# INVESTOR PROTECTION AND GREENFIELD FDI

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**ABSTRAK**

*Studi menunjukkan dampak dari Investasi Asing Langsung (FDI) adalah adanya pertumbuhan ekonomi, stabilitas keuangan serta efek positif lainnya. Penelitian tentang bagaimana FDI masuk ke dalam satu negara beserta faktor-faktor yang mempengaruhinya masih sangat terbatas. Studi pada artikel ini akan membahas faktor dominan apakan yang menyebabkan Greenfield FDI diinvestasikan ke dalam suatu daerah. Greenfield FDI memiliki beberapa kelebihan dibandingkan dengan mode Merger dan Akuisisi (M&A) karena merupakan bentuk FDI dengan investasi dari awal secara penuh sehingga memberikan peluang bagi penambahan lapangan kerja baru. Hasil studi ini memperlihatkan bahwa dengan memberikan perlindungan kepada investor berupa penegakan Hak atas Kekayaan Intelektual (HAKI) yang lebih baik akan mendorong arus masuk Greenfield FDI ke suatu negara. Output lain dari penelitian kali ini adalah pemberian kemudahan dalam memulai usaha baru juga memberikan dampak positif terhadap Greenfield FDI.*

## 1. INTRODUCTION

### 1.1. Background

Foreign Direct Investment (FDI) spreads its positive spillovers through many channels. Li and Tanna (2019) find a robust FDI-induced productivity growth after accounting for the roles of human capital and institutions as contingencies in the FDI-TFP growth relationship while Lamsiraroj (2016) suggests that FDI has an overall positive effect that associated with economic growth and vice versa (2016). Urata and Kawai (2000) argue that host countries gain benefits owing to financial resources transfer, technology and managerial know-how and participation in various networks. On top of that, bringing investment inside means that more money to come and more jobs to create.

There were less studies focusing in how FDI flows to the recipient countries. Bell (1993) classified FDI mode of entry into International Joint Ventures (IJV) and wholly owned subsidiary grouping. The wholly owned group further divided as cross border Merger and Acquisition (M&A) and greenfield investment. Identifying factors affect greenfield FDI modes will provide more information for policy makers in attracting positive impact to come. Previous studies by Neto, Brandao and Cerqueira (2008) explores two kinds of variable groups as mode encompassing variables, which influence both M&A and Greenfield method, and location-specific variables that only affecting each particular FDI entry mode. This study investigates investor protection that may have an effect on greenfield FDI flow to the certain countries. Investor protection as proxied by the enforcement of intellectual property rights will be mainly discussed in this research.

### 1.2. Research Objective and Questions

The objective of this study is to examine the effect of investor protection measures on intllectual property rights on greenfield FDI. This study will attempt to answer this following research question.

*Does investor protection have positive influence on greenfield FDI inflows?*

Greenfield investment is defined as direct investment which enters into foreign market by the processes of establishing a new affiliate. The main difference between cross border M&A and greenfield investment is that the first continues local company which already existed in the domestic while the latter one sets up a new business enterprise from the beginning. This definition is consistent with prior studies by Hennart and Park (1993), Brouthers and Brouthers (2000), Muller (2000) and Neto, Brandao and Cerqueira (2008).

## 2. LITERATURE REVIEWS

### 2.1. Theoretical Background

The Eclectic Paradigm (O-L-I Theory), John Dunning (1980).

The three reasons of naming the eclectic paradigm are because it describes of all the MNE activity occurred during recent years, secondly that it provides plausible explanation to the entire categories of FDI and lastly it includes all kind of methods taken by multinational companies that engage in international activities.

In summary, Dunning (1980) argue that firms engaging in "**foreign value-adding activities**" at these three following circumstances:

1) Firms have possession of Ownership ("O") advantages in compare to any others firms that serve one particular market. The ownership advantages possession may take the forms of intangible asset or of common governance exclusively for the firms at the specific period of time.

2) With the assumption (1) is met, it is more favorable for the firms for employing the advantages by themselves (internally) rather than exploiting them with other firms (externally). These advantages, named as Internalization ("I") advantages, can be in shape of existing capacity expansion or the building of the new one.

3) When the assumption (1) and (2) are satisfied, firms serve international market in the support of input factors outside their home countries. If not, foreign markets can only be supplied by export activities and domestic one by local production. This condition is called as Locational ("L") advantages.

