FOREIGN INVESTORS' DECISION OF TRADING AND THEIR OWNERSHIP IN VIETNAM STOCK MARKET

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Abstract - This paper aims to study the relationship between foreign investors' investment decision and the stock market via their volume trading for firms listed in Vietnam stock market from 2007 to 2011. The main findings are summarized as follows. Firstly, a firm's market size does not significantly affect foreigners' decision of trading on the whole; it just influences their buying or selling decision in specified industries. Secondly, foreign investors prefer trading stocks of firms with high profitability often measured not only by ROE and ROA ratio as conventional indicators but also by EBITDA as another important factor affecting their trading decision for short term position and to their ownership ratio for long term position as well. Thirdly, in terms of a firm's dividend policy, foreign investors tend to trade stocks of financial firms with low dividend vield rather than hold them for long term position.

Key words - trading volume; foreign ownership; firm attributes; Vietnam stock market.

1. Introduction

Financial integration has so far benefited not only source countries but also host countries. One of those benefits is to increase foreign investment in which capital flows from the capital - abundant places to hosts especially in developing countries. So many empirical studies show that foreign capital flows both in direct and through portfolio have affected economic growth. As a matter of fact, in order to diversify risks in foreign investment as well as to cover the more often crisis in the global economy many hedge funds have also been set up and operated to meet such trends. Consequently, along with improvements in financial development foreign investment in the stock market which is conventionally forced to meet requirements and standards of that integration was blamed for the crisis. Such an investment together with joining of increasing professional institutions with different objectives such as hedge funds in stock market drives stocks' prices up, peaked and eventually crashed. Actually, portfolio investment inflows, together with foreign hedge funds, were considered as main reasons for the recent crisis.

In Vietnam, established and operated since 2000 for Ho Chi Minh Stock Exchange (HSX) and since 2005 for Ha Noi Stock Exchange (HNX), the role of the stock market in mobilizing capital including such foreign investment in flows for the whole economy was very impressive and indispensable with its yearly high percentage of the total volume over GDP as the Figure 1.

So far, no empirical study about the relationship between stock market in terms of listed firms' performance and foreign investors in terms of their selling and buying decision have been done in Vietnam.

This paper, therefore, aims to study the relationship between foreign investors' investment decision and the stock market via their trading volume in Vietnam stock market for listed firms both on HSX and HNX. As consequences by answering following critical research questions. Firstly, do foreign investors' trading focus on big companies with higher profits over the market? Secondly, how does their trading for short-term investment affect their ownership ratio for long-term investment?



Figure 1. Vietnam Market capitalization over GDP (Source: World Bank - Global Financial Data)

Analysing the rich dataset of the listed firms both on HNX and HSX, the empirical results show that a firm's market size does not significantly affect their decision of buying and selling on the whole. Actually, they prefer trading stocks of companies with higher profit for short-term and long-term decision. Accordingly, they mostly tend to buy and hold stocks of companies with low financial leverage ratio. Furthermore, there is a positive relationship between the ownership ratio and the dividend-yield. But this is not significantly meaningful.

2. Literature Reviews

Empirically, countries with better stock market are found to be benefited more from foreign investment in relation to portfolio investment and foreign debt (Chong et al., 2010). Recently, along with the more global integration in financemarket, foreign investment in portfolio investment has been empirically found increasing with its certain advantages such as a high mobility in flowing out and in markets as well as reducing some existing limitations in the bond market in developing and emerging markets. Actually, in order to meet demand of redemption related to liquidity requirement, institutional investors often have to follow one portfolio of larger market capitalization, higher liquidity because of its necessary liquidity as well as of its transaction cost (Falkenstein, 1996; Gomper and Metrick, 2001). Additionally, in the equity market, foreign investors also seek for equity returns rather than simply balancing their portfolios (Richards, 2005). However, an average return of some types of investors' portfolios appears rather differentiated in which some investors actually want to own stocks or firms for specified objectives such as their business relationship and control rather than a high investment return (Kim et al,

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2005). Such objectives, therefore, affect holding position of foreign investors' decision.

