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Economics Integration in ASEAN: Corporate Valuation in Emerging Markets, Regionalization and Globalization

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Abstract:

The aim of this paper is to study the impact of regional integration and globalization among ASEAN countries in the onset of ASEAN Economics Community through the conceptual framework that combines the company valuation model and the correlation analysis. Regional integration manifests in the co-movement of corporate values across the market, where each of valuation fundamental becomes increasingly driven by the same regional factors. With the higher degree of regional integrated, the companies' valuation becomes more converge in regional level and more diverge from global level. The extent of transition dynamics of ASEAN markets towards integration is explored with the varied evidence of market correlation across the countries. Results reveal the time-varying nature of the ASEAN integration process that is characterized by diverse transition experience of markets at both the total market and disaggregated industrial sector levels.

Keywords:

Economics Integration, Corporate Valuation, ASEAN

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1.Introduction

As the economies of the world globalize, the flows of international trade in both goods and financial assets have expanded exponentially. Rapid developments of information technology and communication have facilitated the access to a pool of information, knowledge and technology from local to global scale. International markets become more mobile and more competitive especially in emerging countries where a vast of opportunities from growing economies and abundant of natural resources are provided. Many developed countries, multinational companies and investors try to exploit the benefits from market integration in both local and global level. Market liberalization as well as cooperation among countries eventually grows into a crucial part to survive in such a competitive environment. As can be seen, some of developments from the global integration, the flourishing of crossborder agreements as well as the expanding of regional blocs have blurred the lines between developed and emerging markets. With the deepen degree of liberalization, valuation is gaining more important in developing countries – for handling the growing in privatization, joint ventures, mergers and acquisitions, restructuring and portfolio diversifications. Regarding the distinguishing characteristics of emerging markets, valuation is much more difficult in these environments due to inefficient markets and high volatility of macroeconomic factors. High inflation rate, unstable exchange rate and unequally information distributed are general difficulties in developing markets. The uncertainties in emerging market are caused mainly by the global interaction. Globalization brings reorganization at the international, national and sub-national levels, which the consequence of economic globalization is still inconclusive about its overall net effect of costs and benefits (Pologeorgis, 2012).

In this paper, we focused on the impact of regional integration and globalization on the corporate valuation specifically in South-East Asia context. ASEAN has a meaningful growth potential and the abundance of opportunities is going to be a significant market in the near future due to its expanding regional cooperation. After decades of pursuing political stability and regional security, ASEAN countries started to contribute some thoughts on economic collaboration.

The aim of this study is to investigate trends and relationships of corporate values over time determining the impact of regional integration and globalization in the AEC area. Due to the limitation of data, we selected only ASEAN-5 (Thailand, Indonesia, Malaysia, Philippines and Singapore) as our sampling respecting their importance and size of their economies to ASEAN. A sectorial evaluation would generally help us to have a deeper understand on integration effects.

2.Methodology

In order to investigate ASEAN-5 company value relationships, we needed to find an appropriate variable that can be used as a comparable and to apply correlation analysis. The value of company in dollar figures proved to be difficult to perform as a variable to compare or to examine the relationship of the company in the global level. Because the figures have a high bias resulted from many factors e.g. size of the company, type of the company and sector of the company. In these regards, the year-on-year value growth of the companies was applied to capture the relationships in the regional and global level. We calculated growth rates of our sample companies from 2003-2012 when the regional cooperation became more concrete. Consequently, we compared the value growth results with GDP growths in different levels from industry to global by using a correlation analysis approach. The correlation analysis helped us to examine the co-integration and co-movement among the comparable samples. In other words, we exercised growth rate as our medium term to compare and investigate the relationship across the economies. Our assumption was derived from Rajan (2003) who shows that a greater degree of integration implies that the regional economies are more likely to have similarly impacted by common external risks. As a result, the companies' valuation would

become more converge in regional level and more diverge from global level. Chua, Eun, & Lai (2007) also document that growth options are the main drivers of enhancing corporate values. In a previous study, Quang & Konya (2012) provide several of reference studies that supported this view. The study explains that as markets become more integrated, valuation ratios across markets would become more equalized or converged to one another. Bekaert, Harvey, Lundblad, & Siegel (2012) provide the view that economics variables should be convert to one another in integrated market, due to the fact that market integration promotes international risk diversification, enhances efficient of market, stimulates investment flows and thus spurs real economic growth. Islam (1995) describes the concept of convergence by using a classic theory from Solow (1956). Under the paradigm of the neoclassical growth theory, physical capital stock is subject to diminishing marginal returns. Accordingly, developing economies with lower levels of capital stock than developed economies confiscate higher rates of return on their physical capital. Capital is then expected to flow to the developing economies. Moreover, developing economies acquire the discussion of knowledge and technology from the developed ones. Consequently, developing economies tend to grow faster than their developed counterparts initially, with catching up and thereby convergence in income level. The growth rates of developing economies then slow down, and the growth process eventually leads all economies to converge to a unique steady state balanced growth path characterized by the rate of growth of the technological progress in the long run

