

The Cross Section of Expected Stock Return in Ho Chi Minh Stock Exchange Case in Vietnam

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Abstract

This paper investigates the cross-sectional relationship between stock returns and firm-specific characteristics in the HoChiMinh Stock Exchange from January 2007 to December 2011. Firstly, we found that beta have flat effect to the expected of stock return even it is only explanatory variable. Secondly, we found the different results with the other market. Book to market ratio and earning per price have the most significant effects in stock returns in whole period. In the up-quarter market, except firm size, the all of variables are significant with expected stock returns but in the down quarter they are insignificant.

Key words: Cross section, firm characteristics, expected stock returns,
HoChiMinh stock exchange.

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1. Introduction

A large of previous studies mentioned about the firm's characteristics related to stock returns. Stock returns are positively related to variables such as the earnings-to-price ratio , the cash flow-to-price ratio, the book-to-market equity ratio and negatively related to size and sales growth (Basu, 1977; Banz, 1981; Rosenberg et al., 1985; Lakonishok et al., 1994). Yakov Amihud, (2002) found out stock returns were negatively related over time to contemporaneous unexpected illiquidity. Those paper provided the overview of the firm characteristics which related to the expected of stock returns. Daniel and Titman (1997) showed that firm characteristics are more important than factor loadings in explaining the crossection of expected stock returns. In contrast, Davis et al. (2000) mentioned that firm characteristics such as size and B/M ratios are proxies of factor loadings (betas) on risk factors. But in the Vietnamese market, our paper is the first one investigates about the relationship between firm characteristics and stock returns.

In a few years, Vietnam's economy has changed significantly, GDP growth up over 7% annually, ranks second in Asia (after China). GDP per capita was about 2000 USD in the year 2011. This achievement can be explained by the efforts of the Government of Vietnam. They have demonstrated the commitment to economic liberalization and international integration. The government has implemented the organizational reforms, modernized Vietnam's economy, and produced industrial goods more competitive for exporting. The Vietnam joined the ASEAN Free Trade Area (AFTA) and signed into a Bilateral Trade Agreement with United States in December 2001. Besides this, Vietnam has made some changes to the legal and regulatory environment pertaining to Foreign Direct Investment (FDI). It went up from 1.67 billion US dollar in the year 1999 up to 64.01 billion US dollar in the year 2009.

As the result of economic expansion, the demands for larger capital in all of industries are increasing and becoming more necessary. The capital investment or consumption purposes, the lender wants to lend for the profitability. At first, they try to meet each other directly based on the acquaintance. However, when the capital supply and demand continues to growth up sharply and the form of loans, direct loans based on known relationships do not enough they need to have a market for the supply and demand come together- It's the financial market. Through the financial markets, many funds mobilized in consumption, investment for economic development. Financial markets consist of money market and capital markets, where money markets include purchasing, sailing, exchanging the short-term financial instruments less than one year; capital markets include buying and selling, exchanging the

medium and long-term financial tool.

The expansion of the banking system, stock market established, the fund was launched are the results of this process. Stock market tools can create high liquidity, can accumulate, concentrate and distribute funds in accordance to the requirements of economic development. Stock market generated an effective competition on financial markets, which forced the commercial banks and financial institutions to pay attention to their own operations and reduce costs incurred. Stock market became a charming capital raising channel for many enterprises in Vietnam. In macro-economic research, Paresh and Seema (2010) investigated the impact of oil price to stock price. Hoang Quan Vuong, Andre Farber and Van Nam Nguyen (2006) mentioned about the Policy Impacts on Vietnam Stock Market. Furthermore, Vo Xuan Vinh (2010) researched about foreign ownership in Vietnam stock market. The new potential market can be the destination for all of foreign investor in the world.

However, there were much of difficulties in seeking the data and information in Vietnam. The asymmetric information became the big problem for all of investors and researchers. Without some papers mention about the macroeconomic of Vietnam, we didn't have much of paper investigate about the stock market, firm characteristics and expected stock returns. Numeral of paper investigated about the firms' characteristic effect to average stock returns such as (Basu, 1977; Banz, 1981; Rosenberg et al., 1985; Lakonishok et al., 1994), Fama and French (1992). Although they provided the different results for many markets, but we can conclude that firm characteristics have the impact on the expected stock returns.

