

FOREIGN DIRECT INVESTMENT AND ITS DRIVING FACTORS BY INFORMATION COMMUNICATION AND TECHNOLOGY PERSPECTIVE: CASE STUDY IN ASIA

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ABSTRACT

Foreign Direct Investment (FDI) has increased drastically in recent years. So far, the market size, wages, and economic conditions have been empirically tested as capable factors in attracting FDI inflows into the country, but we also need to take into account the changes that occur in the world, such as the changes brought on by Information and Communication Technology (ICT) in global. ICT are considered to have a positive impact on total productivity of multi-national companies. There are some literatures that find a positive and significant effect of ICT on FDI. Therefore, this study aims to further examine the factors that affect FDI from the ICT perspective. The samples used in this study are 25 Asia countries in the period 2008-2011 which do the FDI activity, result in a positive value of FDI, and participate in the network readiness index survey conducted by the World Economic Forum (WEF). The analysis used is the Multiple Linear Regression Analysis. The results of this study indicate that any increase effectiveness of law-making bodies, accessibility of digital content and firm-level technology absorption could increase inflows of FDI in Asia. However, any increase in the quality of education, internet users and government prioritization of ICT has the potential to reduce the inflow of FDI in Asia. While the availability of latest technology and mobile cellular tariffs are not able to significantly in attracting foreign investors to invest their funds in Asia.

Keywords: Foreign Direct Investment, Information Communication and Technology.

1. BACKGROUND

Foreign Direct Investment (FDI) has grown exponentially in the recent past and has become one of the most important measures of globalization (Alexander, 2010). In Asia, FDI continued to increase in recent years. It had dropped at value of U.S. \$315.236 million in 2009; in 2010, it was increased by 21.83% and by 10.18% in 2011. United Nations Conference on Trade and Development (UNCTAD) stated that the outlook for Asia in attracting FDI is very bright. Based on macroeconomic fundamentals, UNCTAD projections for the medium term continues to show FDI flows increasing at a moderate but steady pace, reaching \$1.8 trillion and \$1.9 trillion respectively in 2013 and 2014, unless there's macroeconomic shocks (UNCTAD, 2012).

The level of FDI depends on the location effect of a country's business environment. In other words, by keeping constant firm-level factors, it is

the location effect that Determines "where value adding activities take place" (e.g. in which countries and/or sectors) and may, for example, refer to the existence of raw materials or other assets (e.g. abundant and/or cheap labor, intermediate markets, technological expertise) to international transport and communication costs, to less rigorous legislation, to a more favorable domestic business environment (including institutional framework and resource allocation). Since the distribution of these resources and capabilities is uneven, some firms of one particular nationality and/or located in certain countries will have a site advantage over other firms based in other countries (Anastassopoulus, 2007).

Kurniati, et al., (2007) states that conceptually, the choice of foreign investors to invest in the form of FDI compared to other forms of capital in a country affected by the condition of the recipient country of FDI (the pull factors) as well as the conditions and strategies of foreign investors (push

factors). Pull factors of FDI inflows are market conditions, resource availability, competitiveness, policies related to trade and industry, and the liberalization of FDI policy. While the pull factors are investment strategies and production strategies of investors, and perceptions of risk in the recipient country.

Today, Information and Communication Technology (ICT) are viewed as one of necessary conditions for the globalization of business activity (Alexander, 2010). ICT industry has changed dramatically since 2002 and its effects are increasingly transforming our economy and the societies. The world now has a 'hyper-connected' where the internet is accessible and immediate, where people and business can communicate with each other instantly, and where the machines are equally interconnected to each other (WEF, 2012). However, this hyper-connectivity can also bring about new opportunities, as well as new challenges and risks in terms of privacy, security, cybercrime, the flow of personal data, individual rights and access personal information.

ICT forms the "backbone" of several industries, such as banking, airlines, and publishing and is important value-adding component of consumer products, such as television sets, cameras, cars, and mobile telephone sets. ICT has become a dominant force in enabling the company to take advantage of new distribution channels, create new products, and provide differentiated value-added services to customers. ICT is also an important catalyst for social transformation and national progress (Dutta and Jain, 2002).

ICTs, especially the Internet, and Internet-based technologies and services have occupied an important place in the development of international production in the last decade (MIGA, 2008). The development of ICT has a profound impact on the structure of the international activities of the company (te Velde, 2006). In addition, Addison and Rachman (2005) as cited in Gholami, et al. (2005) suggest that countries that successfully implement the new ICT might be able to overcome barriers that have long held them back in their contributions to global trade (eg, limitations of the remote geography and an unfavorable climate). Therefore, Asian countries need to raise awareness of the importance

of ICT diffusion, so as to use ICT as a tool for global expansion.