The foreign value-adding activities may take form of contractual resource transfers (i.e. licensing), trade in goods and services (i.e. export) or FDI. The factors affecting the selection of each mode are described as follows:

Table – 2: The determinants of foreign value-adding activities.

| Foreign value a adding activities | Ownership | Internalization | Location |
|---|---|---|---|
| Foreign Direct Investment | Yes | Yes | Yes |
| Trade in goods and services | Yes | Yes | No |
| Contractual resource transfers | Yes | No | No |

Source: adopted from Dunning, J.H. (1988)

Based on table above, foreign value-adding activities are determined by the possession of three "O-L-I" advantages. Ownership is basic advantages that a firm should possess to be involved in foreign

adding value activities. The most possible form of doing international production in this stage is by contracting resource or licensing to other firms. Furthermore, the existence of Internalization advantages support firms in doing export rather than licensing. Finally, firms will choose foreign direct investment rather than export and licensing because Locational advantages give preferentiality to foreign production base compare to domestic one.

Bell (1993) categorizes three background theories to explain firms' behavior in choosing between a greenfield investment and an international joint venture. Those theories are the strategic behavior approach, transaction cost theory and internalization theory. All theories are being compared each other within every suggested hypothesis. The study mainly discusses each theory perspective in responding firms' entry mode based on 18 proposed variables. The variables included in the study are as follows: Host country experience, international experience, Research and Development (R&D), Skills, Advertising, Solvency, Relative size, Global strategy, Intrasystem sales, Related business, Country risk, Cultural distance, Resource based, Restrictive country, Stimulation of cooperation, Growth industry, Growth welfare and Local level of education.

According to strategic behavior approach, the probability of a company to set up wholly owned subsidiaries is bigger when:
➢ The company has adequate experiences to operate in international or a certain host country;
➢ Technological know-how is high so that starting up a wholly owned subsidiary will protect the dissemination risk.
➢ The company has a reputable brand name that too risky to be manage by local partner.
➢ The firm has good financial capabilities which needed due to high operational cost and investment.
➢ The MNE aims in doing global strategy. This kind of strategy only can be achieved the company's competitive ability.
➢ Interdependency of intra sales is high.

Whereas, the transaction cost theory will favor for wholly owned enterprises, if:
➢ The company has insufficient experience in serving foreign markets to the intention of defending it against opportunism.
➢ The enterprise own high level of technology and knowledge.
➢ Important skills are being transferred to local partners.
➢ The firm possesses a good brand image.
➢ The subsidiary is relatively bigger than parent company. The opportunistic negative consequence will lessen for a large company.
➢ Intra-system sales are very much connected that may prone to opportunistic behavior.

➢ The MNE wants to reduce its reliance on local natural resources supplier.
➢ The risk is low when the host country is experiencing high growth industry and welfare.

Finally, referring to the internalization theory, the firm should choose a wholly owned entry mode because:
➢ The excellent intangible assets are possessed, like R&D capability, skills and good image brand name.
➢ The host country has location advantage that can be seen by high industry and welfare growth as well as good level of education.

## 2.2. FDI entry mode studies

The first study regarding FDI entry mode in macro perspective level was taken by Globerman and Shapiro in 2004. Their background research basically came from the condition that most of existing studies、only investigates firms' behavior in FDI entry model based on firm level data analysis. They argue that country level study in individual entry mode can enrich and fill the gap within the literature focusing on FDI studies. For this reason, Globerman and Shapiro (2004) make differentiation between factors that may influence specific one particular FDI modes like M&A (mode-specific factors), and factors that may affect all kinds of FDI or mode-encompassing factors. Employed data in the studies are collected by UNCTAD, although originally come from a number of different sources. The FDI and FDO data are gathered from IMF while M&A data are compiled from Tomson Financial. Panel data methodology was chosen to avoid large fluctuation in FDI data which may occur in single year analysis. Therefore, 7 years data period since 1995 to 2001 in 154 countries contribute to comprehensive panel data analysis in the study. The model examines four different equations to find out what kind of determinant factors of FDI, FDO, M&A inflows and M&A outflows. The model form explained as follows:

Table – 3: Globerman and Shapiro's model

$$\text{Ln } Y_{it} = \beta_0 + \beta_1 \text{ Ln GDP }_{it-1} + \beta_2 \text{ Growth GDP }_{it-1} + \beta_3 \text{ Governance Index (GII) }_{it} + \beta_4 X_{it} + \varepsilon_{it}$$

Source: Globerman and Shapiro (2004)