Besides correlation analysis in the country level, we also examined the relationship of valuation in industry level, the sectorial evaluation generally helped us to have a deeper understand about integration effects. Hardouvelis, Priestley, & Malliaropulos (2003) and Tam & Tam (2012) provide the extent to which aggregate market integration is also driven by integration at industry level. This is because integration at the total market level may come with different degrees of segmentation at the industry level, due to the interaction of various industry-specific risk associated and rates of return. Tam & Tam (2012) suggests that from the theory view point, firms in the same industry should have similar valuation fundamentals at the local market level because they employ same industry specific production technology and operating policies. Furthermore, they also face similar market conditions, so that they are open to similar growth opportunities. Competition in the market should drive similar level of risk and rate of return across firms eventually. On the empirical view point provide by Tam & Tam (2012) finds that different levels of risk associated with different investments can be attributed partly by the different levels of average risk of industries. They also provide an evident that shows firms in the same industry typically experience similar industry-specific average rates of return. Tam & Tam (2012) concludes that industrial sectors may not be integrated to the same degree, due to industry-specific characteristics. Convergence of valuation ratios in some industries are relatively more difficult to be realized than those industries that are less dependent on industry-specific factors. In this paper, we divide our company samples into ten different sectors based on MSCI sectorial groupings.

To test our global integration effect assumption, we exercised correlation analysis on the growth of company value with the country GDP growth in different level. First, we applied in the country level to investigate the trends and relationships among ASEAN countries. Then, we expanded into the regional level; we performed the correlation between the ASEAN company value growth and the regional growth comparable (East Asia and the Pacific, China, Japan). Lastly, we tested with the advanced economies represented as the global economies (The US, European Union). With respect this three different level test, we expected the results will show us the degrees of integration/segmentation in each level which will help us to answer our main question of this study whether the regional or global influence are overpower the ASEAN company value. Furthermore, the individual results will guild us the degree of convergence among the ASEAN member states and the relationship between ASEAN and the broader economics area (ASEAN + Japan and China, East Asia & Pacific). To test sectorial integration effects, we divided our samples into ten main industries. Then, we performed the correlation analysis between industry and the GDP growth same as in country

analysis to find out the impact of industry-specific risks and returns. The result will help us understanding the sectorial relationship within the region and will show a dependency of each industry on the regional and global markets. We also expected to realize the extent and importance of specific industry risk on the ASEAN markets as well.

In order to clarify the movements of market integration, we considered three overlapping time periods. The first time period, named period I, begins from 2004 to 2012 which indicated the general picture about trends and relationship of our study. The remaining two periods, period II and III, are the sub-periods which aim to explain the changes in movement during the ongoing regional integration processes. The period II covered the correlation analysis from 2004 to 2007 which was the early stage that ASEAN members gave a thought on the economic community ideas. The period III begin from 2008 to 2012. This period is where the AEC blueprint was introduced and truly interpreted the plan.

3.Data and Sample Selection

In order to investigate the effect of market integration on ASEAN's company values, it is important to explain the sources and descriptions of the data. Because of their economic influential within the region, five ASEAN economies were selected as examples. These five economies which represented more than 75 percent of intraregional trade and investment are: Indonesia, Malaysia, Philippines, Singapore and Thailand, so called The ASEAN-5. With respect to the World Bank data, the regional representatives in this paper were China, Japan and East Asia & Pacific. Instead of ASEAN, the East Asia & Pacific was selected as regional proxy subject to the difficulties in researching ASEAN information. For global representative, the US and European Union were included as advanced economies that represented the global influences in this study. Our database covered data of ASEAN companies in ten major industries based on the industry classification benchmark created by MSCI which included telecom services, financials, industrials, consumer discretionary, consumer staples, utilities, energy, materials, health care and information technology. This level of classification clearly showed the differences among industries and avoided excessive details obscuring the overall picture of our analysis. We referred to MSCI indices for two important purposes. Firstly, MSCI provided us a standard industry classification which was applied in this study. Secondly, we also selected our ASEAN company samples according to MSCI country/regional indices. MSCI is an investment research firm that provides indices, portfolio risk and performance analytics and governance tools to institutional investors and hedge funds. It also publishes indices that are widely available to the investing public. This index is widely used as a benchmark for the total international stock market. According to MSCI indices and company market values, two leading companies in each sector were selected as samples for each country. The time series with data available from 2003 to 2012 were included in our data set. The resulting samples consisted of 92 ASEAN companies that spanned the period 2003 through 2012. Regarding the growth variables, WTO website was the main source of our GDP Growth data.