There is a growing literature on the role of ICT as a determinant of FDI. There are studies that reported a direct correlation between the growth of Internet users or Internet hosts and FDI: a 10 percent increase in the use of Internet correlates with an increase of 2 percent in FDI flows. The growth of FDI inflows was supported by increased international competitiveness; improved business environment; macroeconomic growth, and technological changes, as well as a low-cost location search, new markets and competitive high skilled human resources by multinational companies-in order to maximize the outcome of the investment strategy they like efficiency, asset search strategy, market and/or resources (UNCTAD, 2006).

2. OBJECTIVES

Based on the background above, this study aims to empirically examine and analyze the effect of ICT which consists of effectiveness of law-making bodies on FDI inflows, availability of latest tech, accessibility of digital content, mobile cellular tariffs, quality of education, internet users, firm-level technology absorption, government prioritization of ICT on FDI inflows.

3. LITERATURE REVIEW

The review of literature in this study focused on the concept of Foreign Direct Investment (FDI) and the concept of Information and Communication Technology (ICT). Theoretical framework in this study departs from FDI growth in a decade and its benefits for the host country and the development of ICT suspected to affect FDI in Asian countries.

3.1. Foreign Direct Investment (FDI)

Currently, international business and foreign trade exceeded increases association with direct investment, which includes the establishment of manufacturing or distribution systems abroad by establishing a wholly-owned affiliates, joint ventures, or strategic alliances. FDI burst into developing countries since in the early of 90's, it shows that MNCs realized that developing countries is an attractive location for investment as FDI host country. At the micro level, FDI activity seen in the

disclosure of corporate and list of shares in affiliated companies (Choi and Meek, 2010).

FDI is very important, because it provides benefits to host countries, including: 1) as a source of capital. The role of capital resources is very important role in developing particular for countries that are in the early stages of development, to finance the construction, apart from foreign loans and domestic income, 2) as a driver to help the economic growth through human resources in the country. The FDI will expand its business in the country, so it can reduce the level of unemployment which would help the growth of the country, and 3) as an intermediary to expand exports. The FDI from abroad into the country, the export activities which undertaken by foreign firms could help the expansion of export markets in the country.

According to Dunning (1977, 1981) which quoted by Kurniati, et al. (2007), the interest of foreign investors to invest funds in the form of FDI based on the ownership, location, and internalization advantages. Kurniati explains, the ownership advantages are advantages which had by the company that makes the company superior in certain sectors. These advantages are commonly called as firm specific assets which consist of tangible assets such as capital goods and machinery, and intangible assets such as knowledge, organizational and entrepreneurial skills, access to markets, and technology. While the location advantages are the advantages which had by a region and can only be used in those areas. However, these advantages are opened to all companies, such as cheap labor, cheap natural resources, supporting business climate. While internalization advantages is the action to avoid the disadvantages or capitalization of natural resources due to the market price system and the system of government policy.

There are several reasons why foreign investors invest abroad, in addition to search the new market and expectations of higher profits. According to a study conducted by the IMF, foreign investments made by the 20 largest multinational companies in the U.S. are caused by the motivation to seek higher returns (Kurniati, et al., 2007). FDI based on foreign investors' motivation are:

1. Resource seeking: investments are done to look for the factors of production which is more efficient in other countries compared to factors

of production in the own country which is more expensive;

2. Market seeking: the investments are done with the purpose of finding new markets yet still maintain the old market. This strategy can also be done as a defense strategy. Investments with this motivation can be realized in the form of mergers and acquisitions;
3. Efficiency seeking: investments where the company seeks to increase its efficiency by taking advantage of the economic scale and scope. This type of FDI is widely used in developing countries.

FDI can also be differentiated into other types of Greenfield and Acquisition. FDI by type of Greenfield will build a new production unit while FDI by type of Acquisition will buy part of ownership of the existing company. Here are the types of FDI:

1. Vertical FDI

FDI which is done vertically involving geographically decentralized and production of the company flows. The company will carry out production activities in countries that have low labor costs, then production in that country will be brought back to the source country. For example, a product that the production process is capital-intensive will move the production process into countries rich in capital.

2. Horizontal FDI

FDI which is done horizontally will produce the same product in several countries. FDI of this type have the motivation to look for new markets. The advantage of this type of FDI is efficiency in transportation costs because the production is closer to consumers.

3.2. Information and Communication Technology (ICT)

ICT has been implemented worldwide in many types of organizations. ICT is a diverse set of technological tools and resources used to communicate, create, disseminate, store and manage information. It allows organizations to collaborate and exchange information a large scale (Chanyagon dan Kungwannarongkun, 2011).