Extending previous study by Globerman and Shapiro (2004), Neto, Brandao and Cerqueira (2008) examine both location-specific determinants of each FDI entry mode and mode-encompassing variables as well. At least there are two contribution of their study compare to previous one. First, they specifically explore the other FDI entry method which is greenfield investment. Hence, in the study they employ six different equations to test the

determinants of FDI, M&A and Greenfield within inflow and outflow respectively. Secondly, Neto, Brandao and Cerqueira expands the panel data analysis which comprise of 53 countries over the period 1996-2006 and the period of 2002 to 2006 focusing on greenfield investment flows. There are nine independent variables being contested in six different dependent one, which are GDP, GDP Growth, Governance Index, Trade Openness, Human Development Index, Stock Market Capitalization, Investor Protection, Cultural Distance and Uncertainty Avoidance. The mode encompassing results for inflow sides are GDP, Governance Index and Openness and plus one variable for outflow side which is Human Capitalization Index. In addition, for mode-specific variables are investor protection and cultural distance proven to significant factors. Interesting results demonstrate that GDP growth only proven to be significant factor for greenfield investment and M&A outflow methods.

A study by Hennart and Park (1993) investigates what are the factors behind Japanese companies FDI entry mode selection in USA. Employing two options of FDI entry mode, greenfield investment and acquisition, they both concentrates in specific market to get a clear observation of FDI entry choice in particular industry or country. Several theories applied as the basis of the proposed hypothesis in the paper. The transaction cost theory implemented in a way that a firm will choose to operate abroad because it is cheaper rather than export, and it is more efficient to manage internally compare to through market. Therefore they assume that there is positive correlation between Japanese companies' research and development activities and greenfield investment, whereas Japanese companies experience, product diversification, diversified knowledge and advertising rate have positive impact on FDI acquisition entry mode. Second foundation applied is the merger and acquisition theory. According to Oster (1990) opinion in the study, there are two reasons for a firm to prefer acquisition rather than greenfield method. First, because there is a possibility to obtain a lower acquired price in stock market and second one is entry through acquisition will maximize the investors' firm specific advantage by market power, faster business start-up and no further capacity expansion. Hence, the suggested hypotheses are the higher the Japanese yen, the lower the US stock market price, the higher the growth market, the higher the concentration market will make the higher probability of the Japanese investor entrance via acquisition. Additionally, less competitor in same industry, the more experience in US market and the less possibility that the post-acquired problem may occur will bring more incentives to Japanese investor to do acquisition. Another theory taken is the growth of the firm, which assumes that the both quality and quantity of human resources affect the FDI expansion mode. As a result, the lower human

resources endowment and subsidiary size the higher the probability for a firm to enter through acquisition. Last theory employed is capital market imperfection. Chaterjee (1990) in Hennart and Park (1993) assumes that, usually, the project valuation will be much lower in capital market compare to the one provided by the company. Moreover there is more information regarding corporate value in capital market than that of the price of a new plant. Therefore, they hypothesize the more leveraged the foreign investor the more probability they will enter via acquisition. By using censuses of Japan subsidiaries in US data from Toyo Keizai and Japanese economic Institute, Hennart and Park utilize a binomial logistic model which capture dummy for dependent variable. The study conclude that an entry into a diversified industry, a larger size compare to parent company and within a very high and very low growth market will favor the acquisition mode. Whereas the stronger the competitive advantages that a company possesses, the more incentive to enter via greenfield investment. Other variables such as, stock market conditions, financial situation, previous experience and follower status do not proven has statistically significant effect on a particular FDI entry mode.

Brouthers and brouthers (2000) expand the previous study by Hennart and Park (1993). The study provides two new contributions, which are, applying institutional, cultural and transaction cost variables approaches as well as observing Japanese investment data in Western Europe. Institutional context in the study measures the improvement of both tangible and intangible company asset. The form of tangible asset includes financial and managerial capability. A particular firm that wants to build a large greenfield investment will be hampered by financial and managerial (human resources) constraints. Thus, the paper assumes that the smaller investment size the higher the chance that a company choose greenfield entry. Furthermore, from the intangible asset view, they focus on the company's technology intensity and multinational experience. Developed hypothesizes are, the higher the level of a company's technology intensity and multinational experience are the more likely to prefer greenfield diversification mode. Another approach being discussed is cultural context. In this paradigm, they define cultural context as a measure in comprehending a certain entry mode in both potential profit and risks respectively. For that reason, they suggest these following hypotheses, which in higher growth market and in a smaller cultural distance country the greenfield diversification mode will be chosen. Transaction cost point of view also being assessed in this study, in which they comprise cost needed for foreign operation and the efficient model for managing activities. This perspective leads to the hypotheses that the company with less diversified and more related

