FDI & IDX: A CAUSALITY TEST

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ABSTRACT

This study aims to examine the causal relationship between foreign net purchase and stock market capitalization, as well as to examine the effect of foreign direct investments towards the development of stock markets in Indonesia. The data used in this study were secondary data of FDI and market capitalization issued quarterly in the form of time series during the period of January 2000 to September 2010 obtained from the Board of Investment, Bank Indonesia, Central Bureau of Statistics and the Indonesia Stock Exchange. Data were analyzed by using Granger's Causality method to test the causal relationship between the two variables. The predictive power of prior information may indicate a causal relationship between y and z in the long term. The results indicate that there is a pattern of one-way causal relationship between foreign net purchase and market capitalization, which means foreign net purchase significantly, affects market capitalization. The results also found the effect FDI has on market capitalization and this indicates that the Indonesian stock market is getting better. This condition is also supported by the strengthening of Indonesian economy fundamentals that led to foreign investors interested to invest in Indonesia.

.***Keywords : causality, FDI, market capitalization.***

1. Background

In recent years, Indonesia is paralleled with two other developing countries i.e. China and India, both of which have successfully improved their economy during the global financial crisis storm that began with the collapse of financial industry in the United States. The impact of the financial crisis spread worldwide because almost all developed countries and developing countries related to global financial suffered since the owners of capital withdrew their funds from places vulnerable to the global crisis. Initially, Indonesia was less noticed by investors but now it has become one of promising investment alternatives despite the fact that the investments are still dominated by foreign investors. On one hand, the role of foreign investors brings a positive impact to increase the liquidity in the form of capital inflows but on the other hand, it will be a threat to market instability if the foreign investors withdraw the capital (capital outflows) passively and suddenly.

FDI inflows into a country aims not only to promote the development of host country but also to help host country to integrate into global market. Claessens et al. (2001) argue that the relationship between FDI and stock market development tends to be higher in a riskier, financially underdeveloped and institutionally weak country. Claessens view is supported by Hausman and Arias (2000) who believe that FDI is going to overcome the difficulties in investing through capital markets. This shows that FDI inflows into a country will be able to contribute positively to the development of capital markets.

Indeed, the impact of global and American crisis are still dominant and there is a possibility of massive capital outflow in Indonesian stock market. Stock market is an integral part of a financial system and a replica of a country's economic strength. Therefore, the development of stock market cannot be ignored in any economy because it can increase investment, savings and economic growth (Levine and Zervos, 1996). In addition, the stock market development is the result of various factors such as exchange rates and political stability (Robert and Gray, 2008).

Adam and Tweneboah (2010) state that the role of FDI in the development of stock market in developing county is considered very strong due to the existence of causality and FDI implication relationship in promoting stock market development. Thus, the more FDI flows in capital markets the greater the increase of the stock market is. This shows a positive influence between FDI and stock market development. Meanwhile, Goldstein et al. (2007) state that FDI will enter a country, if the stock market is already developing and economic growth is also already improving. Investors are always looking for the most profitable investment alternatives because they prefer to stocks with large capitalization value rather than small capitalization value.

The motivation of this study is the fact after the global financial crisis many of inflows into Indonesia through the capital market, especially the stock market. Beside it, In 2010 Indonesia Stock Exchange entered a new phase on its journey in realizing its vision to become a competitive exchange with a world-class credibility through its beyond-expectation achievements, including its recognition as one of the exchanges with the best growth index and market capitalization among major exchanges in Asia Pacific region as well as its recognition as The Best Stock Exchange in Southeast Asia by Alpha Southeast Asia Magazine for the second times (www.idx.co.id). This study contributes in analyzing causality capital inflows to the stock market capitalization in Indonesia.

2. Literature Review

Foreign Direct Investment

A decision to foreign investment is the result of a complex process that is different from domestic investment. Foreign Investment is usually based on complex strategic, behavioral and economic considerations. According to Krugman in Sarwedi (2002) FDI is flow of international capital from a country whose companies establish or expand its company in another country. Therefore, there are not only transfer of resources, but also control of overseas companies. Examples of FDI are license of high technology use, joint ventures and strategic alliances with local companies. Joint ventures involve three parties or more commonly called syndicates and usually formed for specific projects such as large-scale construction or public works projects that involve and need a wide variety of expertise and resources (http://dte.gn.apc.org).