Today, ICT is seen as one of the core competitive strategies for the globalization of business activities, thanks to its ability to empower

individuals with information and knowledge, enable better interactions and new ways of doing business, among others (Alexander, 2010). In this research, the variables used from ICT perspective are: effectiveness of law-making bodies, availability of latest tech, accessibility of digital content, mobile cellular tariff, quality of education, internet user, firm-level technology absorption, and government prioritization of ICT.

3.2.1. Effectiveness of Law-Making Bodies

According Budiardjo (2003) law-making bodies are the institutions which are responsible for the welfare of the society because of it regulates all aspects of public life in a country. Law-making body is closely linked with politics in a country. Politics can be considered as an attempt to define rules that can be accepted by most of the people, to bring people together towards a harmonious life. Political science developed rapidly along with other social sciences, such as sociology, anthropology, economics and psychology and they influence each other. Lucas (1990) argues that political risk can become an important factor in limiting capital flows and transfers of capital toward international equalization of factor prices. According Kurniati, et al. (2007), the political risk associated with the potential entry of FDI in some countries, political risk relates to the uncertainty potential. So the potential of this uncertainty can reduce the inflow of FDI in a country.

3.2.2. Availability of Latest Tech

The scale and character of FDI flows to developing countries have long been affected by successive waves in the invention and adoption of new technologies. Despite the challenge posed by keeping up with the rapid pace of technology, National Small Business Association (NSBA) in 2010 found that 98 per cent small businesses think it is important to keep up with new technology. The revolution in ICT is facilitating a global shift in the service industries, which are now relocating to select developing countries, following the earlier shift in manufacturing (Addison and Heshmati, 2004). Economists have long been studying the linkage between technological innovation and economic growth. A large body of evidence shows that innovative economies are more productive and faster

growing. They deliver higher returns on investment and increased living standards. They are better at responding to changing circumstances through redeploying old activities and jobs. They are more able to find solutions to global challenges (the Secretary of State of Business, Innovation and Skills, 2011).

3.2.3. Accessibility of Digital Content

Today many OECD countries regard the digital content industry as an essential element of international competitiveness. The OECD recognizes that digital content spread to the broader industrial sector along with most of the business activities increasingly depend on digital content (OECD, 2005). The dependence of some business activities in the digital content is becomes a consideration of foreign investors to invest their funds since it is related to the efficiency of the company in the production of goods or services. Therefore, the accessibility of digital content in a country is supposedly able to attract FDI inflows into the country.

3.2.4. Mobile Cellular Tariff

The role of mobile cellular in maintaining customer relationships becomes clear. Mobile cellular are used more often for keeping in contact with customers and clients compared fixed-line telephones considering the importance of mobility and low start-up costs associated with mobile cellular. Comparing fixed-line phones, mobile cellular in term of desirability, mobile cellular are rated as significantly more important than any other category, including fixed-line phone (Esselaar, et al., 2008).

Mobile cellular tariffs are significant because mobile cellular tariffs measure both sector performance and affordability. In a study for the department of trade and industry in the UK - Transparency of the Mobile Cellular Tariffs Information, it was confirmed that the price and value are the most important considerations for choosing their mobile phone packages. Affordable tariffs determine the use of the package and the amount of use thereafter. This is because the mobile cellular tariffs are indirectly related to communication costs to be paid by the company to contact clients or business associates of

the company. Therefore, the mobile cellular tariffs become a consideration of foreign investors to invest in the country.

3.2.5. Quality of Education

Akin and Vlad (2011) shows cross-country evidence which indicates that human capital is an important determinant for inward FDI especially among efficiency-seeking MNEs, while not being an important determinant among market and resource-seeking MNEs.

Akin dan Vlad (2011) explain about the Zhang-Markusen theory which states that MNEs will not invest, even if the wages of unskilled-labor in the host country are very low due to insufficient human capital. MNEs need direct requirements such as engineers, technicians, and accountants, and indirect requirements such as electric and water supplies, telecommunications, transport links, and legal institutions. Recent trends in FDI show that MNEs invest in skilled-labor countries to outsource white-collar workers.

The different result shown by Alsan, et al. (2006). Alsan, et al found that education does not significantly affect FDI flows to developing countries. They also tried other measures of education, such as the number of accumulated years of education in the population aged 15-64 years old and school enrollment rates, but did not find any measure that produced a statistically significant effect.