The data used in modeling the discounted cash flows were sourced from Damodaran's website (2013) which provides a number of data sets that very useful in corporate finance and valuation collecting data from a variety of sources (Capital IQ, Bloomberg). This website supported cash flow estimation, capital structure and discount rate estimation data for our paper. All of the data in this paper was in millions of US dollars. The complexity of the model and a large scale of data were not allowed us to provide our detailed discount cash flow model and the corporate values in dollars here. The average numbers were calculated across the five economies and the ten industrial sectors. To see the overall picture, we focused on the total market level instead of examining valuation at the individual firm level. We computed the country-level corporate value growth by using the average growth of all samples which excluding its highest and lowest values for statistics purposes. To conserve space, detailed data for each individual company are not included here, but are available upon request.

4. Empirical Results and Discussion

As discussed, we made a determination to use the growth in valuation as our representatives instead of the discount cash flow of the firms to facilitate the comparison of corporate values across countries. Moreover, it would be more appropriate to compare corporate values growth with the regional and global GDP growth in order to investigate movement and dependency of these two variables. This section divided into two main parts. Firstly, we began with examining movement of corporate value growth in regional and global level though correlation analysis. Then, sectorial analysis continued in the second part of this section.

4.1 Regional and Global correlation analysis

Table 1 presents the GDP growth of our selected representatives which is the main variables to be used in our regression analysis. A few things are noteworthy from this table, the annual rate of economic growth in real terms ranged from -5.5 to 14.8 with the cross-country sample mean of 4.5. Newly emerging country like China had remarkably economic growth, it had double-digit growth from 2004 to 2007 which covered our sample period. As a result, the correlation with China was distorted by this exceptional growth to a certain extent. Almost every country had a fairly stable growth rate during our study period; excluding the 2009 crisis. Every country dealt with a sharp drop in their growth rate; furthermore some of the countries particularly in advanced economies experienced either negative or near-zero growth. This indicated the effects of crisis were more serious in developed countries than in emerging countries. As for the impact on ASEAN members, Singapore, Malaysia and Thailand were also affected substantially by this crisis due to their economies have significantly depended on international capital flows.

 Table 1

 GDP growth by country/region and year (percent), 2004-2012

| GDF growth by country/region and year (percent), 2004-2012 | | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|--|
| Country Name | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | |
| East Asia & Pacific (all income levels) | 4.9 | 4.4 | 5.2 | 6.1 | 3.0 | 0.4 | 6.9 | 3.9 | 4.3 | |
| China | 10.1 | 11.3 | 12.7 | 14.2 | 9.6 | 9.2 | 10.4 | 9.3 | 7.8 | |
| Japan | 2.4 | 1.3 | 1.7 | 2.2 | -1.0 | -5.5 | 4.7 | -0.6 | 1.9 | |
| Singapore | 9.2 | 7.4 | 8.6 | 9.0 | 1.7 | -0.8 | 14.8 | 5.2 | 1.3 | |
| Malaysia | 6.8 | 5.3 | 5.6 | 6.3 | 4.8 | -1.5 | 7.2 | 5.1 | 5.6 | |
| Philippines | 6.7 | 4.8 | 5.2 | 6.6 | 4.2 | 1.1 | 7.6 | 3.9 | 6.6 | |
| Indonesia | 5.0 | 5.7 | 5.5 | 6.3 | 6.0 | 4.6 | 6.2 | 6.5 | 6.2 | |
| Thailand | 6.3 | 4.6 | 5.1 | 5.0 | 2.5 | -2.3 | 7.8 | 0.1 | 6.4 | |
| European Union | 2.6 | 2.1 | 3.3 | 3.2 | 0.3 | -4.3 | 2.1 | 1.6 | -0.3 | |
| United States | 3.5 | 3.1 | 2.7 | 1.9 | -0.4 | -3.1 | 2.4 | 1.8 | 2.2 | |

Note: Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2005 U.S. dollars. GDP is the sum of gross value Source: World Development Indicators

We performed a series of correlation analysis to answer the following question: What effects has more impact on the country company's value, regional or global? Our empirical results were reported in tables 2 and 3 for the cross-country analysis. Table 2 shows the total market integration through the correlation analysis between the total ASEAN-5 corporate value growths with the GDP growths. We present the individual market results in

table 3 which studies the relationship between corporate values growths in each market with the GDP growths.