Asia is going to be the most attractive in the world, but the research about this market is rare except Japan, Korea, and Taiwan. This paper is the first studying mention about the relationships between expected returns and firm specific characteristics in Hochiminh Stock Exchange. By collecting the cross-sectional data and firm characteristics from January 2007 to December 2011, this study tries to use the multivariate cross-sectional regressions to determine the relationship between firm characteristics and expected stock returns. We also investigate the differences of beta and firm characteristic when the world financial crisis happened. In this study, the firm characteristics are: book to market value, firm size, earning per price, beta, and liquidity and investing in real estate.

2. Literature Reviews

2.1 Cross- section of Expected Stock Returns.

There are numerous studies has mentioned about the cross-section of expected stock returns. Wang and Iorio (2006) researched the Chinese A-share market. . Their results indicate that beta lacks explanatory power even when its effect is examined alone in the regression analysis. They also find that size has the most significant effect in capturing variations in stock returns over the whole period. Moreover, while previous studies have concluded that the A-share market is driven by market rumor and individual investors' sentiment, this analysis suggests that the book-to-market ratio is significantly priced. Finally, the use of beta as a measure of systematic risk in China remains unsupported when the beta effect is re-examined in up-markets and down-markets respectively. Fama and French (1992) used all non financial firms in US during the 1963-1989 periods to explain the cross-section of average stock returns. Many papers have mention about the relation-ship of stock returns, firm characteristic and market risk in many different countries. Fama and Macbeth (1973) found a positive relationship between beta and average returns in the U.S. market. In recent times, several studies have renewed the interest underlying the CAPM. We can find the paper of Fama, and French (1992) showed that the three factors that explain 95% of the variability of stock market returns are beta, firm size and value (measured by the book-to market ratio) Their empirical result failed to document the relationship between beta and stock returns in the US market. In recent year, Findings of Chan and Lakonishok (1993), Jagannathan and Wang (1996), Kothari et al. (1995) and Kim (1995) suggested some support of a positive relationship between return and beta. Pettengill et al. (1995) find a positive relationship between beta and stock returns during up market periods and a negative relationship during down market periods.

In the 20th century, emerging countries become the driver of the global growth. From late 1997, Asian market attracted a lot foreign investors who seeking the long-term potential assets. The Gross Domestic Product (GDP) of developing economies is always about two numbers in recent years. Consider also that emerging stock markets rose up from least 4% to 12.5% of the capitalization of the world's equity markets over the past 10 years. Many academic papers that researched about the emerging financial market displayed this motivation. Bhoocha-oom and Stansell (1990) found a great degree of market integration between the US and two Asian NIC markets. Chui and Wei (1998) find a strong size effect in four Pacific-Basic emerging markets (Hong Kong, Malaysia, Korea and Thailand). Reena,

Carla and Ricardo (1999) studied about the volatility in emerging stock markets.

2.2 HoChiMinh Stock Exchange and Accounting System of Vietnam.

Securities and stock market activity areas are very new in Vietnam, even it has been preparing from the early 90s. However, since the State Securities, Commission was established by decree 75/ND-CP (12/1996), the information relating to this area really be considered and implemented in the direct way. In the year 2000, Vietnam launched the Ho Chi Minh Securities Trading Center (HOSE). (The Hanoi Stock Exchange, was launched in 2005 and trades mostly small-cap and OTC stocks.). In the beginning of 2006 has marked as the break point for the Vietnamese stock market which had completely new look with up-trend trading activity in the three markets: the Department of transaction Ho Chi Minh City, Hanoi trading Center and OTC markets. In 2011, HOSE has research and development VN30 index that included 30 leading stock market capitalizations, representing approximately 0% of total market capitalization. About this market, Khaled Hussainey, Le Khanh Ngoc, (2009) studied about the impact of macroeconomic indicators on Vietnamese stock prices. They found that there are statistically significant associations among the domestic production sector, money markets, and stock prices in Viet Nam. The other result is the US macroeconomic fundamentals significantly affect Vietnamese stock prices. From 2000 to now, we can be divided the development of Vietnam's stock exchange into three main stages:

The first stage from 2000 to 2005: Young market with a lot of difficulties. The launching of Vietnam's stock market was marked by the commissioning Stock Exchange Center Ho Chi Minh City on 20/07/2000 and made its first session on 28/07 /2000. At that time point, there were only two listed stocks (REE and SAM) with a capital, about 270 billion VND and some of the government bonds are traded. On 03/08/2005 Center Hanoi Stock Exchange was officially put into operation. The hot developing period started from 2005 when the share holding of foreign investors increased from 30% to 49% (except banking). In the first five years, the market does not attract the attention of domestic and foreign investors. Companies listed on the market at this time most of them are not well-known companies, small-capitalization value. By the end of 2005, the total value of Vietnam's stock market reached 40,000 billion VND, accounting for 0.69% of total national income (GDP).