2.1. Relationship between foreign investor and firm characteristics

Due to redemption and liquidity requirement for foreign investment as well as to prevention of systematic risk, foreign investors prefer large market capitalization firms. However, this tendency has been differentiated in many empirical studies. According to Dhatt, Kim and Mukherrji (1999); Dahlquist and Robertson (2001); Gompers and Metrick (2001); Lin and Shiu (2001); and Kim et al. (2005), foreign investors tend to prefer large market capitalization and strong financial firms. Bae at el. (2011) also agree that foreign investors tend to buy stocks of large firm and sell stocks of small ones. On the contrary, some studies show a negative relationship that on average, smaller-size firms get higher stock returns than large-size firms (Keim, 1983 and Basu, 1983). And when systematic risk is controlled as constant, small firms can also gain higher returns than large ones (Reignanum, 1983). Similarly, Berk (1995) agreed that stock returns have positively correlated with market capitalization and, in ceteris paribus, investment in small market capitalization firms is riskier than in large-market capitalization ones.

In regard to PB and PE ratio, these two conventional ratios rather than Book Value are mainly used to value stocks in many empirical studies. Some showed a negative relationship between PB ratio and stock returns (Daniel and Tittman, 1997). Hence, foreign investors can gain higher stock returns as they buy low PB stocks (Dhatt Kim and Mukherji, 1999). On the contrary, others demonstrated that foreign investors prefer stock with high PB ratio (Lin and Shiu, 2001; Kim et al., 2005; and Bae et al., 2011). Relating to PE ratio, this is considered to be the most important variable in determining a share's price. As a matter of fact, Breen (1978) and Dreman (1980b) demonstrated that stocks with low PE ratio can gain a higher average return than those with high PE ratio. However, Bae et al. (2011) found that foreign investors in the Korean market buy stocks with high PE ratio and sell stocks with low PE ratio.

In connection with measurement of a firm's profitability, according to Kim et al. (2005), there has been a positive correlation between foreign ownership and ROE ratio which was considered to be an important variable to foreign investors. Similarly, Bae et al. (2011) found that foreign investors traded stocks in Korean listed companies with high ROE and ROA ratio that not only for the same current period but also for the subsequent period, their buying stocks have higher profitability than their selling stocks. Furthermore, Kang et al. (2010) studying firms listed on Korean Stock Exchange also demonstrates that corporate profitability measured by the EBITDA has positively correlated with foreign ownership.

Relating to liquidity ratio of firm which is often measured by current ratio and quick ratio, Kang et al. (2010) also found that liquidity ratio has positively correlated with foreign ownership. However, Vo Xuan Vinh (2010) found that liquidity ratio has negatively correlated with foreign ownership for firms listed on Ho Chi Minh Stock Exchange.

Meanwhile, debt ratio is used as an important indicator to measure method of financing firm or its ability to meet financial obligations. Dahlquist and Robertsson (2001) and Lin and Shiu (2001) revealed that foreign investors favor firms with low debt ratio. According to Vo Xuan Vinh (2010), foreign investors in Vietnam stock market prefer firms with low leverage ratio. Similarly, Kang et al. (2010) also confirmed that leverage ratio has a negative relationship with foreign ownership. In other words, foreigners prefer firms with low leverage ratio as well.

In regard to dividend policy, according to Bae et al. (2011), besides preferring large-size firms, foreign investors were found to prefer stocks with high dividend yield. Meanwhile, Dahlquist and Robertsson (2001) as comparing foreign investor's preference to domestic institutions in Swedish firms from 1991 to 1997 found that foreign investors also prefer stocks of lower paid-dividend firms.