3.2.6. Internet Users

The Internet has become essential to daily life, education, employment and participation in society. (Seybert, 2011). Based on Choi (2003), internet can improve the productivity in several ways. First, internet can lower prices by lowering search costs, for examples: business-to-customer (B2C), business-to-business (B2B), and business-to-government (B2G). Internet also makes entry into several markets easier by lowering entry costs. Both lower search costs and lower entry barriers result in a greater market competition and productivity can be improved by intensified competition. Second, internet use can cut the cost of holding inventories by allowing large suppliers bypass retailers and contact customers directly (DePrince and Ford, 1999). Therefore, it is very natural that international direct

investors may prefer to invest in a country with many internet users in it.

3.2.7. Firm-Level Technology Absorption

Improving the absorptive technology capability of a country - their ability to enter the global technology pool - is an important mechanism for accelerating industrial development, raising productivity workers and increasing economic growth (Goldberg, et al., 2008). Absorption is costly learning activities that a firm can employ to integrate and commercialize knowledge and technology that is new to the firm, but not new to the world. Examples of absorption include: adopting new products and manufacturing processes developed elsewhere, upgrading old products and processes, licensing technology, improving organizational efficiency, and achieving quality certification (Goldberg, et al., 2008). There is a general agreement that the adoption and the effective utilization of ICT at micro level can bring about competitive advantages and lead to financial performance advantages over competitors (Alexander, 2010). ICTs have seriously facilitated new ways of organizing firms, including the decentralization of decision making, team production, and new ways of communicating with suppliers and other business partners (Guerrieri and Padoan, 2007).

3.2.8. Government Prioritization of ICT

ICT has revolutionized the global economy changes in different economic activities (Kodakanchi, et al., 2006). ICT has been characterized as an invaluable platform for economic growth attracting increasing attention from different governments around the world mainly from developing nations (Kamel, et al., 2009). Government intervention is often done to protect a product that uses a particular natural resource. The public sector plays an important role in creating and strengthening benefits of the location by providing the goods/services, educating the workforce skills, infrastructure and implement policies. Instead of inefficient public sector will tend to inhibit foreign investors to invest in the country (Choi and Meek, 2010). Governments have great powers to encourage Vertical FDI which entails the relocation of intermediate stages of production to take advantage of lower costs (Addison and Heshmati, 2004).

Here is the Research Model:

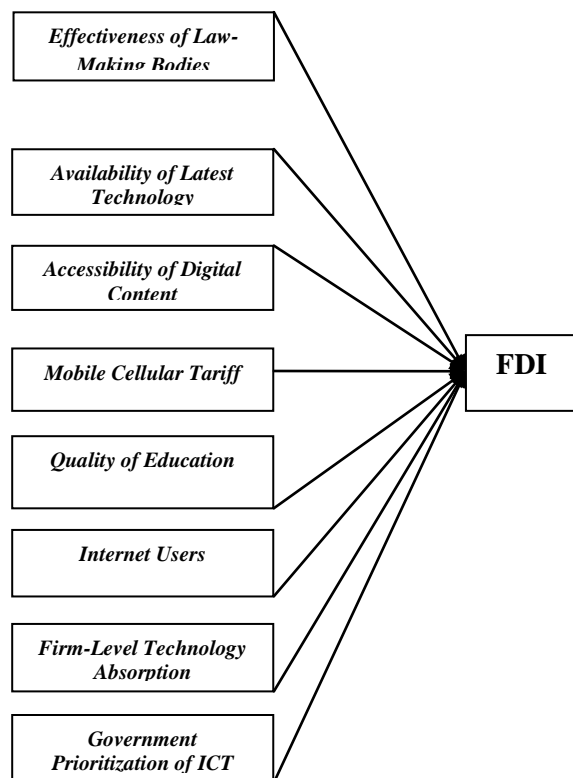


Figure 1. Research Model

Thus the hypothesis in this study are:

- H1 : effectiveness of law-making bodies influences FDI inflows
- H2 : availability of latest tech influences FDI inflows
- H3 : accessibility of digital content influences FDI inflows
- H4 : mobile cellular tariff influences FDI inflows
- H5 : quality of education influences FDI inflows
- H6 : internet users influence FDI inflows
- H7 : firm-level technology absorption influences FDI inflows
- H8 : government prioritization of ICT influences FDI inflows
- H9 : ICT simultaneously influences FDI inflows

4. METHODS

The populations in this study are all Asia countries. The sampling technique that is used is Purposive Sampling in order to get a representative sample in accordance with the specified criteria. They are: 1) countries which included into Asia continent; 2) countries which do FDI activities; 3) countries which have positive FDI inflows; 4)

countries which participate in the Network Readiness Index survey in period 2008-2011.

The selection of countries with positive FDI because of the research is expected to be a reference for Asia countries to create a positive FDI. The populations in the Asia continent are 48 countries. However, based on the criteria noted above the countries which meet the criteria are 25 Asia countries.

