalization Policies, 1986 to 1997	12
iv. The Third Liberalization Policies, after the 1997 Crisis	18
Chapter III: Trend of FDI in Indonesia	22
i. Foreign Investment by Economic Sector	23
ii. Foreign Investment by Country	23
iii. Foreign Investment by Location	26
Chapter IV: Empirical Estimation of the FDI and GDP Growth Model	28

i.	Model Specification	30
	a. FDI Determinants Equation	30
	b. Growth Equation	33
ii.	Data Sources and Data Processing	35
iii.	Empirical Result	35
	a. FDI Determinants Equation Result	37
	b. Growth Equation Result	39
	Chapter V: Conclusion	41
	Bibliography	43

LIST OF TABLES

Table 1. Table of application approval since 1967	21
Table 2. Table of FDI determinants and growth equation	35

LIST OF FIGURES

Figure 1. Trend of Investment Project Approval by Sector 1978-2000	23
Figure 2. Trend of Investment Project Approval by Country of Origin 1978-2000	25
Figure 3. Trend of Investment Project Approval by Location 1978-2000	26

ABBREVIATES

ADB	: Asian Development Bank
BKPM	: The Capital Investment Coordinating Board
BKPMD	: Regional Capital Investment Coordinating Board
BPPMA	: Foreign Capital Investment Advisory Board
DSP	: Priority Investment List
FDI	: Foreign Direct Investment
GDP	: Gross Domestic Product
GNP	: Gross National Product
ICSID	: International Center for the Settlement of Investment Dispute
IMF	: International Monetary Fund
MNC	: Multinational Corporations
PMA	: Foreign Capital Investment

Chapter I

Introduction

The debate about the economic impact of multinational firms on host countries was centered on whether foreign direct investment (FDI) was beneficial to host country or not. The pro FDI arguments grew largely out of the traditional neo-classical and new economic growth theory. The opposite foreign investment arguments came from two basic arguments: one more strictly economic and the other more philosophical or ideological.

Traditional Economic Arguments argued that foreign private investment was typically seen as a way of filling in gaps between the domestically available supplies of savings, foreign exchange, government revenue, and human capital skills and the desired level of these resources necessary to achieve growth, and development targets. The first contribution of foreign private investment to national development (i.e., when the development is defined in terms of GDP growth rates) was its role in filling in the resource gap between targeted or desired investment and locally mobilized savings. A second contribution, analogous to the first, was its contribution to filling in the gap between targeted foreign-exchange requirements and those derived from net export earnings plus net public foreign aid (this is the so-called foreign-exchange or trade gap). Third the gap between targeted governmental tax revenues and locally raised taxes could be filled by foreign investment. Fourth the operation of foreign private investment in the local market presumed could fill in the gap in management, entrepreneurship, technology, and skill. (Todaro, 1997, p.538)

In contrast, the contra arguments argued: first, although foreign private investment provide capital, they might lower domestic savings and investment rates by stifling competition through exclusive production agreements with host governments, failing to reinvest much of other profits, generating domestic incomes for groups with lower savings propensities, inhibiting the expansion of indigenous firms that might supply them with intermediate products by instead importing these goods from overseas affiliates, and imposing high interest costs on capital borrowed by host governments. Second, although the initial MNC investment was to improve the foreign exchange position of recipient nation, in the long run it can reduce foreign exchange earnings on both current and capital accounts. In the long run, when the company starts to proceed a profit, investors will transfer their earning to their home country. Furthermore this transfer earning will reduce foreign exchange earnings on both current and capital accounts. Third, although MNCs do contribute to public revenue in the form of corporate taxes, their contribution can be considerably less than it should be as a result of liberal tax concessions, the practice of transfer pricing, excessive investment allowances, disguised public subsidies, and tariff protection provided by the host government. Fourth, the management, entrepreneurial skills, ideas, technology, and overseas contacts provided by MNCs might have little impact on developing local sources of these scarce skills and resources and may in fact inhibit their development by stifling the growth of indigenous entrepreneurship as a result of the MNCs dominance of local markets. (Todaro, 1997, p.538)

Indonesia has long believed that foreign private investment was economically beneficial to host country. In 1967, when president Soeharto took power from president

Soekarno, he directly changed the orientation of the economy from centralized economy toward liberal economy¹. Despite the initial liberal action policies FDI showed significant growth only after 1986. Policies toward FDI could be broken into four periods. The first liberalization policies were 1967 to 1973, which aimed to correct the economic policies of the previous government. The second policies were 1974 to 1986, which categorized protectionist policies. These policies have implemented in response to increased nationalist reactions to FDI. The third period was marked by the second liberalization policies, from 1986 to 1997, as an effect of the fall in oil price. The fall in oil prices forced the government to restructure the economy, away from its dependence on oil revenues. The fourth period was the third liberalization policies, after the 1997 crisis, which was the continuation of the second liberalization policies 1986 -1997.

Since the onset of 1997 currency crisis, Indonesia has given more attention to FDI. This was because the government desires to foster economic recovery by way of attracting FDI. In the short run FDI was expected to solve lack of capital, absorb unemployment, extend the market price systems and the private sector and mitigate the external debt problem in Indonesia.

When a country suffers a resource or savings gap (an internal macro imbalance between national expenditure and national saving), it would also confront a foreign exchange gap that has to be balanced with an inflow of foreign capital². In macro economic terms, when government expenditure plus private investment exceed government revenue and private savings (a resource gap), this internal imbalance would spill over into a current account deficit and hence create foreign exchange gap.

¹ See the detail, Indonesia: the critical role of government, Donald J. lecrow, 1998, page 322.

² See the detail in page 215 (Gerald M. Meier, 1995)

International financial intermediation was then required to fill in the foreign exchange gap. Moreover this gap could be covered by loans from multilateral lending agencies and commercial banks, or by foreign investment. For a developing country, the sources of external financing were foreign aid from government to government, cross border sovereign lending by commercial banks, loans from the World Bank, access to the country's drawing rights in the IMF and private foreign investment (FDI and portfolio investment). While the four sources of foreign capital declined, FDI had strong potential.

Against such a background, this paper plans to investigate the empirical relationship between FDI and GDP growth in Indonesia. Is FDI economically beneficial to Indonesian economic since long time ago (how much contribution of FDI to GDP growth)? Before we undertake econometric analyses on the impact of FDI to GDP growth, we first examine factors that determine FDI in Indonesia.

This study uses historical and quantitative research methods. The historical overview of FDI policies and trend of investment looks at such important as various government policies and institution designed to foster private investment.

The statistical analysis section comprises two models on FDI: a model of determinants of FDI and a model of impact FDI on GDP Growth. The empirical work in this study is based on time series data.

The organization of the paper is as follows. Chapter II will provide a historical overview of FDI policy in Indonesia. Chapter III will discuss some trends of FDI inflow to Indonesia. The empirical estimation of FDI determinants and the impact of FDI toward

GDP growth is provided in section IV. Concluding remarks are presented in the final section. The appendices contain, among other things, a detailed description of the regression results.

Chapter II

Historical Overview Toward FDI Policies in Indonesia

In order to investigate the role of foreign direct investment in Indonesia's economic development, it was helpful to review the government's policy on FDI. This policies could be discussed under four periods, namely, the first liberalization policies, 1967 to 1973; the protectionist policies, 1974 to 1986; the second liberalization policies, 1986 to 1997; and the third liberalization policies, after the 1997 crisis.

The First Liberalization Policies, 1967 to 1973

Upon assuming after overtaking a power in 1966 President Soeharto tried to restore macroeconomic stability and changed the orientation of the economy from state-owned enterprises and direct government intervention towards more reliance on the market. The new government also made substantial changes in the trade and investment regimes. As part of these initiatives, the government established more sympathetic policies towards private investment in general and foreign investment in particular.