products entering high uncertainty avoiding cultures will choose greenfield modes. The study utilizes 136 Japanese firms' operations data in six European countries; UK, France, Netherland, Germany, Belgium and Luxembourg. The results of the logistic regression analysis concludes that firms opt for greenfield modes due to several reasons, like, relative smaller investment size, higher levels of technology and multinational experience, higher degree of diversity, more related products, higher growth and uncertainty avoiding markets destination, and the higher level of technological intensity and diversification as well. The interesting suggestion from this study that, firms with strong intangible capabilities will gain more through the entrance via greenfield modes.

Another study from Meyer (2001) also underlines institutional and transaction cost factors as two important motives for foreign investors in transitional countries. Meyer assumes that good institutional measures will reduce uncertainty by providing legal infrastructure, which in turn can lead to lowering transaction cost as expressed in establishment and internalization cost. One of the built hypotheses in study states that the further the institutional reform progress in a country, the more probability that a company to start up a wholly owned subsidiaries. Another presented assumption is that institutional reform progress brings Eastern Europe (transition countries) closer to Western Europe (investors) one. Or in other words, institutional convergence drives down psychic distance between those two groups of countries. Reducing in psychic distance means low information investment and local staff training cost as well as smoother adjustment to local management conditions. Furthermore, the study suggests that lower psychic distance related to closer physical distances between two countries. Hence, another hypothesis assumes that the closer the distance proximity the more probability the entrants to choose wholly owned subsidiaries methods. Knowledge transfer perspectives also employed in the study, Meyer proposes two hypotheses; the entrant companies that to transfer knowledge and to build local management more likely to prefer wholly owned subsidiaries. Applied methodology accommodates all forms of internationalization transactions like, trade, contract, joint venture and wholly owned subsidiaries. Sample data taken in the study originated from the questionnaire West German and British companies invested in five countries, Czech Republic, Hungary, Poland, Russia and Rumania. The multinomial model results conclude institutional factors progress and physic distance support companies to entry via wholly owned subsidiaries. Whereas for technology transfer does not support the hypothesis, since all forms of internationalization except trade are appropriate to the matter. However, managerial knowledge transfer is does more likely to happen within joint ventures and wholly owned subsidiaries entry mode.

## 2.3. Intellectual Property Rights and FDI Studies

Seyoum (1996) indicates that intellectual property is stem from an idea which that being manifested on concrete creation or "tangible asset" like products, writing etc. The IPR aimed to protect the tangible asset for the use of "unauthorized commercial exploitation". The intellectual property can be formed on patents, trade mark, trade secret and copyright. At least there are three rationales behind the implementation of IPR protection. First, the competitive advantage in recent era is relied more on the producer ability to create high valued products which resulted from the development of new technology. Secondly, most economies tend to serve specific customers by producing a unique and high value product. This policy came with the cost of the ability to be more flexible in adapting the most updated skills and technology development. And lastly, the failure to protect IPR will make technology innovation and creative work be less attractive since there will be no interesting reward to do so. Hence, international components based products can only be developed with the support of IPR protection. The first suggested hypothesis is that the level of intellectual protection has positive association with the investment flows. Furthermore, host countries' market size, public investment rate and the ratio of external debts to export are assumed to have positive impact on investment flow, whereas the negative one for the exchange rate. Last hypothesis that IPR and economic policy variables have an effect on investment flow both individually or as a group, but the greater impact comes from IPR protection. Using questionnaire data from intellectual property experts and practitioners in 27 countries, the study compares the four variables from each intellectual property and economic policy variables groups. The study results exhibit that IPR's protection and economic policy measure do have positive relationship with investment flows. The interesting findings demonstrate that in newly industrialized countries and developed countries, intellectual property measures is proven has a greater impact compare to economic policy one.