The variables used in this study are: FDI as the dependent variable; effectiveness of law-making bodies on FDI inflows, availability of latest tech, accessibility of digital content, mobile cellular tariffs, quality of education, internet users, firm-level technology absorption, and government prioritization of ICT as independent variables. Here are the operating variables:

Table 1. Operating Variables

Variable	Indicator	Scale
<i>effectiveness of law-making bodies</i>	Effectiveness of national parliament/congress as a law-making institution.	LAW
<i>availability of latest tech</i>	Availability of latest technology in the country	TECH
<i>accessibility of digital content</i>	Accessibility of digital content (such as text, audiovisual content, software products) via multiple platforms (such as fixed-line internet, wireless internet, mobile network, satellite, etc.)	DIGI
<i>mobile cellular tariffs</i>	Average cost per minute of mobile cellular of different types of cell phone calls (PPP \$)	TARIFF
<i>quality of educational</i>	Quality of the country's educational system to meet the needs of a competitive economy	EDU
<i>internet users</i>	The percentage of individuals using the internet.	INET
<i>firm-level technology absorption</i>	Level of firm in absorbing technology	ABSORP
<i>government prioritization of ICT</i>	How much the government in a country place on information and communication technologies	PRIOR
<i>foreign direct investment</i>	FDI = ln(FDI)	FDI

The method of data analysis performed using Statistical Analysis Descriptive and Multiple Linear Regression Analysis. To test the hypothesis used F-test and T-test, but previously we should do the Classical Assumptions Test first. In data processing, the author used software SPSS 16.

5. RESULTS AND DISCUSSION

5.1. Statistic Descriptive Analysis

The results of statistics descriptive below illustrates generally the variables used in this study:

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean
LAW	100	2.18	6.50	3.8223
TECH	100	2.96	6.40	5.0143
DIGI	100	2.69	6.40	4.8985
TARIFF	100	.00	2.04	.2563
EDU	100	2.20	6.22	3.8827
INET	100	.12	83.70	29.1754
ABSORP	100	3.24	6.24	5.0110
PRIOR	100	3.50	6.38	5.0147
FDI	100	13.82	25.48	21.7945
Valid N (listwise)	100			

Resource: SPSS 16.0 Output, 2012

For a country that has the largest FDI inflows is China with the value of the natural logarithm of FDI inflows amounted to 25.48 and the country that has the smallest FDI inflows is Nepal with the value of the natural logarithm of FDI inflows amounted to 13.82 in 2008. While the average value of natural logarithm of FDI inflows of entire sampled countries is at 21.7945.

5.2. Normality Test

Normality test is done to determine whether the distribution of residuals is normal.

Normal P-P Plot of Regression Standardized Residual

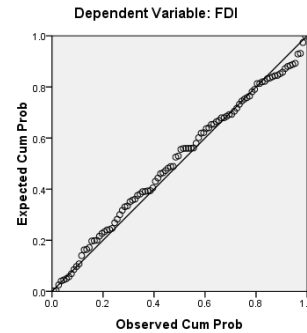


Figure 2. Normal Probability Plot
Resource: SPSS 16.0 Output, 2012

The chart above shows that the distribution of the data in this study is normal. It is seen from the plots that are scattered around the diagonal line and follow the direction of the diagonal line.

5.3. Autocorrelation Test

Autocorrelation test performed to test whether there is a correlation in the regression model between the residuals in period t and residual period $t-1$ (previous). For being free from autocorrelation issue, the Durbin Watson (DW) should be $dU < DW < (4-dU)$. DW values for the data of this study can be seen in the table below:

Tabel 3. Autocorrelation Test

Model	Durbin Watson
1	1.848

Resource: SPSS 16.0 Output, 2012

From the value of DW above, it is seen that the data in this study were between the values dL and dU , each is for 1.506 and 1.850 ($1.506 < DW < 1.850$). Therefore the autocorrelation issue of this research cannot be detected. This result of autocorrelation test can be ignored in the research which uses time series and cross section data (Almalia, 2008).

5.4. Multicollinearity Test

Multicollinearity test conducted to test whether the regression model found a correlation between the independent variables (independent). If the independent variables are correlated, then these variables are not orthogonal. Orthogonal variables are

the correlation between the independent variables are zero (Ghozali, 2007). Multicollinearity test results can be seen from the value of tolerance and the value of Variance Inflation Factor (VIF). Data is free from multicollinearity issue if the value of the independent variable tolerance $0.1 < \text{tolerance} < 1$ and VIF value of less than 10.