2.2. Conceptual framework

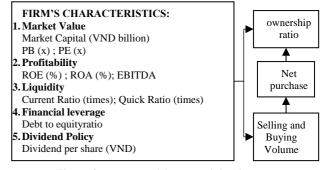


Figure 2. Conceptual framework for the paper

3. Research Methodology

3.1. Research context

As applied NAICS 2007 (The North American Industry Classification System) for industry classification because of its popularity, comprehension and logical order, the structure of Vietnam Securities Market (as of July 2012) is mainly composed by three mainindustries (Finance, Construction and Manufacturing) in term of their market capitalization and companies, respectively, 67% and 89% of the wholemarket. The research scope will therefore survey listed companies in these main industries and expect that foreign investor's decision of buying, selling for short term position and of their ownership ratio for long term position of these industries will be popularized for all foreign investors in the stock market.

3.2. Source of Data and its definition

Firstly, the research will select data of foreign trading from 2007 to 2011 in HNX and HSX just because only from 2006 onward the total volume trading by foreign investors has significantly increased. Secondly, the paper will focus on listed stocks of three main industries described above. Therefore, the sample of more 98 listed firms and observed over 05 years will turn out over 420 observations.

3.3. Research Methodology

As employed by Lin and Shiu (2003), Vinh (2010), the estimated equation is a linear regression model as follows:

$$Y_{i,t} = \alpha_i + X_{j,i}, t \beta + \varepsilon_{it}$$
 (*)

Where: Y_{Lt} denotes buying, selling volume and ownership ratio for firm i at trading year t.X_{J, I, t} presents the firm characteristic variables j of firm i at year t which are divided into stock characteristics including MKC (market capital), PB, PE ratio, ROE, ROA, EBITDA, DEBT, C_Ratio (Current ratio), Q_Ratio (Quick ratio) or Dividend Yield. And α_i are random individual-specific effects, β is a vector of our robust estimators; and ε is an error term; The paper will employ the panel data for the whole sample as well as for each sampled industry. Furthermore, in order to select the most appropriate models for specified samples, the paper will also test all possible regression models among (i) Fixed-Effects Model;(ii) Random- Effects Model; and (iii) Pooled model orpopulation-averaged model. Finally, in order to detect the likely multicollinearity among variables the paper will use the variance inflation factor after regression model. Such tests and other relevant analyses utilized in this paper are supported by the Stata statistical software.

4. Data Analysis And Discussion

4.1. Descriptive Data Analysis

Market capitalization of the finance industry is the highest; the construction and manufacturing industry followed as the second and third of market capitalization. In addition, stocks of construction field were priced at the highest mean value at 25 times, followed by stocks of finance and manufacturing fields at 15 and 11 times, respectively, as in the following table.

Table 1. Description of variables of the sample

Ind	ustry	MKC	DIV	EBITDA	PE	PB	ROE	ROA	C_ Ratio	Q_ Ratio	Debt
	Mean	2,932	1,230	373	25.9	2.04	0.2	0.07	1.9	1.1	2.4
Constr.	SD	5,780	1,042	643	137.4	1.86	0.15	0.06	1.4	1.2	2.0
	CV	2.0	0.9	1.7	5.3	0.91	0.73	0.87	0.7	1.1	0.9
	Obs.	148	148	148	148	148	148	148	148	148	148
8	Mean	10,800	849	1,354	15.3	1.68	0.05	0.08	3.1	3.3	0.7
Finance	SD	13,102	846	2,635	25.6	1.13	0.13	0.12	6.0	6.2	1.2
臣	CV	1.2	1.0	2.0	1.7	0.67	2.5	1.41	1.9	1.9	1.8
	Obs.	69	69	69	69	69	69	69	69	69	69
	Mean	1,728	1,449	287	11.8	1.7	0.18	0.1	2.1	1.2	1.3
fac	SD	5,088	1,049	570	15.2	1.41	0.18	0.09	1.7	1.3	1.2
Manufac.	CV	2.9	0.7	2.0	1.3	0.83	1.01	0.95	0.8	1.1	0.9
2	Obs.	203	203	203	203	203	203	203	203	203	203