Feldstein (2000) states that FDI as a type of free capital flows has several advantages (1) the capital flow reduces risk of capital ownership by doing diversification through investment (2) the global integration of capital markets can provide the best spreads in the establishment of corporate governance, accounting rules, and legality, and (3) the global mobility of capital limits the government's ability to create incorrect policies. Krugman in Acharya, et al. (2008) argue that FDI covers not only ownership transfer from domestic into foreign ownership but also mechanism that allows foreign investors to study management and control of domestic company especially corporate governance mechanism. In addition, the host country will have benefits such as transfer of technology in the form of new varieties of capital inputs that cannot be achieved through financial investments or goods trade (Razin and Sadka, 2002).

In the past three years, the desire of foreign investors to invest in Indonesia has actually improved compared to five years ago. However, challenges to empower capital investment have also been acknowledged by the government. The constraints and challenges include competition of investment policy made by competitor countries such as China, India, Thailand and Malaysia, low legal certainty on capital investment, weak investment incentives, high economic costs due to high cases of corruption, security, abuse of authority and increasing value of effective real exchange of rupiah.

It is necessary to create a more attractive business and investment climate for capital investment in Indonesia. In short, a positive investment climate can be improved through continuous efforts made by bureaucrats and economic actors in investment localities. For examples, by providing legal certainty on regulations, maintaining security from potential criminal interference by corrupt people to company's valuable assets, to distribution of goods to warehouse and to finished or semi-finished goods storage areas, as well as providing the most basic amenities of service for investors such as investment licensing, immigration, customs, taxation, region defense, and selective competitive series of investment incentives package.

Stock Market and Determinants of Stock Market Development

Shares are the ‘main’ channel of a company to promote its business to investors and capital owners. Incorporating a company in Stock Exchange gives a better opportunity to get a larger capital. Exchange is a place for people to invest through the purchase of securities or to make money by selling it. Thus, stock market serves as a place to invest in certain company chosen confidently for its achievements or to dilute ownership by selling shares. Several studies have examined factors that influence the development of the capital market. Shabaz et al. (2008) found a bidirectional causality relationship between capital market development and economic growth for the long term. However, for the short term, it suggests a one-direction causality from the capital market development to economic growth. Claessens et al. (2002) studied the determinants of stock markets development around the world, the cause of internationalization and its effects on the local market by examining data from 77 countries from January 1975 to November 2000. They concluded that the migration of global funds is very beneficial for the development of the stock market as there are more funds for companies and more flexibility for investors.

Garcia and Liu (1999) estimated the macroeconomic determinants of stock market development, especially the stock market capitalization, by using data collected in 15 developing countries and industries for the period of 1980-1995. The results show that real income, saving rate, financial intermediary development and stock market liquidity are the determining factors of stock market development. Singh (1997) also found a positive relationship between economic growth and stock market development. Naceur et al. (2007) examined the role of stock markets in economic growth and macroeconomic factors in the Middle East and North Africa. They found rate of savings, financial intermediaries, stock liquidity and market stabilization variables as determinants of stock market development.

Chai and Corrine (2008) conducted a study using Granger Causality test and vector auto-regression framework (VAR) to test daily transactions of foreign investors in six capital markets in Asia – India, Indonesia, Korea, Philippines, Taiwan, and Thailand – with local capital market and exchange rate changes over the eight years (1999-2006). The results show that equity market returns have a relationship with net equity purchase and vice versa net equity purchase related to equity market returns. Wang (2007) examined the influence of foreign ownership on Indonesian stock volatility by using Granger Causality. The findings indicate that foreign ownership has an effect in reducing stock volatility. It does not depend on the gross and net foreign trade as well as historical stock volatility. The effect of reducing volatility is rising through the increasing of foreign ownership. Nasser and Gomez (2009) empirically explored the impact of financial market developments on FDI inflows. They used data in the period of 1978-2003 and the samples were 15 Latin American countries including Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Paraguay, Peru, Uruguay, and Venezuela. The proxy for stock market development used stock market capitalization as the percentage of GDP, total value traded to GDP, and turnover ratio. The results show that FDI is positively correlated with market capitalization and value of domestic shares traded. This indicated that FDI is a complement and not a substitute for the development of stock markets in Latin American countries.