Table 4. Multicollinearity Test

Variable	Tolerance	VIF	Information
Political and regulatory environment	0.319	3.131	Free from multicollinearity issue
Business and innovation environment	0.107	9.304	Free from multicollinearity issue
Infrastructure and digital content	0.187	5.349	Free from multicollinearity issue
Affordability	0.649	1.540	Free from multicollinearity issue
Skill	0.204	4.904	Free from multicollinearity issue
Individual usage	0.256	3.905	Free from multicollinearity issue
Business usage	0.106	9.398	Free from multicollinearity issue
Government usage	0.208	4.808	Free from multicollinearity issue

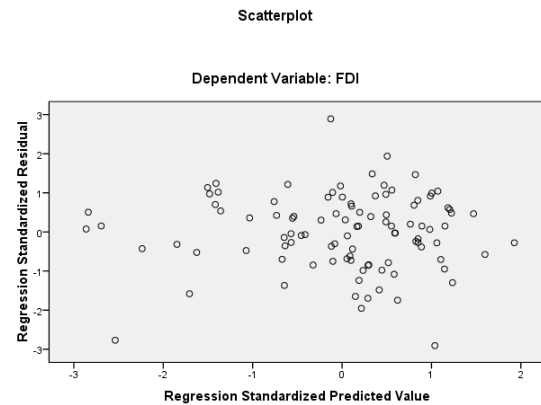
Resource: SPSS 16.0 Output, 2012

From the table above, it is seen that all the variables in this study are free from multicollinearity problems. It is seen from $0.1 < \text{tolerance} < 1$ and VIF values below 10.

5.5. Heterocedasticity Test

Heterocedasticity test conducted to test whether the regression model has the same variance from the residual one to another observation. If one observation to another observation has the same residual variance, it is called homocedasticity and if it is different, it is called heterocedasticity. To determine the heterocedasticity, we can use heterocedasticity scatterplot chart. The plots must be spread randomly formed, scattered both above and below the 0 on the Y-axis. When this condition is met, then it is free from heterocedasticity issue and it is feasible for using the regression models.

Heterocedasticity test results can be seen from the picture below:



**Figure 3. Heterocedasticity Test
Resource: SPSS 16.0 Output, 2012**

From the picture above shows that the plots spread randomly and scattered both above and below the number 0 on the Y-axis, thus it can be concluded that there is no heterocedasticity issue in this regression model.

5.6. Hypothesis Test

This study tested the hypothesis using T-test to test the hypothesis 1 to hypothesis 8, and F-test to test the hypothesis 9. Multiple linear regression analysis was used to analyze the effect of effectiveness of law-making bodies, availability of latest tech, accessibility of digital content, mobile cellular tariffs, quality of education, internet users, firm-level technology absorption, and government prioritization of ICT on inflows FDI in Asia.

5.6.1. Partially Test (T-Test)

T-test was used to test the significance of the partial regression coefficient of the independent variable (Ghozali, 2005). T-test was conducted to test the hypothesis 1 to hypothesis 8. T-Test results can be seen in the table below:

Table 5. Partially Test (T-Test)

Model		Unstandardized Coefficients	T	Sig.
		B		
1	(Constant)	8.742	4.858	0.000
	LAW	0.980	3.867	0.000
	TECH	-0.464	-0.949	0.345
	DIGI	1.113	3.278	0.001
	TARIFF	-0.267	-0.569	0.571
	EDU	-0.866	-2.388	0.019
	INET	-0.030	-2.844	0.006
	ABSORP	3.217	5.235	0.000
	PRIOR	-1.122	-2.673	0.009

a. Dependent Variable: FDI

Resource: SPSS 16.0 Output, 2012

From the T-Test results, it can be concluded that by the ICT perspective, factors affecting FDI inflows into Asia were: effectiveness of law-making bodies, accessibility of digital content, quality of education, internet user, firm-level technology absorption, and government prioritization of ICT.

5.6.2. Simultaneously Test (F-Test)

F-test conducted to determine whether the independent variables together or simultaneously affect the dependent variable. In this research, F-Test was conducted to test the hypothesis 9. F-Test results can be seen in the table below:

Table 6. Simultaneously Test (F-Test)

Model		F	Sig.
1	Regression	19.012	0.000

a. Predictors: (Constant), PRIOR, TARIFF, LAW, INTERNET, EDU, DIGI, TECH, ABSORP

b. Dependent Variable: FDI

Resource: SPSS 16.0 Output, 2012

The table above shows that the significance value resulted (0.000) is less than 5% or 0.05, then all the independent variables (PRIOR, TARIFF, LAW, INTERNET, EDU, DIGI, TECH, ABSORP) simultaneously affect the dependent variable (FDI). It can be concluded that the ninth hypothesis which states that the ICTs simultaneously affect FDI inflows is accepted.