Some policies towards foreign investment were first taken in 1967 as follows: first the government established a new law concerning with foreign investment, law number 1 of 1967 on foreign investment⁴. Second, government returned some nationalized enterprises to the previous owners⁵ (article 21, Law No 1/1967). Third,

⁴ The detail of Law No.1/ 1967, see Country profile of Indonesia: Exchange Control, Foreign Investment Legislations

⁵ In the era of Soekarno many foreign companies had been nationalized. In 1957 Dutch investment were nationalized; in 1963 British and Malaysian assets were nationalized; and in 1965 some American and

government created the Foreign Capital Investment Advisory Board (Badan Pertimbangan Penanaman Modal Asing, BPPMA, 1967). The Board's main task was to give advice to the president with respect to the implementation of foreign investment. Fourth, government allowed 100 percent foreign ownership and no restriction anymore on foreign equity and employment of expatriates (Hadi Soesastro, p. 4). Dr Sadli, a government minister, characterized Indonesia's condition toward FDI during that period: (Dunning, 1996, p.323 quoted from Palmer, 1979, p.100).

“When we started out attracting foreign investment in 1967 everything and everyone was welcome. We did not dare to refuse: we did not even dare to ask for bonafidity of credentials. We needed a list of names and dollars figures of intended investments to give credence top our drive”

(Palmer, 1979)

The only limitation on foreign equity ownership was that foreign investment licenses were only given for a period of thirty years. After thirty years, the foreign investors should transfer its shares to an Indonesian investor; otherwise the company would be liquidated. The regulations also establish a minimum investment limit of \$1 million for foreign investment projects. The rationale behind this regulation was government realizes that the primary benefit of MNEs was their access to large fund of capital that Indonesian investors did not hold. Thus, the government was willing that

other foreign assets were nationalized. For more detail see Donald J. Lecraw, Indonesia: the critical role of government, 1998.

foreign investors should undertake bigger investment projects and domestic investors could undertake smaller investment projects⁶.

Even though Law No. 1/1967 was liberal for FDI in selected sectors, in some sectors government still restricted to foreign companies. The motivations for closing these sectors were security sectors (e.g. explosives and atomic generation plants), strategic sectors (e.g. transportation, the media, and telecommunications) and public services (e.g. electricity generation and distribution, water supply). The mining agricultural and fisheries sectors were also closed to FDI (sources BKPM). These sectors were closed because they run on Article 33 (2) of the 1945 Constitution (branches of production which are important for state and affect the welfare of the people at large will be undertaken by the state) and article 33 (3) (water and natural resources are owned by the state and should be used to benefit all the people). As a result of Law No. 1/1967, twenty-two PMA projects were approved in 1967. By 1970, 177 PMA projects had been approved, in which thirty-seven were 100 percent foreign owned projects (BKPM).

In general, based on analysis data statistic, the government decision to rehabilitate an economy by opening the domestic market for foreign investment was quite successful. Growth was restored, inflation was brought down, private initiatives were promoted and foreign capital plus aid were coming back. As a result, GDP was growth stable in turn 7 percent; inflation dropted to below two digits and number of foreign direct investment has increased significantly more than three times, 22 projects in 1967 to 69 projects in 1974⁷.

⁶ The detail see article 18, law No. 1/1967

⁷ This analysis based on data statistic provided by BKPM and IMF, International Financial Statistics Yearbook

The Protectionist Policies, 1974 to 1986

The oil boom and the higher commodity price brought Indonesia in the new era of foreign investment policies. Higher energy prices provided the government with substantial revenues and relaxed the balance of trade and payments problems that had placed restraints on its development efforts. In January 1974, after violent demonstrations during the visit of Japanese Prime Minister Tanaka and also because of increasing nationalist reactions to foreign direct investment, the government made significant change in Indonesia's FDI system. In addition, since the government started to implement liberal policies on FDI, Japan became the major investor in Indonesia. (detail see chapter III). In January 22, 1974, the government set the standard for principles governing foreign investment that all new foreign investments should be in the form of joint ventures; Indonesian equity in these investments would be increased at least a 51 percent majority share holding within a certain period of time, in 1975 defined as ten years; the number of sector closed to foreign investment was increased; tax incentives were reduced; and number of foreign personnel permitted to work at each foreign owned company was reduced (Donald J. Lecraw, p. 324; Hadi Soesastro, p. 4).

At the same time where these changes were being made in the FDI system, growing controls were instituted on all private investment and the financial system, in the form of investment licensing and credit allocation. The government also used oil revenue to expand the role of state owned enterprises. Public enterprises began to take a dominant role in a number of sectors and public investments were increasingly directed into heavy industries, petrochemicals and mining. These changes in government policy both towards the private sector as a whole and towards FDI demonstrate a recurring theme in

government economic policy in Indonesia. After foreign exchange and capital restraints had been reduced, the government increased the public sector roles and decreased the role of the private sectors and FDI.

During this period an increasing number of sectors were closed to foreign investment (e.g. new weaving mills located on Java). The new investment regulations gave possibility to add sectors that were closed for foreign investment. The next few years, in accordance with this regulation, growing number of sectors were deemed to be closed to foreign investors based on a number of criteria: 1) Domestic entrepreneurs were considered capable to undertake the activity; 2) the activity was targeted by state enterprises because of its strategic nature; 3) the activity was targeted for small entrepreneurs. (Donald J. Lecraw, p. 324; Hadi Soesastro, p. 4)

The falling of oil revenue, in 1975-1976, combined with the Pertamina Crisis, led to deteriorate Indonesia's investment climate and exacerbated its external debt situation. To improve the investment climate, the government simplified and facilitated the foreign investment approval process. The government also implemented existing restrictions on foreign investment less forcefully. The administrative improvements introduced in 1977, including the establishment of the BKPM as a one-stop service and the introduction of a Priority Investment List (Daftar Skala Prioritas, DSP, BKPM, 1977). The government used the annual Priority Investment List as a main instrument to regulate the sectoral composition of investment for the private sector in general and MNEs in particular. The DSP list covered all economic activities except oil, gas and the financial sector. The first DSP list was very detailed; 831 sectors in one of the four categories. (BKPM)

However, the DSP list still had exceptions. Foreign companies could invest in activities that were closed to foreign investment. Furthermore both foreign and domestic investors could also invest in sectors that were closed to all investment under certain conditions related to the development objectives of the government. The rationales underlying these exceptions were: regional distribution, located outside Java; exports, 100 percent of production exported; employment creation. These exceptions illustrate how the government relaxed regulation for MNEs if they could provide additional benefits (beyond capital) to the Indonesian economy.

The second oil price increase in 1978-1979 again relaxed Indonesian foreign exchange constraints accelerated economic growth and increased government budgeted revenues. As a direct consequence, the government again instituted additional restrictions on foreign investment. In 1981, the government required foreign-owned companies to transfer 51 percent of their ownership to Indonesian shareholders within ten years (BKPM). Furthermore, the government appeared to move to implement the phase down requirements. The government stated that for foreign companies approved prior to February 1974, a minimum of 30 percent of their equity had to be transferred to Indonesian shareholders by the end of 1984. Also, at this time the government introduced a requirement that, at the time of formation, there would be a minimum 20 percent Indonesian shareholding for all foreign companies. Starting in 1980, the government closed an increasing number of sectors for foreign investment. The 1981 DSP list kept additional sectors for cooperatives.

Starting from 1982, Indonesia experienced external shocks in the form of falling oil and other commodity prices. Between 1982 and 1985 the government introduced

measures to stabilize the macro economy; introduced some structural reforms to mobilize resources (e.g. tax and financial reforms); and made improvements in customs, ports and shipping. In this case, the government's trade and industrial policies became more inward oriented and interventionist. Against this background, the government also increased the restrictive nature of its foreign investment policies.

In the second stage period policies, based on data statistic, we could say that government failed to uphold friendly investment climate. The changes in government policy both towards the private sector as a whole and towards FDI demonstrated a chronic theme in government economic policy in Indonesia. The protectionist policies and government controls had adverse effect on the competitiveness of domestic market, creating a high-cost economy. As a result inflation stayed above two digits; GDP sharply fluctuated only 2.2 percent in 1982; and the number of FDI suffered a four-fold Decline in 1979⁸.

The Second Liberalization Policies, 1986-1996

In 1986, the economy again suffered a series of external shocks due to a sharp fall in oil prices and the appreciation of the yen (a substantial portion of Indonesia's external debt was dominated in yen). These actions led to 34 percent deterioration in Indonesia's term of trade and an increase in the debt service ratio from 26 percent in 1985 to 37 percent in 1986. In response to this condition the government again undertook macroeconomic stabilization procedures (fiscal strictness and devaluation) as well as

⁸ This analysis based on data statistic provided by BKPM and IMF, International Financial Statistics Yearbook

substantial real and financial sector reforms. In the field of foreign investment policy, the government initiated gradual policies to liberalize all aspects of the FDI system.