Mahmoud (2010) states that stock market development has an important role in host country and is able to attract FDI. Mahmoud's findings are supported by Durham (2004) who states that the development of financial markets can absorb capital inflows like FDI. Adam and Tweneboah (2010) found that FDI is a significant positive impact on stock market development in Ghana. The crucial point worth pointing is that stock market development plays a major role in attracting FDI. This opens ways for research to attracting FDI through the development of stock market. Ergun and Nor (2009) analyzed the role of FDI in the relationship between Turkish stock market (ISE) and investment made by the European Union in Turkey. The samples were France, Netherlands, Germany, Britain, Italy and Belgium. The results showed a strong correlation over the period of the study. This means that FDI is one of the most important determinants of Turkish stock market relations with countries that have direct investment in Turkey.

Claessens et al. (2001) state that FDI is positively correlated with the development of the stock market (a proxy for market capitalization and value of shares traded). Claessens further said that if FDI is positively correlated, this indicates that FDI is a complement of the development of domestic capital markets. However, if FDI is negatively correlated then FDI acts as a substitute to the development of the stock market. Claessens et al. findings (2001) is supported by Hausman and Arias (2000) who said that FDI as a complement to the development of the stock market. These findings suggest that FDI encourages the development of equity markets and the internationalization of stock market, implying that foreign investment may take place through the international market and can help companies migration to overseas. Meanwhile, Garcia and Liu (1999) stated that the development of the stock market and financial intermediation as a complement, not a substitute. Adam and Tweneboah (2010) study of the effect of FDI on stock market development in Ghana shows that FDI has significant positive effect on stock market development in Ghana. This proves that FDI in Ghana as a complement of the development of stock market. Based on these studies, the authors hypothesized as follows:

H_1: There is a causal relationship between foreign net purchase and stock market capitalization in Indonesia.

H_2: Foreign Direct Investments have positive effect on stock market development in Indonesia.

3. Methodology

Data and Samples

The data used in this study were secondary data issued quarterly in the form of time series during the period of January 2000 to September 2010 (2000:1-2010:3). Data obtained from the Board of Investment (www.bapepam.go.id), Bank of Indonesia (www.bi.go.id), Central Bureau of Statistics (www.bps.go.id) and the Indonesia Stock Exchange (www.idx.co.id).

Operational Variable

The operational variables definition used in this study were FDI and stock market development. Foreign Direct Investment using Foreign Net Purchase (FNP) is the net of foreign investors shares purchase value in capital market (Pavabutr and Yan, 2007; Adam and Tweneboah, 2010; and Sierra, 2010).

$$FNP = Purchase\ Price\ of\ Foreign\ Investors'\ Shares - Sell\ Price\ of\ Foreign\ Investors'\ Shares$$

Stock market development using proxy for market capitalization (MC) divided by Gross Domestic Product (GDP) (Claessens et al., 2001; Adam and Tweneboah, 2010). Market capitalization is total market value of shares traded multiplied by the share price. The formulation used is

$$MC = \frac{Share\ Value * Outstanding\ Shares}{Gross\ Domestic\ Product}$$

Data Analysis Method

The method of analysis used in this study to answer the hypothesis was by using causality test and the influence of foreign direct investment variable as a proxy for the net purchase (FNP) with the development of the stock market as a proxy for market capitalization value (MC).

Granger's Causality Test

Causality test was performed to determine whether an endogenous variable could be treated as an exogenous variable. This stems from the ignorance of influence between variables. If there are two variables y and z, then does y causes y or z causes y or both applies or no relationship between the two. Variable y causes variable z means how much the value of z in current period can be explained by the value of z in the previous period and the value of y in the previous period. Causality test can be done in various methods including Granger's Causality and Error Correction Model. In this study, Granger's Causality was used to examine causal relationship between two variables. Predictive power from previous information may indicate a causal relationship between y and z for long periods. The use of lagged number (delay effect) is recommended in a longer time, according to the allegations of causality. It is expected that the results of Granger's Causality would indicate the existence of causal relationship and influence between foreign capital and Indonesian capital market.