Lee and Mansfield (1996) conducted study about the effect of intellectual property protection on the volume and composition of U.S. FDI in developing countries. The study based on the 94 questionnaires sent to patent attorneys, international firms' specialist and top executive in 1991 within 14 following developing countries, Argentina, Brazil, Chile, Hong Kong, India, Indonesia, Mexico, Nigeria, Philippines, Singapore, South Korea, Taiwan, Thailand and Venezuela. The reasons for selecting those countries above are because of their importance and

size as well as IPR's protection implementation issues within those countries. The respondents mainly being asked about whether intellectual property protection was too weak to be trusted in doing business into three different types of international production; wholly owned subsidiaries, joint ventures or licensing with related parties within host countries. Two econometrics models are employed in the study. First one explains the relationship between the U.S. FDI outflow (as dependant variable) and the intellectual property protections with other controlling independent variables like, market size, Mexico dummy, previous FDI stock in particular host countries, industrialization degree, openness, and year dummy variables. For the second model, Lee and Mansfield examine intellectual property protection measures to composition U.S. FDI particularly in chemical firms. The FDI composition reflected by investment distribution on sales and distribution outlets, rudimentary production and assembly facilities. The research outcomes show that the rise of investor perception about intellectual property protection by 10 points will increase U.S. investment by $140 million per year. Additionally, investment composition also affected by the investor perception on the IPR's protection. Moreover, the study highlighted the importance of investor perception instead of the law about intellectual property itself due to problem of fair and effective enforcement.

The study from Nunnenkamp and Spatz (2003) contributes to the existing literature of IPR protection and FDI linkage in three different aspects. First, they focus IPR impact on specific regional country area within particular industry as well. Secondly, the paper assumes that IPR protection attracting FDI both in the matter of quantity and quality flows. Lastly, Nunnenkamp and Spatz (2003) employ two methods IPR protection measurements in order to get clearer picture of each kind of indicators' impact on FDI. Data in the study taken from BEA online database, which captured wide range FDI-related economic activities, like sales, value added, employee and overseas trade, from US foreign subsidiaries in 58 countries.BEA database also include. Other data for control variables are supplied by World Bank, Barro and Lee (2000) and Euromoney country risk indicator. In addition, specifically for IPR protection, they both utilize Ginarte-Park and World Economic Forum Index. Industrial classification originated from manufacturing sector which divided into seven sub sectors in 1995 and five sub sectors in 2000. At least there are four steps in the study. First, they test the simple relationship between FDI, that denoted by FDI stocks and lagged FDI flows and the level of IPR protection. Second step applied to determine host country characteristic effects on IPR protection and FDI. They classified region study group controlling other variables such as GDP per capita, population, average years of schooling and country risk.

Following step was to measure industrial attributes impact on the model. The industrial characteristics are divided into 5 groups: technology intensity, human capital intensity, labor intensity, export intensity and degree of vertical integration. Last step is to measure the quality of FDI affected by the level of IPR protection. Five FDI quality indicators assessed by the technology content of FDI represented at (1) local R&D expenditure and (2) license fees paid to the parent company, as well as (3) the value added, (4) the employment, and (5) the exports of the U.S. affiliates in the host country. The study results reveal that IPR protection indicator taken from World Economic Forum is more superior compare to the other Ginarte-Park Index, in terms that reflected more recent condition in the past several years. As for host country characteristics effects do have different impact on across region, wherein country with strong-market pull factors has weaker IPR protection effect. The strongest impact of IPR protection on FDI is founded in human capital and technology intensive machinery and transport equipment industries. The important finding is that good quality FDI is attracted by the level of IPR protection. It is symbolized by the rising of US affiliates R&D expenditure, value added and export level in linear with stronger IPR protection implementation.

Tanaka and Iwaisako (2014) find that strengthening IPR protection promotes both innovation and FDI. Furthermore, using a North–South quality-ladder model incorporating the exogenous and costless imitation of technology and subsidy policies for both R&D and FDI, show that for the interior steady state to be stable, either R&D or FDI subsidy rates must be positive.

## 3. RESEARCH METHOD

### 3.1. Methodology

As previously mentioned, this study aims to obtain the effect of investor protection and start-up facilitation measures on foreign direct investment (FDI) entry mode. In order to do so, methodology applied in this study is quantitative analysis with pooled regression econometric model. Panel data of 12 selected Asia Pacific countries in period of the year 2005 until 2007 are employed in the model. This model tests the relationship between independent variables and greenfield investment project as the dependant variable. Detailed equation will be explained as follows:

Table – 5: Greenfield investment econometric model

$$GFDI_{jt} = \beta_0 + \beta_1 GDP + \beta_2 RGDPG + \beta_3 IPR + \beta_4 SF + \beta_5 PV + \beta_6 GE + \varepsilon$$

The model employs greenfield investment number of project as the dependent variable.