The liberalization of both the economy as a whole and the foreign investment system in particular was connected to the government's policies to promote non-oil exports and to encourage participation of the private sector in the economy. As in the past, under the pressure of falling economic growth, strained international credit, and the need for both investment capital and foreign exchange, the government turned once again towards the private sector and foreign investors by relaxing regulations on private and foreign investors.

In May 1986 the government reduced the 20 percent minimum requirement for Indonesian ownership to 5 percent for high risk investment: those located in remote areas (i.e. mostly in eastern Indonesia); those involved in high technology; those that were export oriented (i.e. at least 85 percent of their production); or investments requiring a large amount of capital (i.e. project costs above \$10 million). The phase-down requirements for such projects were: to 20 percent Indonesian ownership within five years and to 51 per cent Indonesian ownership within ten years as under the previous regulation (In 1981, the government reiterated the requirement that foreign-owned companies were to transfer 51 per cent of their ownership to Indonesian shareholders within ten years). The government relaxed the requirement for foreign investors to phase down their equity ownership to 49 percent over a ten-year period under certain conditions. The government also confirmed that the licenses of joint ventures were suitable for thirty years and could be extended another thirty years if the firm increased its capital in order to expand or diversify their output. (BKPM)

In the 1986 DSP list, the number of business activities, open to foreign investment increased from 475 to 926. In the industrial sector government also increased activities for foreign investment from 253 to 596 (BKPM). The government's opening the number of sectors investment to foreign companies reflected a major change in their policy focus: from one in which large sectors of the economy were reserved for domestic companies to one in which greater emphasis was placed to attract foreign investment come to these sectors.

In December 1987, the government again relaxed foreign investment restrictions. The minimum Indonesian ownership was lowered to 5 percent for foreign companies, which exported 100 percent of their production without further obligation to phase down their share. The general phase down requirement to 51 per cent was also extended to fifteen years. Moreover, foreign owned companies with a minimum capital of \$10 million; or located in one of the provinces in Eastern Indonesia; or exporting at least 65 percent of their production also could be formed with a 5 percent minimum Indonesian shareholding. Unlike the 100 percent export oriented foreign companies, however, there was a phase-down requirement to 20 percent within ten years and 51 percent within fifteen years for these companies.

In May 1989 the DSP list was replaced with a Negative List. In principle, any sector not on the Negative List was open for foreign companies. By this change the government could effectively further opened additional activities to foreign investment. The original Negative List had sixty-four sectors closed to foreign investment, although some of these sectors open under certain conditions, such as for export-oriented investments. In 1989, the government introduced deregulation packages that lowered the

minimum capital investment required for foreign companies from \$1 million to \$250,000 if the project were labor intensive (i.e. employed more than fifty workers), export oriented, or supported small industries, which did not compete with existing industries.

In October 1989, the government also liberalized foreign ownership restrictions, although only in certain areas: 100 percent foreign ownership was allowed in the Batam Economic Zone with 5 percent divestment to Indonesian shareholders within five years. For this type of investment, there was no further requirement for divestment, if the foreign company exported 100 percent of their products.

In 1991, rapid growth and the resulting accelerating inflation and the increasing current account deficit led the government to establish macro-stabilization measures of tight monetary policies, as well as to impose limits on foreign borrowing by state-related entities. At that time Japan changed its major investment destiny to china. Furthermore the decline in the general investment climate in Indonesia led to a perceived decline in foreign investor interest. As a result, the government introduced two important policy reforms in 1992-1993.

A significant initiative came in the government's 1992 decree, whereby the government allowed 100 percent foreign ownership for certain types of investments: investments of over \$50 million, investments located in Eastern Indonesia, and investment located in a bonded zone if all production were exported. For these types of investments, phase down from a maximum 100 percent foreign ownership was required. The other changes introduced by the government where foreign investment in labor intensive operations (defined as those employing more than fifty persons), export-oriented projects (defined as projects exporting 65 percent of production) and supplier

industries producing raw materials or intermediate goods, the minimum Indonesian shareholding at the time of investment was set at 5 percent with a phase down to 10 percent in ten years and 51 percent in twenty from the start of commercial production. The lower minimum investment also applied to foreign investment in the services sector, but with 20 percent minimum Indonesian shareholding formation and phase down to 51 percent in twenty years.

The October 1993 package was notable for two reasons. On the one hand, that package continued the past trend towards liberalization on FDI system by allowing initial foreign ownership of 100 percent for investments with amount over \$2 million in supplier industries. Conversely, the liberalization of the phase-down requirements of the 1992 package were taken back for investments with amount over \$50 million, those located in Eastern Indonesia, and those in bonded zones: phase down had at least 51 percent Indonesian ownership instead of 20 percent.

In June 1994, the government announced a dramatic FDI liberalization package phase down regulations were removed; FDI with up to 100 percent foreign ownership was permitted in a wide range of sectors; the minimum capital requirements were eliminated; and nine public interest sectors port, production, transmission and distribution of electricity, telecommunications, shipping, air transportation, drinking water, railways, atomic generating plants, and mass media which had previously been closed to FDI were opened to majority, but not 100 percent foreign ownership.

Other policies which were important for improving the FDI in Indonesia were as follows. First, the Indonesian government has agreed to submit any investment disputes to the International Center for the Settlement of Investment Disputes (ICSID) in

Washington D.C. In 1993, a long-pending investment dispute involving a U.S investor was resolved throughout ICSID. Second, under Government Regulation No. 45 of 1996, the government has re-introduced basic tax holidays. According to Regulation 45, specific sectors, including capital goods manufacturing, agribusiness, infrastructure, sea and air transport, engineering, and professional personnel training may be qualified for tax holidays.

The second liberalization undertaken in response to the significant drop in oil revenue was quite successful to attract foreign direct investment. Trade liberalization package of October 1986, and 1994; a dramatic liberalization package of June 1994 to increase the attractiveness of Indonesia's investment regulation due to increased competition for investment from China, Vietnam and other countries in the region. Out of those years, 1986 and 1994, the deregulation on FDI did not significantly increase FDI inflows⁹. Iqbal (1995) described that from 1991 to about the middle of 1994 the country experienced a "reform fatigue" or a policy inertia (Hill, 1997). In addition, the increasing of FDI in Indonesia started from 1986, beside the domestic factors (government policies), also because of the external factors (globalization). According to Dunning (1993), the most sticking development that has affected government attitudes and policies toward MNEs since the 1980's has been the globalization of the world economy. Such globalization was shown by tremendous growth of all forms of international transaction especially related to MNEs activities. In addition, the number of foreign direct investment

⁹ FDI increase drastically after deregulation 1986 and 1994, in other years FDI was stable, detail see the FDI development, BKPM

in the second period of liberalization has increased significantly more than ten times from 1986 to 1996 and GDP was stable in the level 6-7 percent¹⁰.

The Third Liberalization Policies, after the 1997 crisis

Since the onsets of the economic crisis in mid-1997, the value of FDI in Indonesia fell more than two times, 33832.5 in 1997 to 13563.1 in 1998 (see table 1). Troubles such as political uncertainty, upcoming political and fiscal decentralization, uneven implementation of economic reform commitments, the unreliable judicial system, security issues, and treatment of existing investors has pushed foreign investors to stay away from Indonesia. To overcome these problems the Indonesian government was encouraging a more active promotion of FDI.

The Capital Investment Coordinating Board (BKPM/BKPMMD) played an important role in promoting foreign investment and approving project applications. As an investment board, BKPM functioned as a one-stop investor service. Investors that have approval from BKPM no longer need approval from a provincial governor or regional chief. Another significant change was that master lists of capital goods and basic material imports for both foreign and domestic investments were approved by BKPM/BKPMMD and no longer need clearance from the Directorate General of Customs and Excise.