5.6.3. Coefficient of Determinant Test (R^2)

The coefficient of determination (R^2) describes the proportion of the dependent variable that can be explained by the independent variables simultaneously. Determination coefficient ranges between $0 \leq R^2 \leq 1$. When the value of R^2 closer to one, then the greater independent variables in explaining the dependent variable, but if the value of R^2 close to zero, the smaller the independent variables in explaining the dependent variable.

Table 7. Coefficient of Determinant Test

Model	R^2	Adjusted R^2
1	0.626	0.593

Resource: SPSS 16.0 Output, 2012

According to Insukrindo (1998) in Ghozali (2005) recommended to use the adjusted R^2 values when evaluating regression models. This is because the adjusted R^2 can go up or down when the independent variable is added to the model. From the test results, adjusted R^2 value is at 0.593. Thus we can conclude that the independent variables in the regression model of this research may explain the effect on the dependent variable by 59.3%, while 40.7% is explained by other factors outside the regression model.

4.1.7. Summary of Hypothesis Test Results

The hypothesis test results summarized in the table below:

Table 8. Summary of Hypothesis Test Results

No	Hypothesis	Summary
1	Effectiveness of law-making bodies affects FDI inflows	H_01 : rejected H_a1 : accepted
2	Availability of latest technology affects FDI inflows	H_02 : accepted H_a2 : rejected
3	Accessibility of digital content affects FDI inflows	H_03 : rejected H_a3 : accepted
4	Mobile cellular tariffs affect FDI inflows	H_04 : accepted H_a4 : rejected
5	Quality of education affects FDI inflows	H_05 : rejected H_a5 : accepted
6	Internet users affects FDI	H_06 : rejected

	inflows	H _a 6: accepted
7	Firm-level technology absorption affects FDI inflows	H ₀ 7: rejected H _a 7: accepted
8	Government prioritization of ICT affects FDI inflows	H ₀ 8: rejected H _a 8: accepted
9.	ICTs simultaneously affect FDI inflows	H ₀ 9: rejected H _a 9: accepted

Resource: SPSS 16.0 Secondary Data Processed, 2012

From the above table, it can be concluded that the hypothesis which are accepted in this research are hypothesis 1, hypothesis 3, hypothesis 5, hypothesis 6, hypothesis 7, hypothesis 8, and hypothesis 9. Acceptance of this hypothesis based on the value of the significance of each variable < 5% or 0.05.

4.2. Discussion

The test result of first hypothesis shows that effectiveness of law-making bodies positively affects FDI inflows into Asia countries. These findings proved that the effectiveness of law-making bodies which regulates the aspects of society can bring FDI inflows into the related country. Sekretariat Negara Republik Indonesia (Secretariat of the Republic of Indonesia) stated that the factors taken into account by the foreign investor is environmental or policy frameworks made by the law-making bodies, particularly those relating to market regulations that support openness, political and social stabilization, international agreements standardization, ownership protection, and trade and taxation policies. For that reason, each country should prepare strategies, policies, good infrastructure and facilities in order to create conducive climate and win the competition over other countries in attracting foreign investors, without ignoring the presence of entrepreneurs and domestic labor, and social values, cultural and the ecological environment.

A statement from Sekretariat Negara Republik Indonesia is consistent with Kurniati, et al, (2007) who states that the political risk associated with the potential entry of FDI in some countries. With the high effectiveness of law-making bodies, the political risk in the country will be declined. Lucas (1990) stated that political risk becomes an

important factor in limiting capital flows and in transferring of capital toward international equalization of factor prices. By decreasing the political risk, the potential for foreign investors to invest their funds in the country are greater since they will feel secure in investing their funds.

The test results of second hypothesis shows that the availability of latest technology does not affect FDI inflows into Asia countries. This finding suggests that the availability of latest technology cannot attract foreign investors to invest their funds in Asia countries. Foreign investors are not too focused on the availability of latest technology in the country of FDI destination because FDI in the country will be followed by the transfer of technology (Sawerdi, 2007; Sun, et al., 2002). Multinational companies which do the FDI activity will bring the latest technology that has been implemented in the origin companies to a subsidiary that will be built/acquisition company. This happens because the subsidiaries and acquisition companies will adopt the origin enterprise systems and tools of origin companies. Therefore, the availability of latest technology is not a major factor in attracting foreign investors to invest their funds in the country of FDI destination.