Meanwhile, for independent variables consist of two main variables; investor protection index (IPR) and start-up facilitation index (SF) and the other four control variables are gross domestic product (GDP), gross domestic product growth (GDP growth), political stability index (PV) and government effectiveness index (GE). The latter two variables are representation of governance indicator index. In addition, the j and i signs on the left hand side are denoted country and time identifier as for panel data analysis.

### 3.2.  Dependent variables

Having greenfield investment indicator at the left hand side of the equation aims to examine specific effect of independent variables on this kind of FDI entry mode. In this study greenfield investment is measured by number of projects. At least there are two reasons of employing the number of projects as the measurement of greenfield investment. The first is, this kind of formulation also being applied in previous study by Neto, Brandao and Cerqueira (2008). Although several studies try to calculate greenfield investment value by subtracting the value of total M&A to the total value of FDI, it may not give the correct measurement. It is widely understood that the form of FDI entry mode is not only just cross border M&A and greenfield investment but there is also an FDI which enter through the method of international joint venture. The result of total FDI minus total M&A value (Total FDI – Total MAFDI) is not equal to total value of greenfield investment (TGFDI) but include the total value of international joint venture (TIJV).  Secondly, the utilization of greenfield investment number of project is reasonable because the more projects are associated with more investment fund. Therefore, the implementation of greenfield investment number of project is relevant to answer the research questions in this study.

### 3.3.  Independent variables

The first main independent variable in this study is investor protection index. It describes how foreign investors' interests are being securely treated in host countries. The proxy employed is the enforcement of IPR as perceived by business practitioners in target countries. The theoretical rational of this implementation is taken from Eclectic paradigm by John Dunning. In his approach, a company should possess three advantages, Ownership, Internalization and Location (O-L-I theory), before it decides to do foreign direct investment.  One of the descriptions of ownership advantages is a firm possession over an intangible asset like innovation, technology and production management that more superior than of those competitors in overseas market. Having the advantage protected, it assumes that more FDI will be attracted to come, as further elaborated in previous chapter. This notion is also supported by several

empirical studies on IPR and FDI relationship. Seyoum (1996) suggests that intellectual property protection is a strong factor of attracting inward investment and own larger effect compare than several economic policy indicators. Lee and Mansfield (1996) find the positive relations on intellectual property protection and US FDI outflow to destination countries both in composition and volumes. Furthermore, Nunnenkamp and Spatz (2003) shows that intellectual property protection have a tendency to encourage high-quality FDI to come. Therefore, based on theoretical background and existing empirical studies, this study proposes this following hypothesis:

*The level of intellectual property enforcement is positively associated with greenfield investment and cross border merger and acquisition inflows.*

The measurement of intellectual property right protection is taken from survey by the IMD institution. This survey data gathered from questionnaires distributed to over 4 thousands top and management respondents within 60 economies. The questionnaires ask respondents perception whether intellectual property rights are being adequately enforced in their operating countries. This kind of method also advocated by Lee and Mansfield in 1996, which they assume has advantages of measuring the real intellectual property right implementation in the eye of market players.

For the second main independent variable, this study uses start-up facilitation index. The index is comprised of three different indicators taken from cost of doing business database by World Bank group. First indicator is cost of starting business; it is measured as a percentage of certain countries' income per capita. The second and last are the number of procedures and time needed to complete those start-up procedures. The logic of start-up facilitation basically refers to the concept of business facilitation[1] by UNCTAD. Reducing entry bureaucracy barriers is believed to have positive impact to encourage entrepreneurs to start business. Once a new firm is established, it will create jobs, gain profit, pay taxes, trade abroad and bring more other positive consequences to related countries. Hence, lowering cost as well as reducing procedures and time needed of starting business is crucial government actions for inviting foreign investors to come. This research incorporate all three starting-up business dimensions; cost, procedure and time in order to provide more comprehensive evidence of such a set of policies. Background thoughts of this proxy are originated from literature reviews and empirical studies. Eclectic paradigm by Dunning suggests that internalization