In approval process, the Indonesian government also simplified the approval process. For example, approvals for foreign investment up to \$100 million need no longer to be approved by the president of Indonesia, but only by the Chairman of BKPM. On the domestic side, approval of investments of to US\$1.2 million might be issued by the

¹⁰ This analysis based on data statistic provided by BKPM and IMF, International Financial Statistics Yearbook

Chairman of the regional BKPM office rather than by headquarters in Jakarta. A recent Ministerial decree gave authority to Indonesian embassies and consulates abroad to accept applications for foreign investment, which would then be forwarded to BKPM for final approval. (Indonesia: Investment climate statement 2000)

Following the deregulation above, in June 1998, the government of Indonesia eliminated many FDI restrictions in retail and wholesale markets with the condition that they enter into a cooperative agreement with a small enterprise. In addition, many foreign firms used franchising, licensing, and technical service agreements to distribute their goods. Under current regulations, foreign companies manufacturing in Indonesia might distribute their locally produced goods at the wholesale level and might apply for permits to import and distribute other products as well. However, companies engaging in wholesale distribution may not conduct retail operations directly, but should form a separate retail company. Further, the number of expatriate employees granted visas to work in any single wholesale and retail business remains limited.

The government also made some revision in some sectors restricted previously. Sectors such as harbors, electricity generation, telecommunications, shipping airlines, railways, and water supply were revised. Recently government developed policies on the private provision of infrastructure through build-own-operate and build operate-transfer schemes, particularly for electric power, telecommunications and roads. Full foreign ownership was not permitted in these sectors. Local partners were required to own anywhere from five to 51 percent of these investments. Even the government has reduced a negative list of restricted sectors; however, there were some certain sectors remain restricted for foreign investment. Sectors that remain closed to foreign investment are,

among others, freshwater fishing, forestry, public transportation, broadcasting and film, and medical clinics.

In order to give more guarantees to foreign investors in January 2000, Indonesia has made bilateral investment agreements with other countries. In addition, Indonesia has signed investment agreements with 52 countries, namely the United States (Agreement on Investment Guarantees), Argentina, Australia, Bangladesh, the Netherlands, Belgium, Chile, People's republic of China, Czech Republic, Denmark, Finland, Hungary, United Kingdom, Italy, India, Jamaica, Germany, Jordan, Cambodia, South Korea, Cuba, Kyrgyz Stan, Laos, Malaysia, Morocco, Mauritius, Mozambique, Egypt, Mongolia, Norway, Pakistan, France, Poland, Romania, Singapore, Slovak republic, Spain, Sri Lanka, Sudan, Suriname, Syria, Sweden, Switzerland, Thailand, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Vietnam, Yemen, and Zimbabwe. In the case of double taxation, Indonesia also has signed treaties for the avoidance of double taxation with 50 countries. (United Nations, Bilateral Investment Treaties, 2000)

In addition, the economic crisis accompanying such domestic problems, political and social dispute, has fallen foreign investment interest in Indonesia substantially. Eventhough many deregulations have been created by the government, if the business environment, as well as general political and economic environment did not support the government policies, the deregulation has no meaning. So, besides being committed to deregulation the government should consider stable political environment too. Bureaucratic procedures, corruption, and legal reform are also important factors in determining foreign investment development. Klaus Peter Kriegsmann from Asian Development Bank, observed that investors had lost confidence in Indonesia. He

emphasized the need for legal and judicial reform and strengthening of the capital markets and the banking system. He considered corporate governance reform to be the core building renewed investors confidence to make investment in Indonesia (World Bank, Corporate Governance Workshop, February 19, 2002). In the same occasion, I Nyoman Tjager, Chairman of the National Committee for Corporate Governance, also said that investors were concerned about transparency and disclosure concerning the use of their funds by borrowers, and the accountability of the borrower for performance and fair distribution of profits. If Indonesia and Indonesian companies want to attract international investors, there is a need to meet investors requirements such as transparency and disclosure. Unfortunately, this is not as easy as it sounds, most investors still consider doing business in Indonesia as too costly and risky (World Bank, Corporate Governance Workshop, February 19, 2002). In addition, the 1997 crisis has caused total value of investment decreased significantly, more than three times. GDP growths also decrease significantly, even in 1998 reached -13.1 percent¹¹.

¹¹ This analysis based on data statistic provided by BKPM and IMF, International Financial Statistics Yearbook

Chapter III

Trends of FDI in Indonesia

Because of a lack of data source for analysis trends of FDI, data were started to be used in 1978 (data available from 1967 only total FDI). This caused the problem that there was no overview from the moment when the investment law No. 1/1967 was introduced. But in general, in the initial period FDI enter into Indonesia showed no significant change. FDI showed a significant change after the government introduced deregulation packages in May 6, 1986, called Pakem/Pakmei (see table 1). In those years, FDI increased almost 9 times compared to the previous year. Furthermore, in analyzing trends of FDI in Indonesia, this analysis was comprised in three parts: foreign investment by economic sector, foreign investment by countries origin and foreign investment by location.

Table 1. Table of application approval since 1967

The FDI Development in Range 1967-2000					
Year	Number of Project	Value (in millions US\$)	Year	Number of Project	Value (in millions US\$)
1967	22	207.1	1984	23	1096.9
1968	35	264.4	1985	45	853.2
1969	37	127.5	1986	93	847.6
1970	83	166.8	1987	130	1520.3
1971	62	287.2	1988	145	4410.7
1972	47	163	1989	294	4713.5
1973	69	323.8	1990	432	8751.1
1974	53	542.4	1991	376	8778
1975	24	1145	1992	305	10323.2
1976	22	221	1993	329	8144.2
1977	20	167	1994	451	27353.3
1978	23	207.1	1995	799	39944.7
1979	13	248.6	1996	959	29928.5

1980	20	1074.4	1997	790	33832.5
1981	24	706.5	1998	1035	13563.1
1982	31	2416.9	1999	1164	10890.6
1983	46	2470.8	2000	1433	14933.6
Total	631	10739.5	Total	8803	219885

Sources BKPM

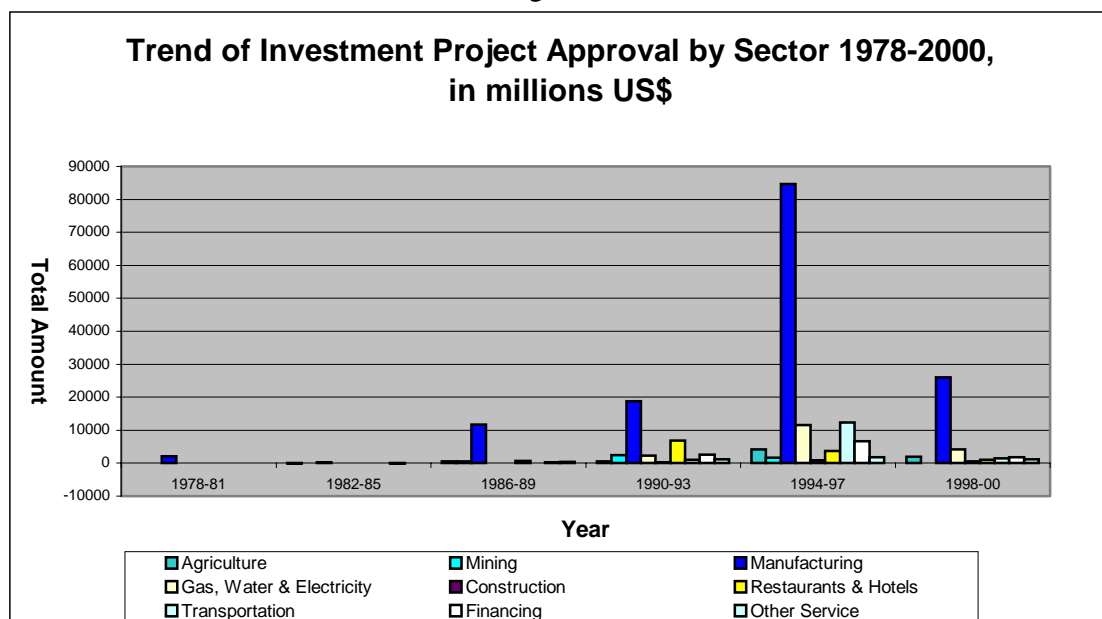
Foreign Investment by Economic Sector

The category investment by economic sector has nine subcategories: agriculture (including forestry and fishing), mining and quarrying, manufacturing, construction, gas, water and electricity, financing (including insurance, real estate, business services), community, social and personal services, wholesale, retail trade, restaurants and hotels, and transportation (including storage, communication). Of these nine categories, the leading categories were manufacturing; gas, water and electricity and transportation. In these three sectors, the total foreign investment respectively was 141079 million US dollar, 17976.4 million US dollar and 14823.1 million US dollar from 1978 to December 2000. In the manufacturing sector the average was 5878.3 million US dollar per year, about 749 million US dollar in the gas sector and 617.6 million US dollar per year in transportation. With a share of more than 65%, it was obvious that manufacturing was the leading sector. The category construction was the smallest one with 1890.6 million US dollar from 1978 to December 2000.