Table 2
Correlations of the corporate value growths and GDP growths, total market

| Country | Period I | Period II | Period III |
|---|----------|-----------|------------|
| East Asia & Pacific (all income levels) | | | |
| | 0.58 | 0.51 | 0.77 |
| China | 0.02 | -0.03 | 0.53 |
| Japan | 0.55 | 0.97 | 0.69 |
| Singapore | 0.72 | 0.84 | 0.93 |
| Malaysia | 0.35 | 0.98 | 0.46 |
| Philippines | 0.50 | 0.99 | 0.63 |
| Indonesia | 0.27 | -0.03 | 0.28 |
| Thailand | 0.44 | 0.75 | 0.58 |
| European Union | 0.22 | 0.20 | 0.49 |
| United States | 0.29 | -0.07 | 0.53 |

Note: Period I 2004-2012, Period II 2004-2007, Period III 2008-2012

Source: Own data

Firstly, we examined the correlation results in the period I as a whole to see the big picture of trends and relationships after that we moved on to investigate the effect on individual country. As shown in table 2, a varied range of coefficient correlation was provided from 0.02 for China to 0.72 for Singapore. In general, a positive relationship between the average corporation value growths and country's GDP growths were evidently found. As we expected, the empirical test statistics confirmed a significant extent of integration within the regional level rather than in the global level, but a surprising lack of integration with the China's economy. The positive correlation statistics for the East Asia & Pacific, Philippines Singapore and Japan were well above 50 percent. The statistics indicate that Japan still has a lot of influence on ASEAN economies due to a strong positive correlation number. This is consistent with the fact that ASEAN depends on a lot of financial inflows from Japanese investors especially on the automotive and electronics sectors. Among ASEAN members, Singapore showed the highest degree of correlation, on the other hand Indonesia was the least integrated country. Table 3 also contained the test result in two separated sub-periods, we examined the sub-period correlation in order to explore the movement of the integration within the region. There were strong positive changes of correlation coefficients from period II to period III for the majority of the group of samples, factored out Japan, Malaysia, Philippines and Thailand which showed decreasing numbers in the third period. These indicate that a relatively high degree of integration becomes more obvious over time both in regional and global level. There was another fact that coincided with the results from the period I, Singapore showed the highest degree of correlation and the least supportive level of correlation were found in Indonesia in both periods. This may be caused by great volume of trade and investment flows from Singapore to its neighbor countries. The results for Indonesia were less likely to what we expected. Despite its size and importance of its economy to the region, the test statistics showed the contradiction results. However, the results were consistent with study from Suryanta (2010) who explains the lack of integration between Indonesia and the region in financial dimension. Interestingly, the global correlation statistics in period III were higher than in period II which indicates an influence from globalization is expanding in ASEAN markets, however, the regional influence still prevails over the global effect to a certain degree in the two sub-periods.