The test of causal relationship with Granger's Causality method is developed by Granger. The Granger's Causality models are expressed in autoregresive vector expressed in the following two equations:

$$MC_t = \alpha_1 + \beta_1 FNP_{t-1} + \varepsilon_{1t} \quad \text{and}$$
$$FNP_t = \alpha_2 + \beta_2 MC_{t-1} + \varepsilon_{2t}$$

To test the hypothesis, the following formula of F test was used:

$$F = \frac{(RSS_R - RSS_{UR})/m}{RSS_{UR}/(n-k)}$$

m is the number of lag and k is the number of parameters estimated in unrestricted regression. If the absolute value of F is greater than the critical value of F table, the null hypothesis is rejected, which means that there is a causal relationship. The steps were repeated for several other research variables with different lag. The test of causality with bivariate models uses pairwise testing for each variable (partially) in a single equation. The process of the test with VAR multivariate models is performed simultaneously so that there is joint significance in one equation (Hamilton, 1994 and Patterson, 2000). Each equation in the VAR was tested in the distribution of Wald Chi-Squares or usually denoted in χ2-Wald. Each variable was exchanged from the endogenous variable to exogenous variables to test the causality. The results of Wald χ2 statistic calculations showed the joint significance of the lagged endogenous variables in the VAR equation.

Regression Analysis

The analysis used in this study was simple regression analysis and ordinary least squares (OLS) was used for the estimation method. The use of OLS in estimation results was expected to be Best Linear Unbiased Estimate (BLUE). The specifications are as follows:
$MC_t = \alpha + \beta_1 LFNP_{t-1} + \varepsilon_t$, Notation: Y_i: Dependent variable, X: Independent variable, β: Estimation coefficient, α: Intercept, and ε: *Error term*

4. Result and Discussion

Indonesian capital market is one of attractive options for foreign investors compared to other countries including European countries and the U.S. that are still in the recovery phase after the crisis hit. It is normal that the current flow of foreign funds is flooding Indonesian capital market. The large amount of FDI flow makes the performance of domestic market jump sharply. Until now, foreign investors dominate shares ownership in Indonesian companies that go public. More detail can be seen in Table 1 below:

Table 1 The Development of Foreign Investor

Year	Net Foreign (US $)	Year	Net Foreign (US $)
2000	808.437,30	2006	17.300.351,20
2001	4.491.479,40	2007	32.607.301,50
2002	7.912.322,20	2008	18.281.263,60
2003	9.877.104,30	2009	13.788.426,60
2004	18.813.726,70	2010	6.002.760,00
2005	(15.417.936,60)		

Source: www.bi.ac.id

In 2009, the proportion of foreign ownership was approximately 67.1% of the total 1.15 million shares in the country owned by foreign investors. While the remaining 32.9% owned by domestic investors. Foreign investors dominated stock assets ownership at Rp 966.23 trillion, equivalent to 67 percent of the stock assets (as of July 30, 2010). The number of ownership increased by 38 percent compared to the same period last year of Rp 696.65 trillion. The same thing was shown in the shares asset ownership owned by local investors. The local investors had assets worth Rp 474.24 trillion, up 30 percent over the previous year, Rp 361 trillion.

Entering the end of the year, foreign ownership decreased but this was temporary and due to profit taking alone. This can be observed from the insignificant number of decrease percentage. It is expected that the future foreign investors still want to invest long term in Indonesia because Indonesia's economic is fundamentally still in good condition coupled with the potential to upgrade Indonesia's rating. The foreign investors began to gain profit by the end of the year.