Figure 1. showed that the manufacturing sector grew exceptionally rapidly in the period 1990-93 to period 1994-1997. A number of industries expanded at an average annual growth rate 30% or above. These industries including garments, footwear, furniture, porcelain, glass, fabricated metal products, measuring equipment and other manufacturing, which include toys and sports goods.

Figure 1. also showed sharp degradation on manufacturing sectors in the period 1994-97 to period 1998-2000. This declining led primarily by a severe slow-down in the textile, wood and paper sub-sectors. The slowdown in other sectors such as fabricated metal, machinery and transport equipment sub-sector and in the non-metallic mineral sub-sector also indicated a cause of the declining in manufacturing sectors. Only food and basic metal sub-sectors maintained their previous growth rates.

Figure 1.



Source: Indicator Economy Bulletin Statistic, BPS, Jakarta, 1980-2000; calculations based on data from indicator Economy, various issues. Excluding oil, insurance and banking sectors

Foreign Investment by Country Origin

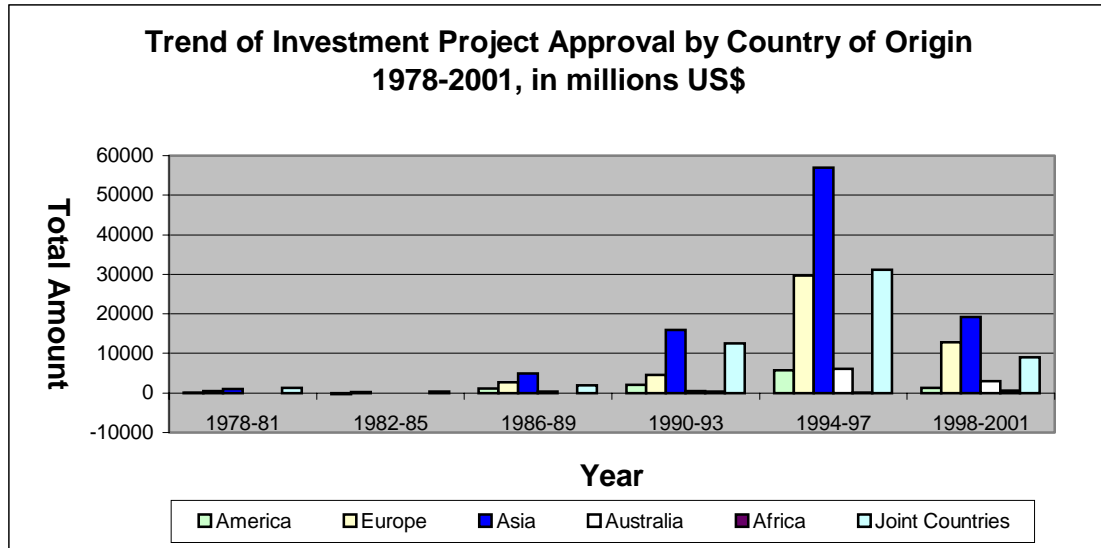
The category country contains about 32 countries, 5 subcategories of continent and 1 subcategory of joint countries. Japan according to the data from Indikator Ekonomi (Indicator Economic) the leading country with a total investment of 31199.5 millions US dollar from January 1, 1978 to 2000. With a total investment of 30229 millions US dollar and 13331.9 billions US dollar, the United Kingdom and Hong Kong were respectively

the number two and three investors. The average investment in million US dollar per year for Japan was around 1300 millions US dollar, for the United Kingdom 1259.6 and Hong Kong 555.5 millions US dollar. Whereas Japan has a share of 9.4% of the total investment from 1978 to 2000, the United Kingdom has a share of 9.1% and Hong Kong around 4%. With two of the four so called New Industrializing Countries (NIC), Japan, South Korea, Hong Kong and Taiwan, in the top three of foreign investors in Indonesia, the New Industrializing Countries with good reason could be said to be the “emerging dragons”. Figure 2. showed the rapid investment growth in Indonesia from Asian Countries, especially in the period of 1990-93 to 1994-97, lead by NICs.

In addition, that Japan has become one of the main direct investors in Indonesia is not very surprising because Japan has long been a major trading nation as well as a one of the main direct investors in the USA, Western Europe, China, and the South-East Asian region. (Andrea Harrison, Ertugrul Dalkiran, Ena Elsey, International Business, p. 176).

The USA has a total investment of only 8895.3 million US dollar from 1978 to 2000. In addition, if the criteria include the oil sector we could not say that Japan was the leading investor in Indonesia because oil sector was the main sectors for investors from the USA. The question which country really was the number one investor, the USA or Japan, could not be answered by looking at the figures from indicator economic because the data provided by the Investment Coordinating Board exclude the oil sector.

Figure 2.



Source: Indicator Economy Bulletin Statistic, BPS, Jakarta, 1980-2000; calculations based on data from indicator Economy, various issues. Excluding oil, insurance and banking sectors

Foreign Investment by Location

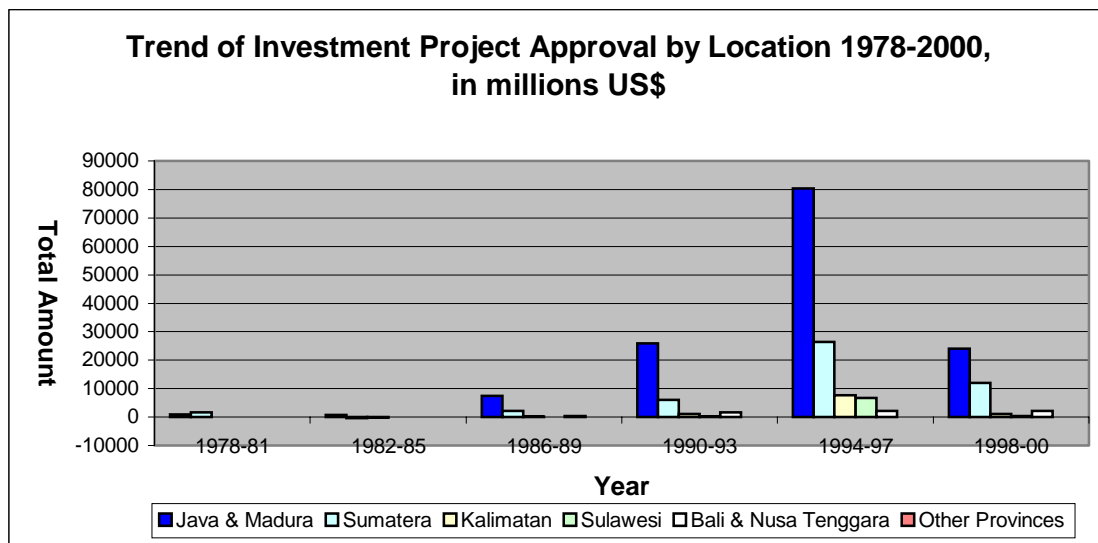
In Indicator Economic the locations were grouped according to the area or island. These categories were divided again in provinces. The regions in West Java, Special Region of Jakarta and East Java with respectively 59808.4; 32737.3 and 30124.7 million US dollar from 1978 to December 2000 attract the most investment projects. West Java, the number one location, has a share of 17.3% of the total investment whereas the special Region of Jakarta and East Java have a share of 9.5% and 8.7% of the total investment. The average investment per year is 2600.4 million US dollar for West Java, 1423.4 million US dollar for the Special Region of Jakarta and 1309.8 million US dollar per year for East Java.