The test results of third hypothesis show that accessibility of digital content affects FDI inflows into Asia countries. This finding suggests that the accessibility of digital content can attract foreign investors to invest their funds in Asia countries. This is consistent with the OECD (2006) which states that most of the business activities increasingly depend on digital content. With the ease of accessibility of digital content from a country, investors are not going to worry about the business activities in the country. Otherwise, if the accessibility of digital content is limited, the company's business activities will also be limited. That would reduce the magnetism of foreign investors to invest into the country.

The test results of fourth hypothesis show that mobile cellular tariffs do not FDI inflows into Asia countries. This finding suggests that no matter how much the mobile cellular tariff in the country cannot attract foreign investors to invest their funds in Asia countries. This happens because the telecommunications media is now not only limited to calls only. Advances growth of internet connections provide a cheaper and easier to communicate both

with employees and with customers. Companies have an alternative to sending email via personal computer in the company or even use their smart phones wherever and whenever they want. If communication hampered by long distances with limited time and still require visual communication with customers/employees/co-workers, companies can take advantage of teleconference with internet facilities in the company (WEF, 2012). Therefore, company communication is not limited to calls by mobile cellular only.

The test results of fifth hypothesis show that quality of education negatively affects FDI inflows into Asia countries. This finding suggests that any increase in quality of education in Asia countries will lower FDI inflows into the countries. Similar results were also obtained by Addison and Heshmati (2002). They also found that the quality of education would reduce the inflow of FDI into the countries. This phenomenon occurred probably due to the higher quality of education in the country, the higher the salary that have to be paid by the company to its employees. Ismail and Yussof (2003) found that an increase in salary in Philippines can reduce FDI inflows into the country. The high level of employee salaries in a country will be a consideration for foreign investors. It can lower the interest of foreign investors to the country.

The test results of sixth hypothesis show that internet user negatively affects FDI inflows into Asia countries. This finding indicates any increase in the percentage of internet users in Asia countries has the potential to reduce the FDI inflows into Asia countries. It was triggered by the development of ICT in the world to make consumers will interact with each other, access information and perform their daily activities in new ways, such as mobile-phone-based shopping and payment service (WEF, 2012).

To increase sales, the company does not have to physically build up the company in the form of Greenfield and acquisitions in the abroad countries, considering the steps for doing business in the countries are not always easy. Companies can increase the sales by creating a website where consumers can order the goods/products of the company through the website. Then the company can promote the website/products by putting advertisement on various social media sites or sites that are frequently visited by the societies. Thus

consumers can order or booking via the Internet, so the company's sales will increase.

The test results of seventh hypothesis show that firm-level technology absorption positively affects FDI inflows into Asia countries. This finding suggests that any increase in firm-level technology absorption in the country can increase the FDI inflows into the country. Consistent with Goldberg, et al. (2006), improving the absorptive technology capability of a country will improve their ability to enter the global technology pool. This is an important mechanism for accelerating industrial development, raising productivity workers and increasing economic growth. They also stated that the technology absorption is considered a necessary step to promote the development of human capital and the productive base, paving the ways for innovations at the global knowledge frontier. They invoke the Cohen-Levinthal notion of absorptive capacity: a firm must be engaged in an active process of learning about technologies in order to effectively absorb advances in these technologies by other firms. It is believed to increase the belief of foreign investors to invest their funds in the country.

The test results of eighth hypothesis show that the government prioritization of ICT negatively affects FDI inflows into Asia countries. This finding suggests any increase in government prioritization of ICT has the potential to reduce the FDI inflows into Asia countries. In this research, the sample suspected to have concerns if the government prioritization of ICT too large, then the other investors in other sectors will feel neglected. It would discourage to invest in the country. It is because of ICT is not a major factor in the business sector of the company in the country of FDI destination. According to UNCTAD (2012), since 2008-2011, FDI flows mostly to finance sector.

The test results of ninth hypothesis show that the ICTs simultaneously affect FDI inflows into Asia. This result is consistent with Addison and Heshmati (2002) who found that ICT has positive and significant effect on FDI. This is because ICT has a positive impact on total productivity (Matambalya and Wolf, 2001). The relationship between ICT and FDI is also found by Gholami, Tom Lee and Heshmati (2005) and Alexander (2010).

6. CONCLUSION

This study tries to examine and analyze the factors affecting FDI inflows in Asia from by the ICT perspective (effectiveness of law-making bodies, availability of latest technology, accessibility of digital content, mobile cellular tariffs, quality of education, the Internet user, firm-level of technology absorption, and government prioritization of ICT) and the samples used by 25 Asia countries for the period 2008-2011. The test results showed that the effectiveness of law-making bodies, accessibility of digital content, quality of education, Internet user, firm-level technology absorption, and government prioritization of ICT affects FDI inflows into Asia. However, the availability of latest mobile technology and mobile cellular tariffs do not FDI inflows into Asia.

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