The Developments of Stock Market Capitalization

In the last two years, the development of market capitalization has increased consistently. The state of stable macro-economy as seen from a more controlled inflation, a relatively stable rupiah, and relatively low interest rates has raised hopes of company performance improvement. As a result, the investors' incentives to stocks listed on our Exchange increased so that the stocks capitalization pushed higher. Market capitalization in 2001 was only 14.2 percent of GDP, but this figure climbed to 22.1 percent of GDP at the end of 2003. A more details of the development of stock market capitalization can be observed in Table 2.

Table 2 The Capitalization of Stock Market

Year	Market Capitalization	Year	Market Capitalization
2000	259.621,00	2006	1.249.074,50
2001	239.271,00	2007	1.988.326,20
2002	268.776,00	2008	1.076.490,53
2003	460.366,00	2009	2.019.375,00
2004	679.949,10	2010	2.919.402,30
2005	801.252,70		

Source: www.bapepam.ac.id

Compared to previous year, the market capitalization on Indonesian Stock Exchange increased by 59.18%, from Rp1.249,1 trillion by the end of trading in 2006 to Rp1.988,33 trillion at the end of trading in 2007. In line to this, the Indonesian capital market contribution to GDP also increased from only 37.42% in 2006 to 50.24% in 2007. Market capitalization at the end of trading on the Stock Exchange in 2009, when compared to the end of the previous trading year, up 87.59%, from Rp1.076,50 trillion at the end of trading in 2008 to Rp2.019,38 trillion at the end of trading in 2009. Parallel to this, the Indonesian capital market contribution to GDP rose from 21.72% in 2008 to 35.97% in 2009.

The market capitalization value gave an indication that the amount of demand for stocks was very high. Shocks caused by global financial crisis indeed lowered demand in the capital market but the recovery process that occurred in 2009 showed an increasing trend. This suggests a potential return of demand in the capital market so that companies do not have to worry about the shares being issued cannot be absorbed by the market.

The Relationship between causality of foreign net purchase and stock market capitalization in Indonesia

The causality testing was performed simultaneously by using Vector Autoregression (VAR) model for multivariate. Each equation in the VAR was tested in the distribution of Wald chi-Squares or usually denoted as χ^2–Wald. Each variable was exchanged from endogenous variable to exogenous variables to test the causality. The results of statistical calculations of χ^2–Wald showed joint significant of the lagged endogenous variables in VAR equation. Based on the causality test using Engle Granger method, the obtained causality output results were as follows:

Table 3 Granger's Causality Test

Null Hypothesis	Number of Observa-tion	F-Stat	Probabili ty
LMC does not cause LFNP	12	204,55	0,226***
LFNP causes LMC	12	394,33	0,087***

***/**/* Significant at 10%, 5% and 1%

Based on tests with Granger Causality, the results point out that there was a unidirectional relationship between Net Foreign Purchase (LFNP) and market capitalization (MC). This indicates that the inflows of Net Foreign Purchase (LFNP) to stock market were able to encourage the movement of stock market capitalization in Indonesia. From the results of Granger causality, it can be concluded that the research hypothesis (H1) that states two-way relationship (causality) between Foreign Direct Investment and stock markets development in Indonesia is rejected.

The Effect of FDI on stock market development in Indonesia

The results of regression equation that was used to estimate foreign net purchase (LFNP) to the stock market development, particularly the market capitalization (MC) is as follows:

Table 4 Estimates Results

Dependent Variable	α	β FNP	R^2
Market Capitalization (MC)	-490,623	0,28057	0,5106
	(101,129)	(0,04856)	
	0,00000*	0,00000*	

***/**/* Significant at 10%, 5% and 1%

The regression equation model is: LMC = -4.90623 + 0.28057 * LFNP. The equation can be interpreted as if LFNP increase by 1 million rupiahs, the market capitalization will increase by 280.570 rupiahs, assuming another variable is constant. With a higher adjusted R-squared by 0.5106 (51.06%), regression has a significant probability of the independent variables at 1%, then the regression model is good because of 51.06% MC can be explained by the independent variables, the remaining 48.94% can be explained by some external factors other than the independent variable used in this study such as inflation, exchange rate, interest rate and other.