In the category location one of the important factors besides a liberal policy was the infrastructure of a region. For both domestic and foreign investors the infrastructure was one of the criteria when deciding to invest or not. In regions with a less adequate

infrastructure the investment was usually lower than in regions with an adequate infrastructure. A good example was Southeast Sulawesi, the location with the lowest total investment (about 168 million US dollar from 1978 to 2000). Another example was East Indonesia where infrastructure also played an important role.

Figure 3 showed that investment into Java increased gradually in the period 1990-1993 to period 1994-1997 compared with other regions. At this period many of medium and large scale manufacturing industries were heavily concentrated in Java and Jakarta in particular. This happened because in this region good physical infrastructure was available and also the government offered special incentives to investors. By 1997 this region has increased their share of manufacturing employment and value added more than half of the country's total.

Figure 3.



Source: Indicator Economy Bulletin Statistic, BPS, Jakarta, 1980-2000; calculations based on data from indicator Economy, various issues. Excluding oil, insurance and banking sectors

Chapter IV

Empirical Estimation of the FDI and GDP Growth Model

The decision by foreigners to invest in a given country depends on a wide range of factors in the host country. Among the major ones were: the availability and cost of natural and human resources; adequacy of infrastructure and support facilities; market size; trade policies and other policies that affect macroeconomic stability; economic growth and level of development; and political stability¹². The importance attached to each of these factors depends on the type of investment and the motivations or strategy of investors.

Relative costs influence location decisions, but low direct labor costs were not as much important as was commonly believed. In fact, the importance of low-cost unskilled labor in location decisions has declined in recent years and greater emphasis now has placed on skills and the trainability of workers.

Moreover, in many industries, direct labor costs now account for only 10 to 15 percent of manufacturing costs, and the share was even smaller in some industries. In contrast, because of white collar and supervisory roles, labor costs have been rising in the more developed countries; it has become increasingly attractive to invest in countries that offer low-wage high technology skills pool of labor. As multinationals transfer more sophisticated production lines to developing countries, the availability and cost of skilled labor become more important.

¹² See the detail about factors involved in the FDI decision in International business, Andrew Harrison, Ertugrul Dalkarin and Ena Elsey, p. 256, 2000

Market size was also significant in affecting location decisions. Larger economies have attracted the bulk of FDI. This was because of the potential of local sales. In small economies, FDI usually concentrates on production for export.

The role of previous investor was also another important factor in determining foreign investment inflows. There was somewhat of a “herd effect” with potential investors following where others are already operating successfully (Marios B. Obwona, 1996). Further, as more firms invest in a country, synergies and linkages would develop among them.

Costs were also affected by adequacy of infrastructure facilities and the supply of utilities. Unreliable transport and telecommunication services and insufficient power or water supply addition, the existence of efficient financial and other support facilities, which could cater the diversified needs of investors, was also necessary.

The host country’s policies with respect to restricting or welcoming FDI would obviously also affect the magnitude and character of FDI. Not only would the policies have direct effect on FDI, but they would also affect whether the foreign firm wishes to export or license instead of having a direct production investment in the foreign country.

Finally, the importance of political stability in creating a climate of confidence for investors could not be underestimated. Political instability, whether perceived or real, constitutes a serious deterrent for FDI as it created uncertainties and increased risks and hence costs.

Following the model that has been used by Marios B. Obwona in the case of Uganda, in order to determine relationship between above factors and FDI in Indonesia, we have specified a model as follows¹³:

Model specification

Based on the Indonesian situation and availability of consistent data series, the following model was specified:

FDI determinants equation

$$1. \text{ FDI} = a_{11} + a_{12} \text{ GDP} + a_{13} \text{ GE} + a_{14} \text{ FD} + a_{15} \text{ INF} + a_{16} \text{ DSR} + a_{17} \text{ ER} + a_{18} \text{ WF} + a_{19} \text{ NR} + a_{20} \text{ PS} + a_{21} \text{ GP} + u_1$$

Where:

FDI	= Real Foreign Direct Investment,
GDP	= Real Gross Domestic Product,
GE	= Real Government Expenditure in Transportation, Telecommunication and Education as proportion of GDP
FD	= Foreign Debt as a proportion of GDP
INF	= Inflation Rate was data GDP deflator 1995 = 100,
DSR	= Domestic Saving Rate as a proportion of GDP
ER	= Exchange Rate
LF	= Labor Force
TB	= Real Trade Balance

¹³ The model was modification from Model that has already been used by Marios B. Obwona. The modification is adjustable with Indonesia investment condition.

GP = Government Policies used dummy variables, 1 for liberal policy, 0 for restrictive policy

FDI (-1) = Real Foreign Direct Investment in the previous years.

a_1 = stochastic disturbance terms.

Based on the history and trend of FDI in the previous chapter the hypotheses below could be advanced concerning factors that have affected FDI inflows to Indonesia.

H1: GDP, GE and DSR have positive relationship with FDI.

The variable GDP stand for market size hypothesis. The market size stresses the necessity of large market size for efficient utilization of resources and exploitation of economies of scale. As the market size grows to some critical value, the hypothesis asserts that FDI would start and increase thereafter, with the expansion of the market size (Scarpelanda and Mauer, 1969; Torrisi, 1995). Moreover, GDP could be used to capture the influence of proven economic performance. The higher the value of GDP implies, in addition to greater domestic market, the better the infrastructure and hence provides greater incentive for FDI. In addition, the variable of GE above only covered expenditure in the field of infrastructure, transportation, telecommunication and education. According to Dunning, Inadequate infrastructure such as transportation and communication facilities, and perhaps most important of all, a poorly educated, trained or motivated labor force was insufficient to attract FDI. So our assumption was in order to attract more FDI, government should spend more in the areas of infrastructure and education. DSR represent a willingness to forgo present consumption in favor of investment in future production capacity and future consumption.

H2: ER, INF, FD and TB have negative relationship with FDI.

All of these variables are reflection of macroeconomic stability. ER, INF, FD and TB capture some structural characteristics of the economy and are related to economic policy, which can be adjusted by policy makers in order to make FDI more attractive. Exchange rate instability increases a firm's foreign exchange exposure and a falling currency might severely reduce the value of repatriated profits. The Inflation rate represents the cost of the latter in Indonesia fuels inflation. Inflation raises production costs and puts pressure on a firm either to raise its prices or to reduce its profit margins. Inflation also makes investors difficult to estimate the price of along-term contract. The high debt service overhang describes both the structure of the economy and political effects.

To analyze the relationship between trade and FDI is actually rather complex and there are diverse predictions about this relationship (see Torrisi, 1985; Tsai, 1994). Taking in the Fry's view (1983), with his argument of the two-gap model, he said that foreign exchange was one of the key constraints on economic growth in developing countries; it was not difficult to understand the relation between trade balance and FDI. When a country faced growing trade deficits, it was expected to adopt more favorable policies to facilitate inflow of FDI.

H3: LF has positive relationship with FDI. Even labor force, especially low-cost unskilled labor, was less important to attract foreign investment inflow to country (Dunning, 1996), but labor force still have important role to attract foreign investment.

H4: GP has negative relationship with FDI. The government policies were important in order to provide the business environment as well as the general political and economic environment. Above all, investors like a stable political environment. This is probably

more important than whether a country is in the upturn or downturn of its economic cycle, since investors are more concerned about an economy's future potential than its present state. But political stability is crucial. Wars and civil unrest are an obvious case where loss of life or destruction of property may result. Turbulent changes of government might also lead to volatility in the business environment, leading to the nationalization or confiscation of foreign assets. In this case we will use dummy variables to investigate the government role toward FDI in Indonesia. As we discuss in the previous chapter, Indonesia has implemented two kinds of investment policies, liberalization and restriction policies. For the liberal period we use 1 as a representative of liberal period, and for restrictive we use initial 0 as representative of restrictive period.

H5: FDI in the previous year has positive relationship with FDI in the recent year. The effect of the other investors, which has already been operating successfully, has influenced the new potential investors to follow. Further, as more firms invest in a country, it means the more synergies and linkage develop among them. We call this as herd effect.