The second stage, from 2006 to 2007, the market is bloom. In 2006, the VN-Index at the Ho Chi Minh City increased 144%, in Hanoi HASTC increased over 152.4% comparing with 2005. The market capitalization increased more than 15 times in a year. At the end of the

year, 2006, Ho Chi Minh City Stock Exchange had the participation of 106 stocks, two fund certificates and 367 bonds with a total par value listed at over \$ 72 trillion VND. At the Hanoi Stock Exchange, the stock number had up to 87 stocks and 91 bonds with a number of registered capitalizations about 29 trillion VND. The third stage from 2008 up to now. The bubble is broken.

The Last stage, in the beginning of 2008, the government promoted the privatization of State enterprises, especially large corporation, effective business and decreased shares holding in state own enterprises. The tax incentives and loans also encouraged private companies interested in participated in the privatization. These activities contributed to the market expansion but the impact of macroeconomic and world financial crisis began the decline of Vietnam's stock markets at the end of 2008. VN-index has lost nearly 60% of its value and become one of the best markets plunged around the world in the first half of 2008. Since then, it's rarely crossed 500, with mini-recoveries inevitably followed by lengthy slumps. In 2011, Vietnam was the third-worst-performing market in the world, losing 27%. Vietnamese stock market has the big decreasing not only in the price but also in the market liquidity.

The promulgation and introduced Vietnam Accounting Systems (VAS) have an important contribution in the improvement of the legal framework for accounting, to enhance the transparency of financial information, to maintain the confidence of foreign investors in Vietnam. David C Yang., Anh Thuc Nguyen (2003) comparing the enterprise accounting system of Vietnam and United States. They found a lot of differences between VAS and US GAAP. In recent years, the International Federation of Accountants (IFAC) issued the new International Accounting System (IAS) and International Financial Report Standards (IFRS). Furthermore, the market economy and the opening of the stock market are the motivation help Vietnam's transition gradually turning stability and phase of development. The laws of the market economy governed economic activities. Therefore, Vietnam has to update and issue new VAS line with international standards and meet the demands of the market economy of Vietnam.

On 20/3/2006, the Ministry of Finance issued the new decree No. 15/2006 / QD-BTC issued accounting system applies to business enterprises in all areas of operation, all economic sectors in Vietnam. On 31/12/2009, the Ministry of Finance issued Circular 244/2009/TT-BTC to guide modifications and supplement to the corporate accounting. This is a very important change to the Accounting and Financial Reporting System in Vietnam. The changes in the accounting system to help Vietnam improve the reliability of the information

economy - finance, clarify the business environment and financial businesses, creating the confidence for investors.

3. Methodology

3.1 Study Collection

This study uses data for all non-financial firms listed on the HoChiMinh Stock Exchange (HSE). In the beginning, our sample size includes 89 firms listed in the HoChiMinh Stock Exchange from January 2007. However, due to some companies lost the quarterly data, so we try to reject some of them out of sample size. Finally, our sample only has financial data of 72 companies. In this study we use the cross-sectional data in 20 quarterly from January 2007 to December 2011. Each quarter has 72 firms with their characteristics, expected stock return. However, during the study process, we need to calculate the ratio of E/P (Earning to Price), so we have to deduct the first quarter in the year 2007. As a result, after sorting data we have only 19 quarterly sheet data of 72 firms in 5 year.

We collect the balance sheet and income statement data from the HoChiMinh Stock Exchange database. As the database is not complete, additional data are collected from various issues of the company's annual financial statement, the company's from some trading securities companies. We calculate the following variables for each firm: Beta, SIZE, Book to Market Value, Earning to Price, Investing in Real Estate and Liquidity profile.

3.2 Definition of Variables

The main purpose of this study is investigate the relationship between firm characteristics, beta value and expected stock returns. So we will set up the expected stock returns as dependent variable. And the independent variables are beta values and firm characteristics variables.