Regression analysis shows that net foreign purchase (LFNP) variable has a significant positive effect on market capitalization (MC) variable. These results were proved with the significance is less than 1%. Thus, it can be stated that the research hypothesis (Ha) is acceptable, meaning that the Foreign Direct Investments variable has positive effect on stock market development in Indonesia.

The results of this study are consistent with the findings of Claessens et al. (2001) and Adam and Tweneboah (2010), which state that the development of stock market is affected by the movement of FDI inflows. The reason of this phenomenon is basically because of the entry of foreign investors into the stock market increasing the market capitalization. Thus, companies can also take advantage of these conditions to conduct an initial public offering or IPO.

5. Conclusion

The Granger Causality test results indicate that there is a pattern of one-way causality relationship between foreign net purchase (LFNP) and market capitalization (MC). This means that foreign net purchase (LFNP) significantly affect market capitalization. This also suggests that the trust of foreign investors (FDI) in the period of the study proved to have a significant influence on the development of stock market in Indonesia. This happened probably because Indonesian stock market were in good and stable conditions and government policy in an effort to encourage investment led to the development and expansion of financial sector especially stock market. The estimation result using simple linear regression proved that FDI has significant positive effect on the development of stock markets in Indonesia. This shows that the Indonesian stock market is still trusted by investors to invest and the strengthening of Indonesian economy supports this.

The results of the study demonstrate the significant effect between FDI and market capitalization and this indicates that the Indonesian stock market is getting better. The strengthening of the Indonesian economy that led to foreign investors interested in coming into Indonesia also supports this condition. The high flow of foreign capital can be a momentum for domestic market to add funds in capital markets in order to be able to balance the flow of foreign capital. The addition of these funds can be done through rights issue or initial public offering (IPO) to strengthen the fundamentals of economy, especially in Indonesian stock market. The amount of capital inflow is a great opportunity for companies that do not require additional capital to undertake listing or rights issue.

Foreign net purchase entering Indonesia that is largely a short-term capital flows (hot money) and invested more into portfolio through capital markets is not a direct investment. And this more or less will affect the economy if there is simultaneous withdrawal of funds out of Indonesia. The amount of short-term capital flows into the country is believed to be capable as driving indicators to a better monetary sector in Indonesia. Such conditions can be addressed wisely and is regarded as a good beginning for the revival of Indonesian economy, along with the increasing confidence of foreign investors to invest in Indonesia, although for the moment they are short term. Without a high trust on the prospects of Indonesian economy, the foreign investor is certainly not going to invest in Indonesia, even a short-term investment, because there is no guarantee that their capital will be invested back.

For the Indonesian capital market, this study shows that FDI variable has an influence on stock market. Policy recommendations from this study are how the government and authorities should be able to oversee that FDI (capital inflow) entering Indonesia is a longer term and is not vulnerable to economic turmoil. Besides, capital inflow also acts as an incentive to encourage real sector. With a variety of regulations and incentives, the government should be able to make flow of funds invested in portfolios such as SBI, SUN and stock market can be used as sources of funding for businesses and governments to run the economy. Foreign Direct Investment has shown a significant stronger effect on the changes in stock market but cannot reveal any further influence of macro-economic variables that can affect the development of stock market. Because in this study, those variables are used as control variables. Therefore, there are some suggestions for future research i.e. to incorporate macroeconomic variables as research variable, and for the development of the market, the value of trade and JCI that is sorted by industry can be used.

References

Acharya, Viral., Hyun Song Shin., dan Tanju Yorulmazer. (2008). Firesale FDI*, Working Paper, American Finance Association*

Adam, Anokye M., dan Tweneboah, George., (2010), Foreign Direct Investment and Stock Market Development: Ghana's Evidence, *International Research Journal of Finance and Economics, Vol. 36, pp. 179-185*

Chai-Anant, Chayawadee and Ho, Corrinne., (2008), Understanding Asian Equity Flows, Market Returns and Exchange Rates, *BIS Working Papers*, Monetary and Economic Department, Bank for International Settlements

Claessens, S., Daniela KL., and Schmukler, S.L. (2002), The future of Stock Exchanges in Emerging Markets-Evolution and Prospects, *Brookings-Wharton Papers on Financial Services 2002,* The Brookings Institution, Washington, D.C., hal. 167-212.