 Table 3

 Correlations of the corporate value growths and GDP growths, individual market

| | Sogapore | | | Philipines | | | Mataysia | | | Indonesia | | | Durked. | | |
|--|----------|-----------|------------|------------|-----------|------------|-------------------------|-----------|------------|-----------|-----------|------------|----------|------------|------------|
| | Period I | Period II | Period III | Period I | Preied II | Ferial III | Period I | Period II | Period III | Period I | Period II | Period III | Period I | Period II. | Period III |
| Kart kela A Pacific (all I arcme | 4020 | 422 | 6.22 | 4.67 | 997 | 0.75 | 0.80 | 0.74 | 6.80 | 0.50 | -884 | 639 | 0.37 | -0.24 | 0.3 |
| Ckies | 6.76 | | 435 | | 0.94 | | 0.40 | 0.56 | | 0.09 | | 6.78 | 0.00 | -0.41 | -0.25 |
| Japan | | | | | | | Annual Property Control | _ | | | | | | | |
| and the later of | -0.09 | 8.55 | 9.25 | | | | | 0.51 | | 0.43 | 4.36 | | 6.37 | A | h |
| Singapore | -0.35 | 0.54 | 4.14 | 6.73 | 0.47 | 0,91 | 0.73 | 0.37 | 6.77 | 6,67 | 4.52 | 4.77 | 6.33 | -0.17 | 0.30 |
| Malayria | 0.00 | 9,56 | 0.36 | 6.34 | 0.17 | 0.43 | 0.59 | 0.4 | 9.54 | 9.25 | 4.0 | 4,31 | 0.00 | 0.36 | 0.00 |
| Phil light serv | -0.03 | 1,76 | 8.25 | 0.57 | 6.43 | 0.62 | 0.71 | 0.65 | 8.79 | 0.34 | 421 | 4.39 | 0.39 | 0,30 | 0.38 |
| laderes. | 0.30 | -0.98 | 0.75 | 8.30 | 0.82 | 0.34 | 0.34 | 0.77 | 4.36 | 621 | 4.51 | 9,27 | -0.11 | 0.01 | -0.10 |
| thetend . | -0.13 | 191 | 0.14 | 0.46 | 425 | 0.58 | | -0.04 | 6.79 | 0.34 | 6.17 | 627 | 1642 | 0.19 | 0.40 |
| Karapus Kalon | 43 | sin | 0.59 | 9.25 | 6.77 | 0.44 | 0.54 | 0.21 | 0.47 | 0.29 | -1/8 | 640 | 0.00 | -0.75 | -0.12 |
| Cinétril States | -0.07 | 2.68 | 0.54 | 428 | 4.9 | 0.90 | 0.39 | -0.66 | 2.66 | 0,36 | 4.00 | 649 | 630 | (3) | 0.27 |

Note: Period I 2004-2012, Period II 2004-2007, Period III 2008-2012

Source: Own Data

We next turn to table 3. Table 3 contained correlation results for each individual country. Some interesting patterns derived from the correlation test results are as follows. There were certain degrees of correlations between company value growths with their own country GDP growths except for the case of Singapore which showed a negative relationship. Malaysia had the highest number of correlations followed by Philippines, Thailand and Indonesia respectively. There were strong evidences supported a stronger regional influence over a global impact on ASEAN for three countries, namely Philippines, Indonesia and Malaysia. As for Singapore, global influence remained slightly stronger than regional. Singapore's structural has highly depended on foreign economies may be the reason behind these results. Thailand's results were inconclusive due to the empirical presented very low degrees of correlation in both levels. Another notable pattern is the relationship between China and ASEAN. Results indicated that China has a limited impact on the region, moreover, negative correlation was found in the case of Singapore. Only Malaysia had a significant positive correlation with China. Even if, we considered particularly in the sub-period results, the relationship between China and ASEAN still very limited. This can be explained by a recent intention to upgrade ASEAN-China ties after a period of growing tensions in the Asia Pacific. Consistent to the overall results, the empirical results in table 3 also presented a greater degree of correlation over these two periods. In other words, markets start off to have low correlation in the first period, but the numbers are higher in the second period. These increasing trends were found both in regional and global level.

With respect to individual investigation, we started with Singapore data. Unlike the other countries, most of Singapore statistics showed a negative relationship. Indonesia and Malaysia were only two countries that presented positive correlations with Singapore, but the degrees of relationship were insignificant. Similar to the period I results, the sub-period results also confirmed the stronger global impact on Singapore's corporate values. As for Philippines, there was a clear positive relationship between Philippines and ASEAN in all periods. The highest numbers were found in Singapore and East Asia & Pacific. As well as Philippines, Malaysia also showed a stronger relationship with the region more than with the global representatives, the US and EU. The positive correlations with East Asia & Pacific, Japan, Philippines and Singapore were well above 70 percent. The lowest number was found in Indonesia. In fact, there was a limited degree of integration between Malaysia and the others during the period II; however, Malaysia showed outstanding degree of correlations with the others in 2008-2012 periods. Moving on to Indonesia's case, the relationship between Indonesia and the other samplers were not quite clear. The results were insignificant numbers, only for East Asia & Pacific and Singapore that showed small degrees of positive correlations. The correlation analysis suggested that the company growth in Indonesia were largely segmented from the GDP growth of China. To deepen understanding, we looked into the subperiod studies. The sub-period results showed us a big difference between the two periods. On the period II, 2004-2007, the results of Indonesia presented negative relationships in most of the countries except for Thailand and The US that carried on the positive results. On the other hand, the correlations turned out to be positive for every country which the most correlated region was Singapore followed by East Asia & Pacific. Our last subject is Thailand which the results indicated a very low number in every region which ranged from -0.11 for Indonesia to 0.4 for Philippines. In the same way, the statistics derived from correlation analysis in subperiods showed a limited correlation between Thailand and the others regions in both periods. The movements in Thailand's sub-periods results were much like in Indonesia's changes, but with a smaller degree.