Firstly, we will mention about the dependent variable: Expected stock Returns. Many of previous studies already have been conducted a study about this relationship, and they also used the expected stock return as one of variable to find out the effect of firm characteristics and systematic risk value on the listed firm performance (that be measured by expected stock returns). It can be calculated by taking average excess returns of each stock in each quarter. Because, in Ho Chi Minh stock market, there is the difference in number of trading days from each company, so in overall the sample, we try to obtain only 1200 trading days in 5 year period from January 2007 to December 2011. Moreover, our sample size was divided into 20

quarter, so finally, each quarter we have only 60 trading days' data. From this data, we can calculate the average excess return of each stock in every quarter to represent for quarterly returns. This average excess returns will be considered as our dependent variable-expected stock returns.

Secondly are the independent variables. In this study, we will use the beta value as the first explanatory variable to estimate the firm expected stock returns. Beta coefficient is the coefficient of risk measure known as volatility measure of systematic risk of a security or portfolio relative to the overall market. Beta is used in the model of capital asset pricing (CAPM) to calculate the expected profitability of an asset based on its beta coefficient and profitability in the market. If a stock has a beta:

- Equal 1 that means the volatility of the stock price equal to the volatility of the market.
- Less than 1 means the volatility of the stock price is lower than the volatility of the market.
- More than 1 degree of volatility of the stock price is greater than the volatility of the market.

Beta is calculated by using the data of stock price and market price from January 2007 to December 2011. In study, we need to unify the number of observations in overall sample size, so the number of trading days for market price has to base on the trading days of the companies' stock. And as a result, in each quarter, we have stock and market prices in 20 trading days. From this data, firstly we will calculate the stock and market return in every trading day. Secondly, after having the excess returns of each stock and market, we will try to calculate the beta value by taking the slope of 20 days excess returns of stock and market. And following is the formula to calculate beta of each companies' stock:

$$\text{Beta} = \text{Slope} (R_{it}; R_m)$$

While

- Beta: The correlated volatility of stock in relation to the volatility of the market
- R_{it} : Daily excess return of stock
- R_m : Daily excess return of market

Besides the beta value, we also use five firm characteristic variables as our independent variables. They are firm size, Earning to Price, Market to book ratio, liquidity and investing in real estate variables. Firm Size is measured by taking natural log of the totals assets and will be used to check the effect of firm size on the expected stock return. Earning to Price is another variable calculated by dividing the previous quarterly earnings per share to average of

adjusted stock price in this quarter. The calculations of other firm characteristic variables will be shown more detail in the Table 1:

Table 1: Variable definition.

Variable	Variable definition
Rit	Expected stock return
Beta	Slope (quarterly excess return of stock; quarterly excess return of market)
SIZE	Log of total capital
B/M	Book value of shares / Market value of shares
E/P	Previous quarterly earnings per share / Average of adjusted stock price in this quarter
LIQ	Total of trading shares/ Total number of shares outstanding
IVR	Dummy variable (equal to 0 if the firm do not have any investment activities in real estate, other equal 1)

3.3 Models

This study we will use the multivariate cross sectional regression to analysis the relationship of beta value, firm characteristic and expected stock returns. The regression equation is:

$$E(R_{it}) = \alpha_{it} + \beta_1 \text{Beta}_{it} + \beta_2 \text{E/P}_{it} + \beta_3 \text{B/M}_{it} + \beta_4 \text{SIZE}_{it} + \beta_5 \text{LIQ}_{it} + \beta_6 \text{IRV}_{it} + \xi_{it}$$

where $E(R_{it})$ is expected stock returns, Beta is the correlated volatility of stock in relation to the volatility of the market, E/P is earning per share in a previous quarter divided by the stock price in this quarter, B/M is book to market ratio, SIZE is the firm size, LIQ is firms' liquidity, IRV is firm's investing in real estate.

The empirical results of firm characteristics were calculated following cross-section of stock return of Fama and French (1992). The average of slope is average of quarterly slope regression from January 2007 to December 2011. The summary of the t-statistic was calculated by using time series of average slope divided for it time series of standard error.

4. Empirical Results and Analysis

4.1 Descriptive Statistics

This paper followed Fama and MacBeth (1992) methodology to examine the interaction

of firm characteristic's variables to expected stock return by using cross-sectional regressions. Table 2 below shows summary statistics for the firm characteristics from January 2007 to December 2011. The means, the medians, standard deviation, minimum and maximum are reported in this table.