Growth equation

$$2. \text{GDPGR} = a_{21} + a_{22} \text{FDI} + a_{23} \text{GDS} + a_{24} \text{EG} + a_{25} \text{OCF} + u_2$$

Where:

- GDPGR = Real Annual Growth Rate of GDP,
- FDI = Real Foreign Direct Investment,
- GDS = Gross Domestic Savings as proportion of GDP,
- EG = Rate of Growth of Real Exports,

OCF = Other Capital Inflows,

a_2 = stochastic disturbance terms

Following the equation (2), four hypotheses could be advanced, concerning the effect of FDI to GDP growth.

H6: FDI has positive relationship with GDPGR. The impact of FDI on economic growth is one of the most controversial topics in development economics. According to the modernization hypothesis, FDI promotes economic growth by providing external capital and through growth, spreads the benefits throughout the economy. Moreover, FDI usually brings with it advanced technology, and better management and organization. FDI is in fact, the other engine of growth in developing countries.

H7: GDS has positive relationship with GDPGR. The variable GDS is so standard in a production function that it is unnecessary to repeat the rationale of including it the Harrod-Dommar equation theory of economic growth states simply that the rate of growth of GNP/GDP is determined jointly by the national saving ratio, and the national capital-output ratio. More specifically, it say that in the absence of government, the growth rate of national income will be directly or positively related to the saving ratio (i.e. the more an economy was able to save and invest, out of a given GNP/GDP, the greater would be the growth of that GNP/GDP).

H8: EG has positive relationship with GDPGR. The variable of EG is also so standard in a production function that it is unnecessary to repeat the rational behind this. The higher export that reached by a country the higher national income (GDP) the country gains.

H9: OCF has positive relationship with GDPGR. The more capital inflow the more capital government has to finance development.

Data sources and data processing

Annual time series data for the variables of interest for the period 1971-2000 were used. All data used were annual, in domestic currency and expressed in real terms at 1996 constant prices. Data on FDI, GDP growth and so on were gathered from a number of sources: the IMF, International Financial Statistic Yearbook, the ADB, Key Indicators of Developing Asian and Pacific Countries, Indonesia Investment Coordinating Board, Statistic Indonesia of the Republic of Indonesia. The data for the government policy variables on the restrictiveness of Indonesia's FDI system were based on the historical policy on FDI in chapter two.

In processing data all data nominal has been transferred to real value by dividing it with GDP deflator 1995=100 times 100. The data included in this process were GDP, DSR, FD, GE, TB, FDI, EG, and OCF. The rest of the data used original data (nominal data). Data like inflation were taken from data GDP deflator 1995=100 (data inflation = data GDP deflator 1995=100). In the case of Government Policies, we used dummy variable, with specification 1 for liberal policy (period 1971-1973 and 1987-2000) and 0 for restrictive policy (period 1974-1986).

Empirical result

Table 5 reports the empirical results using data during 30 years from 1971 – 2000. The ordinary least squares (OLS) estimation method for FDI determinants and Growth equation models has been used.

Table 2. FDI determinants and growth equation

Explanatory variables	FDI determinants	Growth equation
Constant	737.1087 (2.8522)	8.3548 (10.9871)
GDP	0.2342* (4.2452)	
GE	-4.0405* (-4.8578)	
FD	0.0564* (2.3976)	
INF	2.8438* (2.0843)	
DSR	0.3362* (2.7275)	
ER	-0.0979* (-3.5142)	
LF	-0.0189* (-3.4767)	
TB	-0.2479* (-2.2899)	
GP	-6.4764 (-0.1525)	
FDI (-1)	0.02846 (0.2086)	
FDI		0.0056 (0.9323)
GDS		0.0715* (3.0828)
EG		-0.00003* (-3.4882)

<i>OCF</i>		-0.0388* (-3.3225)
R2	0.9019	0.8059
S.E. of Regression	32.8059	1.9236
Durbin Watson Stat	2.8035	2.1639

Note: The numbers in parenthesis are asymptotic t-statistic;
* Indicates significance at 5 percent level

FDI determinants equation result

Based on empirical result in table 5, the regression analysis shows that GDP, DSR, FD, INF, FDI (-1) has positive relationship with FDI inflow vice versa ER, GE, LF, TB and GP has negative relationship with FDI in the case of Indonesia. Almost all variables have significant at 5 percent level except for variables GP and FDI (-1). In general those results above are quite good. The overall explanatory power of the model as indicated by R² value is reasonably high. The Durbin Watson statistic is also quite good close to two. In addition, Durbin Watson Statistic functions as detection of autocorrelation disturbances between each variable of the model¹⁴.

From table 5 above we find interesting cases on variables FD, GE, INF, and LF. For the variable of Foreign Debt, in the case of Indonesia it will not be surprising if Foreign Debt shows a positive relationship with FDI because commonly the donor countries also embody major investor for Indonesia, such as Japan and World Bank.

In the case of Government Expenditure, as we mention in previous hypothesis, GE should have a positive relationship but the empirical result shows that GE has a negative relationship with FDI. This contradiction result happens because of some

¹⁴ The perfect value of Durbin Watson statistic was two. This means that between each variable there were not autocorrelation disturbances. (See the detail in Jack Johnston and John Dinardo, econometric methods, p.179)

possibilities. First, In the case of Indonesia, maybe the government expenditure is not so important. Investors consider other factors, which are more important, such as natural resources, government incentives, political stability, labor force and others. Second, maybe the government budget for investment in public facilities is so low that the GE every year has no impact toward foreign investment. There is no significant improvement in government budget every year (see data IMF). Third, maybe because in this paper variable GE only covers some sectors, in government expenditure such as transportation, telecommunication, and education. So these three variables can not strongly represent variable of Government expenditure¹⁵.

The result of Inflation variable also shows contradictory result with previous hypothesis and theory. The relation between inflation and investment should be negative, where the increasing of inflation will reduce FDI inflows. As we mention before, variable inflation is used as indication of macro economic stabilities. In this case, inflation can raise production costs and put pressure on a firm either to raise its prices or to reduce its profit margins. Inflation also makes investors difficult to estimate the price of a long-term contract. The high debt service overhang describes both the structure of the economy and political effects. If the relationship between FDI and inflation is positive this is not unreasonable. Positive relationship means that increasing of inflation would increase FDI inflow in Indonesia. So this result is dubious.

The result of variable Labor Force is different from the hypothesis; LF has negative relationship with FDI. In Indonesian case, this result is quite reasonable, because

¹⁵ Government Expenditure, according data statistic, covered 13 items; general public services; defence; education; health; social security and welfare; housing and community amenities; Economic services: agriculture, Industry, electricity, gas and water, transport and communication, other economic services; and others

majority of labor force in Indonesia generally is unskilled worker. According to Dunning, in the modern theory of FDI, labor force is not as much important as it is commonly believed. Nowadays the importance of low-cost unskilled labor in location decisions has declined in recent years and greater emphasis has been placed on skills and the trainability of workers. From 1961 to 1990, only 8.1 percent students graduated from tertiary education, universities and academy¹⁶.

Growth equation result

As indicated in table 5 the regression analysis shows that FDI and EG have positive relationship with FDI inflow vice versa GDS and OCF has negative relationship against FDI in the case of Indonesia. Almost all variables have significant at 5 percent level except for variables FDI. In general, those results above are quite good. The overall explanatory power of the model as indicated by R^2 value is reasonably high. The Durbin Watson statistic is also very good, almost perfect.

The important thing in this empirical result is the relationship between GDPGR and FDI. The result shows that FDI is positively related to GDP growth, even the result shows insignificant at 5 percent significant level. In addition, the coefficient value of FDI is very small namely 0.0056. From the result we can interpret that every additional one point of FDI can increase 0.0056 point of GDP growth.

From growth equation models, GDS and OCF show an opposite result with the previous hypothesis. Our hypothesis assumes that GDS has positive relationship with GDPGR but the result shows negative relationship. In the case of Indonesian this result is quite understandable because GDS in Indonesia is low, around 30 percent of GDP. On

¹⁶ Quoted from Hal Hill, p. 207, the original sources was BPS, Sensus Penduduk, 1961, 1971, 1980.

the other hand, government has also debt burden, so almost of GDS used by the government have to finance debt. Consumption in unproductive sector also includes one of the causes why GDS do not have positive relationship with GDP growth. Inequality of income distribution can not be looked down. Inequality of income distribution in Indonesia is very high, more than 50% concentrated in Jakarta, proprietary by conglomerates.