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1       Website source: http://businessfacilitation.org/en/about-eadmin.asp

advantage is occurred when the cost of conducting business internally is more efficient than manage it with other companies (externally). Buckley (1988)[2] assumes two general points of the internalization theory which (1) companies choose to operate in markets with the least cost needed (2) companies will stay in the market to internalize business until the cost needed outweighed the obtained benefit. The existing empirical studies also support the reason for combining cost, procedures and time in one measurement. Fonseca, Lopez-Gracia and Pissarides 2001) calculate start-up cost by elaborating number of weeks and number of procedures in studying their effects on job creation in OECD countries. Additionally, Ciccone and Papaioannou (2007) focus on registration time measurement to investigate its impact on the number of entrants in several countries. In a nutshell, cost, procedures and time of starting business are assumed to have negative association with the both kind of FDI entry modes. The proposed hypothesis will be:

*The level of start-up cost, number procedures and length of entry time is negatively associated with greenfield investment inflows.*

The formulation of start-up facilitation index is derived from Helble, Shepherd, and Wilson (2007) measurement on trade facilitation index. Similar with them, this study employs factor analysis method in constructing start-up facilitation index. One of the advantages of applying this method, factor analysis provides equal weighted process on each variable included in the index. As a result the index consists of data which include official pre-requisite procedures together with cost and time needed to complete those procedures for an investor to start a business under normal condition. The result of factor analysis shows that the lower index value is better which express lower cost, less number of procedures and less time needed to start a business.

There are three control independent variables applied in the model. First variable is gross domestic production (GDP). GDP is used to represent the size of host countries' market. Two studies by Globerman and Shapiro (2004) and Neto, Brandao and Cerqueira (200) assume host countries' market is related to economies of scale and agglomeration, which will generate lower supply cost to operating companies. Based on those assumptions, this study expects GDP will positive influence both kind of FDI entry mode. Second control variable is GDP growth as a proxy for market growth. Taken from similar studies above, market growth is believed to reflect host countries' market in the future

and to offer abnormal return for market experiencing high growth. Brouthers and Brouthers (2000) suggest two different propositions of GDP growth relationship on each kind of FDI entry mode. As cited from previous studies[3] (Andersson and Svensson, 1994; Caves and Mehra, 1986 and Zejan, 1990) greenfield investment is might be a good option when there is a fast growing market for capacity expansion. On the other side, from the same study, acquisition is offer faster entrance in high growth market to capitalize benefit from avoiding opportunity cost. Therefore this study expect positive sign for GDP growth regardless the mode of FDI entry. The last control variable is governance index. Different from those variables above that stands for host countries' economic risk. This study utilizes other two variables which represent political and social risks within recipient countries, which are political stability index and government effectiveness index. Both indexes are taken from world governance indicators from World Bank group. The reason of applying these variables is that political and social risks are associated with uncertainty that may hamper foreign investors to come. Consequently, the better the government in handling these risks the more likely FDI to flow.

## 3.4. Data

Sample date employed in this research are 12 Asia Pacific countries; Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, New Zealand, Philippines, Singapore, South Korea and Thailand. At least there are two reasons of selecting those samples. First, as being described in Chapter II, the Asia Pacific countries demonstrates high growth of FDI inflows as opposed to total world FDI inflows which shows declining trend in the recent years. Secondly, Asia Pacific is the second best region which receives FDI inflow after Europe. This region also has relatively close physical distance and shares similar characteristic to each other which make it relevant of comparing the countries in this region. Observation period applied is from 2005 until 2007. Data availability issue and global crisis timing are two rationales of choosing this period of time.

Greenfield investment and cross border M&A measurement are taken from UNCTAD World Investment Report 2010. As for intellectual property right survey data, GDP and GDP growth are originated from IMD competitiveness year book from 2005 until 2008. The political stability and government effectiveness index come from Worldwide Governance Indicators online database. Lastly, start-up facilitation index is based on cost of doing business online database by World Bank group.

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2      As explained by Bell (1993) in "International Joint Ventures Versus Greenfield Investments: A Comprehensive Approach", Research in Global Strategic Management, Vol. 4, page 202.

3  Brouthers K., and Brouthers L. (2000). "Acquisition or Greenfield Start-Up? Institutional, Cultural and Transaction Cost Influences", Strategic Management Journal, 21, page 91

## 4.    RESULTS AND DISCUSSIONS

This chapter presents the econometric models' results employed in this study. Furthermore, this part also discusses the obtained results by comparing them with existing studies and literature background.