Table 2: Summary of Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Beta	0.160883	0.403733	-0.85487	1.94133
E/P	0.046272	0.072241	-0.83783	0.75584
B/M	0.8254	0.22937	0.182	1.6124
SIZE	5.198328	0.550611	3.60874	7.175624
LIQ	0.972549	0.509967	0.021624	1.886698

From the above table, we realize that the mean value of beta is 0.16. This value is smaller than 1 means that the volatility of the stock price is lower than the volatility of the market, or in generally, it presents that the movement of stocks is in the same direction with the market but this relationship is quite small and flat effect to each other. The average value of E/P ratio is only 0.046. It means firm have the higher earnings in the previous quarter will have high earnings in this quarter. Mean of firm size equal 5.198328. These results conclude that most of firm in Vietnam are small and medium firms. The mean of book to market ratio is 0.8254. It showed that most of firms in HoChiMinh stock exchange are over value in the period 2007-2011. This result can be explained by the going up sharply of the developing market. In 5 years from 2004-2008, the total market capitalization go up double time, market index from 500 point up to 1100 point.

The mean of liquidity is 0.972549, if we compare with the other market this ratio is really high. The heating-market with high interest rate, the lack of capital supplements are the main result of high liquidity ratio.

4.2 Empirical Results

The finding of our analysis in HoChiMinh Stock Exchange is reasonable and different from the result of the papers before. It was shown in the Table 3. The average slope of the quarterly regressions of returns on beta alone is 0.56881, and it is not statistically significant

with a t-statistic of 0.9. In this case, we find the positive relationship between beta and returns. It means an investor chose the stock with high systematic will take the higher rate of return. In the other side, Wang and Iorio (2006), Chinese A-share market has the negative beta and insignificant. This negative risk return relationship has no theoretical meaning. In our multivariate regression with other firm characteristics, beta becomes bigger but still insignificant. The average slope of beta up to 0.0006969 and t-statistic is 1.64. In three models (1), (6), (7), the results of beta are the same. We can conclude that beta has no effects to the average of stock returns in HoChiMinh Stock Exchange.

Besides this, E/P and BM have a significant and strong effect on expected stock return when they stay alone. (Significant at 10% of level) The average slope of E/P is 0.190828 and t-statistic is 2.85. This significant and positive relationship suggests that firms have higher earnings in the previous quarter will have the higher average stock return in this quarter. Basu (1983) concluded that high E/P stock earned statically significant positive risk-adjust returns. Comparing with the research of Lau, Lee, Inish (2002) about the Malaysia and Singapore markets, we can see some different in result. E/P ratio in Malaysia is insignificant but Singapore is strong significant at 5% level. Base on the emerging market as Vietnam this theory is reasonable. Most of the firms are easy to earn money when the market is going up. They can take these advantages for at least few months because of the lacking in competitor and the protectionist policies of the Vietnamese government in important industries.

There are different with the previous study in the book to market value. In this investigation, we find that BM is negative and significant with the average of stock returns when it stays alone. The average slope on B/M are significantly negative at the 10% level (t-values equal 1.81 and average slope is -1.8391). In the multivariate regression BM is insignificant and also negative (t-values equal -1.38 and average slope is -1.51478). Many paper has mention about the BM is the strong explanatory variable such as Chan et al. (1991) found that in Japan, book to market is positively related to stock returns. Stattman (1980) found there is positive relationship between book-to-market ratio and average return for U.S. stocks. Chui and Wei (1998) also investigated the relationship between expected stock returns and, book-to-market equity, and size in five Pacific Basin emerging markets. Their study showed that the book-to-market ratio can explain the cross-section of expected returns in Hong Kong, Korea, and Malaysia. The opposite result could be explained by the difference in the old accounting system of Vietnam.

Table 3: Average coefficients and t-statistics regressions of stock returns on beta, E/P, size, B/M, IRV and liquidity: 19 Quarters from 2007-2011

Model	Intercept	Beta	E/P	B/M	Size	Liquidity	IVR
(1)	-0.0004 -0.51	0.568 0.9					
(2)	-0.0018 -2.15		0.190 2.85*				
(3)	0.0008 0.89			-1.839 -1.81*			
(4)	-0.0003 0.676				-0.681 0.314		
(5)	-0.0003 -0.4					0.649 0.37	
(6)	0.0001 0.36	0.00069 0.89					-0.0002 -0.57
(7)	-0.00064 -0.51	0.885 1.64	0.088 1.61	-1.514 -1.38	-0.989 -1.49	0.230 0.14	-1.267 -0.74

*Significant at 10% of level

The current Regulations and accounting practices were borrowed and developed from the accounting system of the former Soviet Union in the last century. This accounting system is only suitable for the economy plan with available goal's management. When that book value does not reflect the real value of the firms, it will lead to suspicion from investors. Even the BM ratio is becoming bigger and bigger. The average of stock return will be down-soon.