Claessens, Stijn., Daniela Klingebiel, and Sergio L. Schmukler., (2001), FDI and Stock Market

ISSN: 2089-5917

Development: Complements or Substitutes?, *Working Paper*, Word Bank

Durham, J. B., (2004), Absorptive Capacity and the Effects of Foreign Direct Invesment and Equity Foreign Portfolio Investments on Economic Growth, *European Economic Review*, Vol. 48, hal. 285-306

Ergun, Ugur., dan Nor, Abu Hassan Shaari Mohd., (2009), An Empirical Study on Determinants of External Linkages of Turkish Stock Market Under European Union Accession Conditions, *European Journal of Social Sciences*, Vol. 9, No. 3, Pp. 475-481.

Feldstein (2000), How Beneficial Is Foreign Direct Investment for Developing Countries?, http://www.imf.org/external/pubs/ ft/fandd/2001/06/loungani.htm Garcia, V.F. and Liu, L. (1999), Microeconomic Determinants of Stock Market Development, *Journal of Applied Economics*, Vol. 2. No. 1. Pp. 29-59.

Goldstein, Judith L., Douglas Rivers, and Michael Tomz. 2007. "Institutions in International Relations." *International Organization* 61(1):37-67.

Hausmann, R., dan Arias, F Fendandez., (2000), Foreign Direct Investment: Good Cholesterol? *Working Paper*, American Development Bank.

Sarwedi., (2002), Investasi Asing Langsung di Indonesia dan Faktor yang Mempengaruhinya, *Jurnal Akuntansi & Keuangan* Vol. 4, No. 1, pp. 17 – 35

Levine, Ross dan Sarah Zervos., (1996), Stock Markets, Banks and Economic Growth, *Working Paper*, The World Bank, Policy Research Department, Finance and Private Sector Development Division.

Mahmoud, Ashraf Abdelaal. (2010). Foreign Direct Invesmnet and Local Financial Market Development : A Granger Causality Test Using Panel Data, *Working Paper*, George Washington University

Naceur, S. Ben, Samir Ghasouani, and Mohamed Omran., (2007), The Determinants of Stock Market Development in the Middle-Eastern and North African Region, *Emerald Group Publishing Limited,* Vol. 7, No. 33, pp. 477-489.

Nasser, Omar M. Al., dan Gomez, Xavier Garza,. (2009), Do Well-Functioning Financial Systems Affect the FDI Flows to Latin America?, International Research Journal of Finance and Economics, Issue 29. Hal, 60-75

Pavabutr, Pantisa dan Yan, Hong., (2007), The Impact of Foreign Portfolio Flows on Emerging Market Volatility: Evidence from Thailand, *Australian Journal of Management, Vol. 32, No. 2. pp. 345-368*

Razin, Assaf dan Efraim Sadka., (2000), Unskilled Migration: A Burden or a Boon for the Welfare State, *The Scandinavian Journal of Economics*, Vol. 102, No. 3, pp. 463-479.

Robert D. Gray Jr. (2008), Effect of Macroeconomic Variables on Stock Market Returns for Four Emerging Economies: Brazil, Russia, India, and China, *International Business and Economics Research Journal*.

Shahbaz, M., Nadeem Ahmed and Liaqat Ali, (2008), Stock Market Development and Economic Growth: ARDL Causality in Pakistan, *International Research Journal of Finance And Economics,* Vol. 14. pp. 184-194.

Sierra, Jesus. (2010), International Capital Flows and Bond Risk Premia, *Working Paper*, Financial Markets Department, Bank of Canada, Ontario, Canada.

Singh, A. (1997). Financial Liberalization, Stock Markets, and Economic Development,*The Economic Journal,* Vol. 107, pp. 771-82.

Wang, Jianxin (2007) The Causal Relationship between Foreign Ownership and Stock Volatility in Indonesia, Draft paper. jx.wang@unsw.edu.au

www.bapepam.go.id,
www.bi.go.id,
www.bps.go.id
www.idx.co.
www./dte.gn.apc.org.