In summary, according to the concept of regionalization and globalization that effect on ASEAN countries, the degrees of regional impact that stronger than global impact were found in Philippines, Indonesia and particularly in Malaysia which largely driven by the period II correlation statistics. These trends supported the view that the regional economy is more likely to have similarly impacted by common risk when they become more integrated in regional level. As a result, company values become more converge in regional level and more diverge from global level. In contrast, Singapore appeared to be influenced by global factors more than regional due to the fact that Singapore's economy depends a lot on international trade and international financial services. The result for Thailand was still inconclusive whether regional or global has more impact on Thailand's company values. As for Japan, Japanese economy still contained a significant impact on the ASEAN company values. It currently becomes the third rank in FDI net inflow share to ASEAN followed ASEAN and EU. Turning to China, the statistic results presented that Chinese market has a relatively low influence on ASEAN economies which is contradictory to what we expected. This may be attributed to the competitive environment between these two regions over the past decade; however, the future stronger bonds between China and ASEAN will probably strengthen the integration degree between the regions. Lastly, the results indicated a significant pattern that the correlation data had a limited degree of relationship in the period II, but there were clearly stronger tendencies of the correlation in every country in the period III. In other words, the movements of corporate value growth were more related to the global and region growth in the period III. This supports the fact that AEC will become more competitive region in global market subject to greater degrees of integration in both global and regional level.

Some literature supports the increase in regional potential; for example, Chua, Eun, & Lai (2007), Quang & Konya (2012), United States International Trade Commission (2010). These studies guide us to explain our empirical results. With a higher degree of market integration, each of the valuation fundamentals across markets becomes increasingly driven by the same global factors, and there is a tendency for the convergence of corporate value across markets. But, the different fundamentals converge at varying speeds due to the diverse transition dynamics of different markets, giving rise to varied evidences for market correlation across the countries. Regardless the supportive in regional prevailing hypothesis, some other literature provides a different perspective about the influences of global economies towards ASEAN. The previous studies point out the substantial asymmetries in sizes, levels and stages of economic development of the ASEAN economies make it extremely difficult to expect the successful ASEAN economic community as done in Europe. They also provide the empirical studies that show a number of supportive evidences on the dominated global impact on ASEAN markets; for instance, Azman-Saini, Azali, Habibullah, & Matthews (2002), Rajan (2003), Suryanta (2010), and Singh (2009).

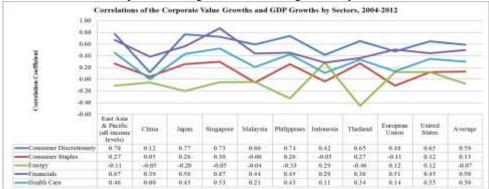
4.2 Industrialization Analysis

To expand our knowledge about the effect of market integration, industry specific analysis is an importance aspect to study. In the sectorial tests, we decided not to test on the sub-period levels due to the data limitation difficulties. In the best case, there were 10 samples in one industry to perform the correlation test from 2004-2012. Some industries had even less

than 10 samples with shorten the time series, the test results may not be reliable. Before we performed the analysis, we expected the top priority sectors to show higher degrees of correlation with the regional samples than with the global one. These top priority sectors have been subsidized and supported by the ASEAN government to accelerate the liberalization of their trade and investment flows within the region. According to the industry classification benchmark, our ten industries were different from ASEAN top priority sectors.

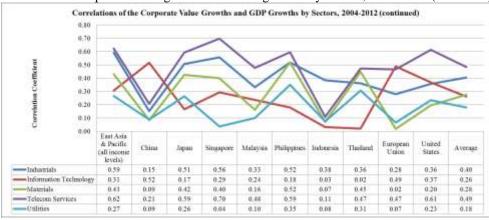
Figure 1 and 2 contained the line graph of the correlation results and the table of test results by industrial sector. We divided our data into 2 separated figures for avoiding ambiguity and confusion. The correlation statistics of sectorial analysis ranged from 0.87 for Singapore with financial sector to -0.46 for Thailand with energy sector, with the sample mean of 0.31. The highest average correlation coefficient was in consumer discretionary sector with average of 0.59, and the least correlation was in energy sector with -0.07. With regards to the average numbers of correlation, we separated the relationship into 3 main groups. Firstly, the relatively high positive correlation was for 4 industries, specifically consumer discretionary, financials, industrials, and telecom services. Secondly, there were a group of relatively low positive correlation to the samples for five industrial sectors of consumer staples, information technology, materials, utilities, and health care. Energy was the only one that showed a negative correlation with our samples.