A large of previous studies found that size has the significant effect to the stock return. For example, Lau, Lee, and McInish (2002), who report the existence of a negative relationship between stock returns and size for both the Singaporean and Malaysian markets. Wang and Iorio (2006) found the firm size has the positive and significant effect to the expected stock returns in Chinese A-share market. Banz (1981) and Reinganum (1981) was documented that small firms have high average returns than the large firms. This paper finds that firm size is negative but not significant with average stock return in both of model (4) and (7). (t-statistic are 0.314 and -1.49) This result showed that even firm size variable stay alone or not it does not have any effect to the expected stock returns in HoChiMinh stock exchange. The negative coefficient of firm size (average slopes are -0.68151 and -0.9897) mean small firms have higher expected return than the large firms. Base on the specification of Vietnam, this result is acceptable because most of the firms in Vietnam are the medium and small firm. The large firms dominated the market are the state-owned companies or government owned more than 50% of shares. The small –private companies always have higher reputation than the large own state-companies.

There are different with the previous study in the book to market value. In this investigation, we find that BM is negative and significant with the average of stock returns when it stays alone. The average slope on B/M are significantly negative at the 10% level (t-values equal 1.81 and average slope is -1.8391). In the multivariate regression BM is insignificant and also negative (t-values equal -1.38 and average slope is -1.51478). Many paper has mention about the BM is the strong explanatory variable such as Chan et al. (1991) found that in Japan, book to market is positively related to the stock returns. Stattman (1980) found there is positive relationship between book-to-market ratio and average return for U.S. stocks. Chui and Wei (1998) also investigated the relationship between expected stock returns and, book-to-market equity, and size in five Pacific Basin emerging markets. Their study showed that the book-to-market ratio can explain the cross-section of expected returns in Hong Kong, Korea, and Malaysia. The opposite result could be explained by the difference in the old accounting system of Vietnam. The current Regulations and accounting practices were

borrowed and developed from the accounting system of the former Soviet Union in the last century. This accounting system is only suitable for the economy plan with available goal's management. When that book value does not reflect the real value of the firms, it will lead to suspicion from investors. Even the BM ratio is becoming bigger and bigger. The average of stock returns will be down soon.

In 2010, Vo Xuan Vinh and Batten, Jonathan analyzed the relationship between liquidity and stock returns in the Hochiminh stock exchange during the world financial crisis. The data was collected from 2006 to 2010. Their result said that liquidity was negatively correlated with stock returns as the premium requirement of investor. This finding is different with previous study. For example, Datar, Naik Radcliffe (1998) researched about the liquidity and stock returns. They suggested that liquidity was significant in explaining the cross-section of expected stock returns is US from 1962 to 1991. Omri, Zayani and Loukil (2010) found that liquidity is negatively related to stock returns in Tunis stock market. In our paper, the liquidity has positive relationship with the average of stock returns (average slope is 0.649295). It means the stock with high liquidity will have the high return because of liquidity is a measure of the stock purchase fast or slow. Look at the behavior of investor. The high liquidity stock is easier to trading than illiquidity ones because of high liquidity stock have higher expected returns as compensation for their increasing in risks a higher costs of trading. However, the t-value (equal 0.37) is in significant so our result did not have much of contribution.

Investing in real estate is dummy variable. We added this variable to testing it effect to the firms expected stock returns when the firm has the investing activities' outside industry. From 2005-2009, there were a lot of firms in Vietnam spend their capital to invest in real estate. In this time period, investing in real estate was the best way to growth their assets. The high return from the previous periods, the tax-policies in real estate was not clearly, the easiest and fastest way to raise the earnings are the motivations to put firms in Vietnam into the racing. The insignificant result has no meaning in this testing. Beta has negative relationship with stock return mean investors take the higher systematic risk earn a lower rate of return. It does not have any theoretical meaning but still possible. When the market goes up, investor can take the return from any kind of stock except high systematic risk stocks. In the second stage(2006-2007), when the Vietnam stock market went up, investor followed the crowd psychology. They did not buy and sell on the demand of the market. On the other hand, investing in real estate is significant and negative with the stock return (average of a

coefficient is -9.1327; the t-statistic is -9.47). This result can be explained by the going down of the real estate market in Vietnam in recent years. Most of the firms invested in real estate take the loss. The real estate market was frozen by the speculation.