Source: Author's calculation on the data

In general, foreign ownership ratio at firms surveyed is not much different at 20% of both finance and manufacturing industry and 17% of the construction industry. And the mean of debt ratio in the construction field is extremely high at 2.35 times followed by manufacturing Empirical Results

4.1.1. Regression result for the whole sample

a. For buy-volume variable

It can be inferred that foreign investors tend to buy value stocks of large firms in finance and construction industry with better performance and low financial leverage. However, they decrease their buying volume for firms with high debt ratio. Such above findings are consistent with previous studies in terms of firm size (Vo Xuan Vinh, 2010; Pimnara Hirankasi, 2009) and PE ratio (Pimnara Hirankasi, 2009) but against with the finding of Lin and Shiu (2001).

Table 2. Regression result for buy-volume variable (*** and ** present statistical significance level at lower 5% and 10%, respectively) – See appendix 1 for more

Buy volume	Whole sample	Finance stocks	Construction stocks	Manufacturing stocks
MKC	+	+ (***)	+ (***)	+
EBITDA	+ (***)	+	+ (***)	+ (***)
ROE	+	+ (***)		- (***)
ROA	- (**)	- (***)	-	
PE	- (**)	-	- (***)	-
PB	- (**)	- (***)	- (**)	+ (***)
Dividend Yield	+	- (***)	-	+
Debt	-	- (***)	- (***)	- (***)
Quick Ratio	+	+	- (***)	+

b. For sell-volume variable

Table 3. Regression result for sell-volume variable (*** and ** present statistical significance level at lower 5% and 10%, respectively)- See appendix 2 for more

Sell volume	Whole sample	1	Construction stocks	Manufacturing stocks
MKC	+	+ (***)	+	_
EBITDA	+ (**)	+	+	+ (**)
ROE	+	+ (***)		-
PE	+(***)	-	+ (***)	-
PB	- (***)	- (***)	- (***)	+
Dividend Yield	-	- (**)	-	-
Debt	+	- (**)	+ (**)	-
Quick Ratio	+	-	- (**)	+ (***)

Sell-volume variable for most samples has a positive relationship with EBITDA except for finance industry which sell-volume variable also has a significantly positive relationship with ROE ratio, a negative relationship with PB ratio except for manufacturing industry. This means that they tend to sell stocks of firms with better performance but being overpriced (PE high) as well as they prefer holding growth stocks (negative correlated with PB ratio). Firm size and dividend yield do not actually affect their decision of selling except for finance industry.

The finding of positive relationship between selling volume and PE ratio is to differ from the finding of Pimnara Hirankasi (2011) as well as from the finding of Bae et al. (2011) in relating to firm size and dividend yield. It also disagrees with the previous findings of positive relationship between PB ratio and foreign investor's preferences.

b. For foreign investor's ownership ratio in relation to net purchase variable

These findings suggest that although foreign investors prefer buying stocks of large firms with better performance, but for a longer position via their ownership ratio, they just actually want to own firms with low financial leverage without caring their firm sizeexcept for manufacturing stocks. This finding hence reinforces the

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study of Vinh (2010) that foreign investors prefer firms with low leverage. In addition, ROE ratio is a conventionally important indicator to measure profitability of company Furthermore, EBITDA which is found as another key important variable affecting their decision of buying and selling above does actually play nothing in regard to their ownership ratio. Such an EBITDA indicator only plays an important role in construction field where most of their assets are tangible ones and imposed by one of three current depreciation and amortization methods available and flexible to firm in Vietnam.