Figure 1
Correlation of corporate value growths and GDP growths by sectors, 2004-2012



Source: Own Data

Figure 2
Correlation of corporate value growths and GDP growths by sectors, 2004-2012 (continued)



Source: Own data

Within ASEAN member states, Singapore had the most impact on industrial level according to the test results, especially for the consumer discretionary, financials and telecom services which the results were more than 70 percent. On the contrary, Indonesia was the lowest influence on the industrial scale, only in industrial and consumer discretionary sectors that the coefficients were approximately 40 percent. Interestingly, the results were consistent with the country analysis case. Another similar pattern was that China's impact on the ASEAN's industrial quiet limited, information technology and financial were particular sectors that ASEAN businesses had strong supportive evidences of correlation with China.

With respect to the regionalization effect, influences from regional scale were clearly found in Industrial and Materials sectors. The relationship with regional samples was roughly 50 percent compare to the relationship with global variables which showed only 20 percent. Energy was once again the individual sector that depended more on global economies which showed positive correlation with only Indonesia, EU and the US of all samples. The result in financials, information technology and telecom services sectors indicated that the global and regional effect were equally importance. For financials, Singapore presented the highest degree of correlation as expected due to their competitive financial industry. Moreover, global representatives also had great degrees of correlation with financial sector compared to the other industrial groups. This may be attributed by a high dependence of ASEAN's financial industry on international flows from the developed countries. For information technology, there were evidences for relatively high positive correlation in China along with The US and EU. The remaining sectors presented ambiguous relationships but tended to depend more on regional samples. As for consumer discretionary, there were highly correlations with almost all the samples especially for Japan, East Asia, Philippines and Singapore; however, the relationship with China was very limited according to the result. Turning to consumer staple sector, there were small degrees of correlation for Thailand, Singapore and East Asia & Pacific. The other regions presented insignificant statistics results with the consumer staples sector. The same patterns occurred to health care and utilities sectors which there were a small number of countries that displayed limited degrees of integration with these two sectors, the rest showed insignificant test results. For health care, Singapore and East Asia & Pacific dominated in this sector. For Utilities sector, the results showed approximately 30 percent correlated with Thailand and Philippines. The main reason of these varied results in the observations may be explained by the various industry-specific factors. For instance, the results supported the increasing trends of integration in the top priority sectors. Three industrial sectors, utilities, energy and telecom services those are not included in top priority sectors showed relatively low degrees of integration. Sectors that depend a lot on domestic markets which are consumer staples, health care and utilities sectors, showed limited degrees of correlation for the international level. The energy sector is further characterized by the fact that most of ASEAN members were net importers for petroleum products except for Indonesia. As a result, the correlation of energy sector was more related to global economies rather than regional. Information technology sector also leaned slightly toward global representatives due to the fact that ASEAN is the leading distributor and supplier in electronic parts to the world

To summarize, according to the sectorial correlation analysis, the varied results across the industries may be attributed to the interplay of various industry-specific risk associated and rates of return. The different level of average risk of industries may partly explain the different in corporate values across countries. This is consistent with Tam & Tam (2012) study. They conclude that industrial sectors may not be integrated to the same degree due to the industry-specific characteristics. Overall, the regional impacts appeared to be slightly prevailing over the global power particularly in materials and industrials sectors. Financials, information technology and telecom services showed no significant relationship with both global and regional market. The individual sector that depended more on global level was energy sector. Among ASEAN member states, Singapore showed the highest

correlated numbers in the industrial analysis. The least influence economies are Indonesian which had relatively low statistic results in most of the samples. The literature from Suryanta (2010) supports this empirical result, he explains the lack of integration between Indonesia and the ASEAN region. Consistent with the country analysis, China also presented a limited influence on the sectorial analysis. Except for Information technology that contained a significant degree of integration with China, this may be because of the powerful cooperation in electronic production supply chain between China and ASEAN. In brief, the sectorial presented similar results to the country analysis, the empirical results indicated that the regional influences still slightly dominated the globalization effects.