Table – 7: Regression Results for GFDI

| Independent Variables | Coefficient | Standard |
|---|---|---|
| Investor Protection | 47.32*** | 17.84 |
| Start-up Facilitation | -103.91*** | 34.49 |
| GDP | .09 *** | .01 |
| GDP Growth | 63.64 *** | 7.14 |
| Political Stability | .001 | 1.904 |
| Government Effectiveness | -7.54 | 3.80 |
| **R squared** | | 0.9574 |

Notes: ***= significant at 1% level

From the result, it concludes that holding other factors fixed investor protection and start-up facilitation have significant relationship to greenfield investment. The positive coefficient of investor protection means that improvements in intellectual property right enforcement increase the number greenfield investment projects in respected countries. T statistics of investor protection equal to 2.65 which is statistically significant at 1% level. On the other hand, holding other factors fixed start-up facilitation index has negative and significant relationship to greenfield investment. The coefficient of start-up facilitation means that lower cost, less number of procedures and less length of time needed to start business boost the flow of greenfield investment in host countries.  T statistics of start-up facilitation index equals to 3.01 which is also statistically significant at 1% level. Other control variables, like GDP and GDP growth have the expected signs. They both reflect t value at the 1% significance level. In contrast, this study does not find any significant effects of both governance index, political stability and government effectiveness indexes, to the level of greenfield investment in particular countries. R square number is .957, which describe that the model explains quite reliable (96%) relationship between all the independent variables to dependent variable which is greenfield investment.

### 3.5.   Discussions

Refer to the study objectives that whether investor protection has effect on both FDI entry modes or just specifically impact one particular method, this empirical model suggests two different outcomes. Initial model presents evidence that investor protection does have significant impact on greenfield investment. It implies that intellectual property right enforcement measure is one of important factors being considered by greenfield foreign direct investors. The result further confirmed a previous suggestion by Hennart and Park (1993) that a firm that owns high level of research and development will opt for greenfield investment entry mode. The reason for that, firms believe greenfield investment is more accurate way of converting their benefits in the local markets. The result also supported by Brouthers and Brouthers (2000) that intangible asset represented by higher technological intensity is one of the drivers of greenfield investment. Moreover, it is similar with the result from another study by Nunnenkamp and Spatz (2003) that intellectual property right protection affects specific FDI which associated with job and export creation like, greenfield investment. Therefore, protecting intangible asset by intellectual property right enforcement is essential determinants for attracting greenfield investment to host countries. Meanwhile, the insignificant investor protection result from cross border M&A model implies two different notions. First, it verifies both studies by Cho and Padmanabhan (1995) and Hennart and Park (1993)[4] that greenfield entry was chosen due to firm specific advantage dissemination risk and its easiness to establish developed technology via organization rather than personally. Secondly, it requires future studies to explore more about the characteristics of FDI investors in Asia Pacific region whether they are high intense industries or not.

### 3.6.   Conclusions

Following the finding results, this study proposes these conclusions below:

Investor protection measures by adequately enforcing intellectual property rights in host countries, attracts foreign investors to come. Even more, the existence of intellectual property right law is not enough. The perspective of foreign investors on how well the implementation of intellectual property right protection should be put as a main consideration for host countries' government. This finding uniquely related with greenfield investment entry mode inflows in recipient countries. For this reason, the enforcement of intellectual property right protection encourage relatively more job creations, more export

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[4] As explained by Brouthers K., and Brouthers L. (2000). "Acquisition or Greenfield Start-Up? Institutional, Cultural and Transaction Cost Influences", Strategic Management Journal, 21, page  90

opportunities and more competitive local market which often associated with greenfield investment.

Start-up facilitation variable reveals interesting empirical facts. This indicator is verified to negatively significant affecting greenfield FDI. This implies that decreasing entry barriers by lowering cost and reducing required time and procedures to start business is obligatory for inviting more FDI to come. The outcome amplifies theoretical foundation and existing studies as well. More importantly, this study suggests related parties to exercise three components of start-up indicators such as, cost, required time and procedures, altogether instead of just focus on one particular dimension. This combined effect also supported by a range of previous research employing similar variables.

## 5. LIMITATIONS

Identifying these constrains hopefully, will support any subsequent research in the future. A number of shortcomings that can be detected come in the following forms, like This study mainly observes determinant factors from host countries point of view (pull factors) rather than home countries aspects (push factors) that may influence investors' decision of doing outward FDI. Such motivations also may offer explanation regarding the type of FDI entry modes chosen by foreign investors. Future studies can elaborate two-side story research like focusing the characteristics of certain countries foreign direct investment outflows into specific destination market, for instance, the study about determinants of Chinese FDI entry modes on several African countries. The implementation of this research may provide more unique results.

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