Table 4. Regression result for ownership ratio variable (*** and ** present statistical significance level at lower 5% and 10%, respectively)- see appendix 3 for more

Ownership	: :	Finance stocks	Construction stocks	Manufacturing stocks
Net_buy	+ (***)	+ (**)	+	+
MKC	+ (***)	+	+	+ (***)
EBITDA	-	-	+ (***)	
ROE	+ (**)	+ (***)		+
ROA			-	
PE	-	+	- (***)	-
PB	-	-	-	-
Dividend Yield	+	+	-	+
Debt	- (***)	- (***)	- (***)	-
Quick Ratio	-	-	+	+

4.1.2. Regression result for specified industries

It's necessary to run regression for each industry to enhance the regression results of the whole sample above or even reveal some certain discrepancies for specified industries in relating to the whole market (also see Table 2, 3, 4).

For Finance Industry: Although foreign investors prefer trading growth stocks, they just want to own firms with high profitability and low financial leverage ratio. Firm's market capitalization does not really affect their long term position via ownership ratio.

For Construction Industry: Foreign investors tend to buy value stocks (with low PB ratio) of large firms being underpriced (low PE ratio) and with low dividend yield and leverage or quick ratio. Meanwhile, they incline to sell value stocks being over priced or of firms with high leverage ratio. Firm size does not actually affect their selling decision. For a long term position, they just want to own firms with better profitability (high EBITDA), low financial leverage ratio and being underpriced. Again, a firm's market size also does not play an important factor in their long term decision.

For manufacturing Industry: Foreign investors trade stocks of high profitability in which they tend to buy growth stocks of firms with low financial leverage ratio, to sell stocks of firms with high quick ratio. This seems to meet the fact that the market capitalization of the manufacturing industry is lowest in all industries, a high quick ratio shows an inefficient use of cash and cash equivalent assets. A firm's market capitalization does not

affect their trading both in buying and selling, it just only affects their long term position via their ownership ratio.

5. Conclusions and Policy Implication

5.1. Conclusions

The results of regression show that a firm's market size does not significantly affect their decision of buying and selling for the whole sample, it just influences their buying decision in finance and construction industry, and their selling decision in finance industry. The findings strongly support the hypothesis that foreign investors prefer trading stocks of firms with high profitability for short term position as well as for long term position. Furthermore, besides ROE and ROA ratio as indicators to measure firm's profitability, EBITDA is also one another important factor affecting their decision of buying, selling for short term position and of ownership ratio for long term position.

In regards to firm's leverage ratio, the results significantly support the hypothesis that foreign investors prefer buying and holding stocks of firms with low leverage ratio almost for all industries. Meanwhile, foreign investors only sell stock of firms with high leverage ratio in the construction industry that agrees with the hypothesis, but differ from the hypothesis when foreign investors only sell stocks in the finance industry with low leverage ratio and also in manufacturing industry but not statistically significant.

For a firm's liquidity, the paper reveals that quick ratio rather than current ratio is statistically significant to measure it. However, the finding of relationship between it with ownership ratio is mixed and not statistically significant to reach a conclusion. Similarly, although it has positively correlated with buying and selling volume variables for the whole sample but not statistically significant. Instead, it partially has significance in each separate industry. In connection with a firm's dividend policy, ownership ratio of all industries has almost positively correlated with it but it is not statistically significant. That is the same to relationship between it with buying and selling volume for almost industries except in the finance industry that foreign investors prefer trading stocks of firms with low dividend yield.

5.2. Policy Implication

5.2.1. For domestic investors

For domestic investors who often refer foreign trading to make their own short-term investment, it's necessary to consider firm size along with better profitability significantly measured by EBIDTA indicator, especially in stocks of construction field in terms of buying decision and of manufacturing field in terms of selling decision, rather than ROE or ROA ratio as usual.Furthermore, foreign investors tend to buy and sell such stocks with low PB ratio.

For long term, domestic investorsshould closely review foreigner investors' net purchase and firms' debt ratio as well. In short, the higher the net purchase or the lower the debt ratio is, the more investment they should do.

5.2.2. For companies

Companies who want to attract foreign investors should consider their financial leverage. It's likely that the higher this ratio, the lower the firm's attraction to foreign investors. Furthermore, firms in construction field being overpriced should consider their strategy to attract their foreign investment.