In the panel A of Table 4, except firm size, all of variables are strong significant with the expected stock returns. Beta is negative significant with stock returns (t-values equal -8.9 and average slope is -2.456). Because we looking for the positive result. It mean the stock has higher risk will have higher returns. Earning to price, book to market value and liquidity are positive with stock returns. These results were the same with previous study. There are only investing in real estate has the negative relationship with stock return. This result reflects by the real estate bubble. Most of firms lost their money in real estate market.

In the panel B of Table 4, firm characteristics are insignificant with expected stock returns in the down-quarter-market. Beta also insignificant with stock returns in the down quarter. So when the market going down, we cannot find any relationship between beta, firm characteristics and expected stock returns. In the Table 5, we tested the effecting of firm characteristics on stock returns when the world financial crisis happened. We expected world crisis will start from January 2009 and ended at the end of 2010. In the panel A of Table 5, both of model (1) and (2), firm characteristics are insignificant with expected stock returns. In panel B, both of model (1) and (2) only beta is significant and positive with expected stock returns. This result is totally different with the up-quarter testing, but it is same with many previous studies. Firms with high risk will have higher returns. The firm characteristics are in significant with expected stock return.

Table 4: Estimates of average slope coefficients and t-statistics for up-quarters and down-quarters from 2007-2011.

Model	Intercept	Beta	E/P	B/M	Size	LIQ	IVR
Panel A: Up-Quarters market (8 quarters)							
(1)	0.0025 3.81	0.37 0.92					
(2)	-0.00664 -6.29	-2.456 -8.9*	0.512 8.03*	3.556 9.22*	-1.40 -5.96	12.23 6.58*	-9.132 -9.47*
Panel B: Down-Quarters market (11 quarters)							
(3)	-0.0025 -3.36	0.247 0.43					
(4)	-0.0018 -1.2	0.826 0.92	-0.050 -0.41	-0.908 -0.74	-1.729 -1.6	0.971 0.51	-1.413 -0.61

*Significant at 10% of level

Table 5: Estimates of average slope coefficients and t-statistics for finance crisis effect quarter and non-financial crisis quarters from 2007-2011

Model	Intercept	Beta	E/P	B/M	Size	LIQ	IVR
Panel A: Financial Crisis (8 quarters)							
(1)	0.0011	-0.249					
	0.82	-0.32					
(2)	0.0011	-0.249	0.220	2.161	-3.055	-4.775	-4.380
	0.82	-0.32	1.75	0.92	-1.59	-2.84	-2.03
Panel B: With-out Financial Crisis (11 quarters)							
(3)	-0.0009	1.488					
	-1.03	1.95*					
(4)	-0.0001	1.503	0.026	-1.817	-1.117	2.278	0.487
	-0.06	2.69*	0.5	-1.46	-2.19	1.29	0.28

*Significant at 10% of level

5. Conclusions

Do the firms' characteristics effect to the expected stock returns? There are many studies addressed this question. Using the data from HoChiMinh Stock Exchange from January 2007 to December 2011, we examine the relationship between six firm's characteristics variables and expected stock returns. Six variables are beta, E/P, Book to market value, firm size, liquidity and investing in real estate. By using the regression, we find the different result with previous studies.

In multivariate model, firm characteristics do not significant with the expected stock returns. If variables stay alone, book to market ratio and E/P are strong significant with expected stock returns. We find the positive relationship between E/P and stock returns. Book to market ratio is negative relationship with stock returns. Firm size, liquidity and investing in real estate are insignificant. In the up- quarter market, except firm size, the rest five variables are significant with expected stock return. In the down quarter, six variables are insignificant with stock returns. In the time period of the world financial crisis, firm characteristics are insignificant with expected stock returns. Without financial crisis, there is only beta is positive and significant with expected stock returns.

Because this study is the first one research about the cross section in HoChiMinh stock exchange so we still has a lot of limitation. At first, our sample size is small. It included 72 firms from January 2007 to December 2011. We suggest the other researcher using the bootstrap method of accuracy to sample estimates. The second is the time limitation in collecting data. We only take the 19 quarterly data in five year period. So if the later research using the monthly data, the result will be better.

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