5.Conclusion

The influence of regional and global on market integration is an important issue for investors. On one hand, it implies the potential benefits of greater cross-border access and risk sharing across borders. On the other hand, it is an important element in assessing the potential costs from financial contagion. ASEAN with the large consumer based and meaningful expected growth will become more interesting competitor in the global level due to the recently AEC collaboration. The trend of intra-activity across the borders tends to be increasing after the implementation of the AEC blueprint. Understanding the degrees and dynamics of market integration in ASEAN is essential particularly in the corporate level. Studying the private sector, which appears to be more flexible and more innovative to the economics transitions than the government sector, will provide future movements on business. It is very important and useful for investors who are interested in this high potential region to gain knowledge of factors and influences behind the company value in ASEAN.

This paper focused on the impact of regional integration and globalization by investigating the crucial issue of the corporate valuation specifically in South-East Asia context amidst the ongoing ASEAN economics integration process. As a whole, regionalization effects prevailed in all time periods to a great degree for Philippines, Indonesia and especially Malaysia. While, Singapore's economy appeared to be depended on global markets more than regional. For Thailand, the test results were still ambiguous whether regional or global has more impact on Thailand's company values. Some interesting relation can be deduced from our study. At the aggregate level, Japan's economy showed a considerable impact on the ASEAN company values. On the other hand, China's correlation results presented a relatively low co-movement and co-integrated with ASEAN companies. The asymmetric extent of integration among markets may be caused by a specific characteristic of each country for example; local risk, degree of openness, potential growth, and the relationship among the economies. Lastly, the results indicated development patterns from the time-varying investigation that the correlation data had a limited degree of relationship during 2004-2007, but positive trends of the correlation for all country were apparently found in 2008-2012. In other word, the findings of this paper suggest that emerging ASEAN markets were increasingly integrated both regionally and globally during the 2004-2012 period. This supported the fact that the integration movements are going towards the end-goal of the AEC 2015 which is the realization of a single market and production base.

At the industries level for all markets, the extent of market correlation also varied in different regions and different time-periods. In general, the materials and industrials sectors were the most correlated to the regional representatives. In contrast, the single sector that depended more on global economies was energy sector. No significant relationship was found in financials, information technology and telecom services sectors. The rest of the sectorial samples slightly leaned towards regional markets. It is interesting to find that Singapore among ASEAN member states showed the highest correlated with industrial analysis based on the test results especially for the consumer discretionary, financials and telecom services. The least influenced economy was Indonesia which presented relatively low statistic results in most of the samples. Similarly to the country scenario, China also presented a limited degree

of correlation to the ASEAN companies in the sectorial analysis, only in the information technology and financial sectors displayed strong supportive evidences of integration with China. These observation based on the sectorial correlation analysis may be attributed to the interplay of different industry-specific risk associated and rates of return.

This study covered the time-varying investigation which provided a better understanding about integration/segmentation of region than the static assessments. As well as across country dimension, this study also focused on the sectorial analysis to cover more ground on the integration effect issues. Based on several dimension in our analysis, regional influence were likely to prevail over the globalization impact on ASEAN's companies during this study period. Yet, our study concentrated on the effect of global integration in the corporate valuation view. To understand the overall effect of integration in ASEAN, our literature reviews provided some contradictory and supportive evidences about global influences in different dimensions. On the whole, the effect of global integration is still ambiguous by balancing these two contrary views. In fact, all of studies point out that the regional integration in ASEAN are not the short term process, AEC should be a much longer-term goal which are required both time and effort from every stakeholders to make it sustain and successful.

In conclusion, the ASEAN economics integration process is found to be timevarying in nature, as some of member states are still undergoing substantial development in their market to achieve the same ultimate goal of AEC. On an overall market level, the results indicated that the various fundamentals and the diverse transition dynamics of each country are the main factors causing the different degree of integration. On the whole, with the onset of the ASEAN integration process, we provided evidence that ASEAN company values are becoming more integrated with the regional fundamentals under our unified valuation and correlation conceptual framework. Yet, markets are still far from ultimate full integration, as the regional integration process is characterized by various transition dynamics across markets and industries. In addition, the strong influences of globalization effect on every local economies including ASEAN which sometimes distort ASEAN members from realizing of the same end-goal. There are many challenges towards ASEAN integration which should be complemented by collective efforts from government/regulators as well as the private sector. To achieve the AEC ultimate goals as a single market, ASEAN members will certainly encounter trade-offs in short-term. For the longer-term period, integration will result in a bigger and more diversified market with a pool of investors.

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