The variable OCF also shows negative relationship with GDPGR. In the case of Indonesia this result could be understandable, because many of foreign loans distribute to inappropriate objects, especially in President Soeharto's era. According to Sumitro, around 40 percent of foreign debt from donor countries have gone useless¹⁷.

¹⁷ Sumitro mentioned in the local newspaper (Kompas, 1998) that around 40 development lending has corrupted.

Chapter V

Conclusion

Throughout Indonesia's economic development, FDI has played an important role in rehabilitating Indonesia's economy especially at the beginning of 1967¹⁸. Both economic theory and recent empirical evidence suggest that FDI has beneficial impact on developing host country. Even its quantitative insignificance, case study evidences show that FDI has had a significant impact on Indonesia economic growth. The historical overview suggest that in the initial period of implementing market oriented system, FDI has had important role in restoring economic problem by spinning out domestic investment, filling lack of capital, accelerating industrialization and increasing GDP growth. Period 1994 to 1997 has showed that manufacturing sector has grown very rapidly more than four times.

The 1997 economic crisis accompanied with political and social dispute has decreased foreign investment. This experience suggests that stable business environment as well as politic and economic stabilization also has very important role to attract FDI inflows. The general message from our study and empirical findings is, from the viewpoint of attracting investment, the macroeconomic and political stability are more important than level of the incentives themselves¹⁹. This view has important consequence for macroeconomic policy making and for the design of reform programs to promote investment. Besides that, good governance, building better legal framework and

¹⁸ In order to rehaabillitate the economy the government moved decisively on restoring macroeconomic stability and introduced market-oriented reforms, Donald J. Lecraw, *Indonesia: the critical role of government*, p. 322.

¹⁹ Even the government was promising many incentives but if the macroeconomic and political stability did not support the investment climate, most investor still consider doing an investment.

eliminating corruption in bureaucratic institution are not less important. The 1997 crisis has give lesson to Indonesia about how important development of better legal framework in globalization era is.

However, economic crisis does not make the government surrender. The government should continue their efforts to attract and accelerate the flow of FDI through policy liberalization and introduction of new measure and mechanisms. Some of these measures include, among other things, as follows:

- a. Creating a climate favorable to investment, which requires establishing a partnership between the government and the private sector on the basis of greater transparency in public administration and strong intermediate organization such as chambers of commerce, business councils, professionals and associations, which could engage the state in a regular dialogue. The state has a critical role to play, but government needs to encourage, stimulate, regulate, and complement the private sectors, rather than compete with it or attempt to displace, discourage, and exploit it.
- b. Maintaining economic and political stability, as a general precondition for increased FDI, and intensifying regional cooperation. With greater regional integration, each individual country would have an increased market for particular goods.

Overall, Indonesia has done a remarkable job in attracting FDI given the obstacles of history, context and natural hindrance. A continued process of foreign investment liberalization is thus necessary to realize the full potential of foreign investment and allow foreign investment to complement local effort in accelerating the country's development. The hope is a promising one as the restoration continues.

Bibliography

- Abdel-Hameed M. Bashir, Foreign Direct Investment and Economic Growth In Some MENA Countries: Theory and Evidence, Department of Economics, Grambling State University.
- Andre Harison, Ertugrul Dalkiran, Ena Elsey, International Business, Oxford University Press 1999.
- Andrea Marino, The Impact of FDI on Developing Countries Growth: Trade Policy Matters, ISTAT (National Institute of Statistics), Italy, CEMAFI, Universite de Nice-Sophia Antipolis, France.
- Canada Indonesia Business Development Office for Canadian Companies, A Brief Review of the Investment Environment in Indonesia, Canada Indonesia Business Development Office (CIBDO).
- Edward M. Graham, Fighting the Wrong Enemy, anti global activists and multinational enterprises, Institute for international economics 2000.
- Gerald M. Meier, Leading Issues in Economic Development, Oxford University Press 1995.
- George Fane, Deregulation in Indonesia: Two Steps Forward, One Step Back, Research School of Pasific and Asian Studies, The Australian National University.
- George Fane, The Squencing of Economic Deregulation in Indonesia, Research School of Pasific and Asian Studies, The Australian National University.
- Hadi Soesastro, The Economic Crisis in Indonesia: lessons and challenges for governmence and sustainable Development, Pasific Link.
- HANKEN, Foreign Direct Investment (FDI) Flows; Extra – and Intra Regional, Svenska Handelshogskolan.
- John H. Dunning, The Globalization of Business, Routledge London and Ney York 1993
- Jordan Shan, Garry Gang Tian and Fiona Sun, The FDI-led growth hypothesis: Further Econometric Evidence from China, National Center for Developing Studies – The Australian National University – Research School of pacific and Asian Studies, 1997.

Kim June Dong, The role of foreign direct investment in Korea's economic development: productivity effects and implications for the currency crisis, Korea Institute for International Economic Policy, 1998.

Kompas, Daily Newspaper.

Lindblad, J, Th, Foreign Investment in Indonesia – Website, Daburh of the Leiden University.

Marios B. Obwona, Determinants of FDI and Their impact on Economic Growth in Uganda, Economic Policy Research Center 1996.

Michael P. Todaro, Economic Development, Longman London and New York 1997

The Central Bureau for Statistics Indonesia (BPS), Data FDI by Sector, Country Origin and Location, 1970 - 2000.

The Investment Coordinating Board (BKPM), Data FDI Development 1967-2000.

U.S. Commercial Service and the U.S. Department of State, Country Commercial Guide – Indonesia, Fiscal Year 2000, July 1999.

United Nations Conference for Trade and Development, Bilateral Investment Treaties 1959-1999, United Nations, New York and Geneva, 2000.

U.S. Embassy Jakarta, Indonesia Investment Climate 2000, www.usembassyjakarta.org.

World Bank, Indonesia Corporate Governance Reform Leading the Way, National Committee for Corporate Governance, February 19, 2002.

Appendix I

FDI Determinants Equation Result

Dependent Variable: RFDI

Method: Least Squares

Date: 02/03/02 Time: 02:36

Sample(adjusted): 1976 2000

Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	737.1087	258.4327	2.852226	0.0128
GDP	0.234268	0.055184	4.245226	0.0008
DSR	0.336190	0.123257	2.727541	0.0163
ER	-0.097903	0.027860	-3.514161	0.0034
RFD	0.056447	0.023543	2.397628	0.0310
RGE	-4.040469	0.831751	-4.857786	0.0003
INF	2.843805	1.364402	2.084286	0.0559
LF	-0.018931	0.005445	-3.476686	0.0037
RTB	-0.247949	0.108275	-2.289983	0.0381
GP	-6.476433	42.48139	-0.152453	0.8810
RFDI(-1)	0.028455	0.136432	0.208562	0.8378
R-squared	0.942767	Mean dependent var		97.58046
Adjusted R-squared	0.901886	S.D. dependent var		104.7341
S.E. of regression	32.80599	Akaike info criterion		10.11928
Sum squared resid	15067.27	Schwarz criterion		10.65559
Log likelihood	-115.4910	F-statistic		23.06139
Durbin-Watson stat	2.803459	Prob(F-statistic)		0.000001

Appendix II

Growth Equation Result

Dependent Variable: GDPGR

Method: Least Squares

Date: 01/31/02 Time: 02:23

Sample(adjusted): 1972 1999

Included observations: 28 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.354752	0.760414	10.98711	0.0000
RFDI	0.005593	0.006000	0.932267	0.3609
ROCF	-0.038828	0.011686	-3.322468	0.0030
EG	0.071545	0.023208	3.082796	0.0053
GDS	-2.58E-05	7.39E-06	-3.488216	0.0020
R-squared	0.834644	Mean dependent var		5.857143
Adjusted R-squared	0.805886	S.D. dependent var		4.366067
S.E. of regression	1.923617	Akaike info criterion		4.306725
Sum squared resid	85.10699	Schwarz criterion		4.544618
Log likelihood	-55.29414	F-statistic		29.02340
Durbin-Watson stat	2.163938	Prob(F-statistic)		0.000000