5.2.3. For government authority

Firstly, there has been a positive relationship between net-purchase of foreign investors with portfolio equity. Therefore, on years reported a low or negative net purchase of foreign investor in the stock market, it's necessary to adjust related policies or regulations to attract foreign capital inflows.

Secondly, practices of accounting principles in amortization and depreciation should be standardized and meet with global standards. Otherwise, other financial indicators to measure firm's profitability which have been conventionally employed and reported such as ROE and ROA ratio, EBIT will deviate from their objectives and nature.

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(The Board of Editors received the paper on 12/15/2014, its review was completed on 02/28/2015)

APPENDICES:

Appendix 1. Regression result for buy-volume variable

	ipponum 1. Regression result for only volume variable															
Buy volume			Sample effects)		Finance sample (Random-effects GLS)				Construction sample (Random-effects GLS)				Manufacturing sample (Random-effects GLS)			
Variable	Coeff.	Robust Std. Err.	t- Statistic	P>t	Coeff.	Robust Std. Err.	z	<i>P>z</i>	Coeff.	Robust Std. Err.	z	<i>P>z</i>	Coeff.	Robust Std. Err.	z	<i>P>z</i>
MKC	0	0	0.539	0.591	0.001	0	2.925	0.003	0.001	0	3.038	0.002	0	0	0.866	0.387
PE	-0.003	0.002	-1.887	0.062	-0.04	0.042	-0.938	0.348	-0.006	0.001	-4.517	0	-0.001	0.006	-0.189	0.85
PB	-0.433	0.247	-1.753	0.083	-6.057	2.408	-2.516	0.012	-0.589	0.318	-1.852	0.064	0.571	0.3	1.906	0.057
EBITDA	0.004	0.002	2.384	0.019	0.002	0.001	1.365	0.172	0.006	0.001	6.195	0	0.007	0.003	2.772	0.006
ROE	10.502	6.956	1.51	0.134	75.783	23.256	3.259	0.001					-3.701	1.809	-2.046	0.041
ROA	-28.459	17.478	-1.628	0.107	-58.152	20.031	-2.903	0.004	-0.428	10.755	-0.04	0.968				
DIV	0	0.001	0.528	0.599	-0.004	0.002	-2.033	0.042	-0.001	0.001	-1.067	0.286	0	0	0.023	0.982
Debt	-0.454	0.341	-1.33	0.187	-2.533	1.14	-2.222	0.026	-0.929	0.254	-3.66	0	-0.926	0.427	-2.168	0.03
Q_Ratio	0.197	0.254	0.774	0.441	0.108	0.31	0.348	0.727	-0.542	0.209	-2.593	0.01	0.303	0.225	1.345	0.179
Obs.		4.	20		69				14	18			20	03		
	R-squared overall = 0.3094			0.3094	R-squared overall = 0.2668			0.2668	R-square	d	overall = 0.6327		R-squared		overall = 0.7416	
	F-Statisti	cs	3.03		Wald chi2(9)		37.37		Wald chi2(9)		316.8		Wald chi2(9)		34.18	
	Prob F-Statistics 0.003			•	Prob > chi	i2	0.000		Prob > chi2		0.000		Prob > chi2		0.000	

Appendix 2. Regression result for sell-volume variable

Sell volume			sample	Finance sample				C	Constructi	-	le	Manufacturing sample				
rounte	(Fixed-effects)				(Random-effects GLS)				(Fixed-effects)				(Random-effects GLS)			
Variable	Coef.	Robust Std. Err.	t-Statistic	P>t	Coef.	Robust Std. Err.	z	P>z	Coef.	Robust Std. Err.	t- Statistic	P>t	Coef.	Robust Std. Err.	z	P>z
MKC	0	0	-0.611	0.543	0.001	0	2.879	0.004	0	0.001	0.577	0.568	0	0	-0.213	0.832

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PE	0.01	0.002	5.815	0.007	-0.05	0.051	-0.973	0.331	0.009	0.002	5.702	0	-0.01	0.012	-0.881	0.378
PB	-0.747	0.347	-2.151	0.034	-5.912	3.007	-1.966	0.049	-0.841	0.391	-2.15	0.039	0.142	0.257	0.553	0.58
EBITDA	0.005	0.003	1.623	0.108	0	0.001	0.115	0.908	0.002	0.002	1.145	0.26	0.005	0.003	1.872	0.061
ROE	0.141	1.492	0.094	0.925	46.484	22.674	2.05	0.04					-1.73	1.615	-1.071	0.284
ROA									-5.822	8.127	-0.716	0.479				
DIV	0	0	-0.832	0.407	-0.006	0.004	-1.678	0.093	0	0.001	-0.625	0.536	0	0	-0.995	0.32
Debt	0.425	0.293	1.449	0.15	-2.292	1.342	-1.707	0.088	0.549	0.324	1.696	0.099	-0.29	0.272	-1.065	0.287
Q_Ratio	0.246	0.215	1.144	0.256	-0.023	0.327	-0.07	0.944	-0.96	0.504	-1.906	0.065	1.387	0.264	5.252	0
obs.		4	20			69			1-		148		2		03	
	R-square	1	overall = 0.	0866	R-squared		overall =	overall = 0.1449		d	overall = 0.2508		R-squared		overall = 0.7006	
	F-Statistics 6.94				Wald chi2	(9)	17.31		F-Statistics		72.79		Wald chi2(9)		149.7	
	Prob F-S	atistics	0		Prob > chi2		0.027		Prob F-Statistics		0		Prob > chi2		0	

Appendix 3. Regression result for ownership ratio variable

	Appendix 5. Regression result for ownership ratio variable															
Ownership ratio		Whole !	Sample n-effects)		Finance sample (Random-effects)				Construction sample (Random-effects)				Manufacturing sample (Random-effects)			
Variable	Coef.	Robust Std. Err.	z	<i>P>z</i>	Coef.	Robust Std. Err.	z	P>z	Coef.	Robust Std. Err.	z	P>z	Coef.	Robust Std. Err.	z	P>z
net_buy	0.002	0.001	2.263	0.024	0.001	0.001	1.568	0.117	0.002	0.001	1.307	0.191	0.004	0.004	1.021	0.307
MKC	0.001	0	2.196	0.028	0	0	0.806	0.42	0	0	1.234	0.217	0	0	2.282	0.023
PE	0	0	-1.074	0.283	0	0.001	0.515	0.606	0	0	-2.029	0.042	0	0.001	-0.156	0.876
PB	-0.008	0.005	-1.467	0.142	-0.03	0.034	-0.899	0.368	-0.007	0.006	-1.085	0.278	-0.008	0.008	-0.96	0.337
EBITDA	0	0	-0.811	0.417	0	0	-1.13	0.259	0	0	2.233	0.026				
ROE	0.076	0.047	1.625	0.104	0.393	0.159	2.473	0.013					0.071	0.071	1	0.317
ROA									-0.014	0.117	-0.117	0.907				
DIV	0	0	0.423	0.673	0	0	0.159	0.874	0	0	-0.488	0.626	0	0	0.088	0.93
Debt	-0.017	0.007	-2.499	0.012	-0.022	0.01	-2.135	0.033	-0.018	0.009	-1.945	0.052	-0.012	0.019	-0.652	0.514
Q_Ratio	-0.002	0.002	-1.168	0.243	-0.002	0.002	-0.994	0.32	0.001	0.01	0.121	0.904	0.009	0.01	0.885	0.376
obs.		37	70		64				131				175			
R-squared overall = 0.0734			overall = 0.1846				overall = 0.2385				overall = 0.0622					
Wald chi2(9))		42.18													
Prob > chi2			0													