

Accepted Manuscript

Title: Foreign Ownership in Emerging Stock Markets

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PII: S1042-444X(15)00026-2
DOI: <http://dx.doi.org/doi:10.1016/j.mulfin.2015.05.001>
Reference: MULFIN 475

To appear in: *J. of Multi. Fin. Manag.*

Received date: 23-3-2015
Accepted date: 6-5-2015

Please cite this article as: Batten, J.A., Vinh, V.X., Foreign Ownership in Emerging Stock Markets, *Journal of Multinational Financial Management* (2015), <http://dx.doi.org/10.1016/j.mulfin.2015.05.001>

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Foreign Ownership in Emerging Stock Markets

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Keywords: foreign ownership; firm attributes; portfolio investment; Vietnam.
JEL Classification: F3, G10, G15
This version dated March 18, 2015

Foreign Ownership in Emerging Stock Markets

Abstract

We utilize a number of key firm characteristics to establish the extent that information asymmetry impacts the level of foreign ownership in Vietnam. The findings indicate that foreign investors adopt a long term investment horizon and employ a buy and hold strategy to exploit potential growth prospects. These investors avoid firms with riskier financial management practices and where information asymmetries provide advantages to domestic investors. Overall, these findings support the importance of linking deregulation with financial market openness and transparency to enhance and encourage international portfolio investment.

Keywords: foreign ownership; firm attributes; portfolio investment; Vietnam.
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This version dated March 19, 2015

Foreign ownership in Emerging Stock Markets: A Vietnamese Perspective

1. Introduction

Emerging markets offer an alternative destination for portfolio investment from advanced economies due to better growth prospects, their governments dedicated policies of furthering financial deregulation, as well as the risk-return advantages available from international diversification (e.g. Karolyi, Ng and Prasad (2013) amongst others). In fact, the Institute of International Finance forecasts that net private capital inflows to all emerging economies will persist at current levels and will exceed US\$1 trillion in 2015 (Collins et al., 2014)¹.

The extent of emerging market capital flows raises two important questions: the first concerns the motivations of an investor when choosing one country over another for direct, or portfolio investment, such as the specific macroeconomic environment or the expected diversification benefits (e.g. Garg and Dua, 2014; Iwasaki and Tokunaga, 2014); while the second, focuses on better understanding the investor's choice of investment within a particular market. This last question concerns not just the choice between investment classes such as stocks or bonds, but the choice within a specific investment class, such as between specific stocks or bonds.

This paper provides insights into this last question by identifying those firm characteristics that are preferred by investors when investing in an important emerging stock market, Vietnam. Vietnam provides a unique institutional setting to better understand the motivations of portfolio investors: its government has undertaken regulatory reforms to facilitate foreign investment both before and after Vietnam became the World Trade

¹ Forecast net inflows of US\$1,133 in 2014 and US\$1,176 in 2015.

Organization's (WTO) 150th member on 11 January 2007², while simultaneously privatizing many state corporations to expand the investment portfolio available. As a result these reforms the stock holdings of foreign investors now represent in excess of 25% of market capitalization³.

Our findings therefore extend existing literature where diversification benefits are generally considered one of the most important factors driving emerging market portfolio investment. Our results are consistent with foreign investors avoiding firms where information asymmetries provide advantages to domestic investors. The importance of better corporate governance, financial market openness and transparency highlight the importance of the deregulatory agenda addressing the institutional structure of the domestic financial market, and not simply focusing on the removal of capital controls or capital account liberalization more generally (e.g. Long, Yang and Zhang, 2015). This is especially important in the case of Vietnam where foreign investors are currently limited in the extent of their ownership in a listed firm.

Vietnam is an emerging economy with a unique institutional and corporate governance environment that differs from many other emerging economies (Deepak, 2011). The first stock exchange was established in Ho Chi Minh City in 2000 with just four listed companies. Since then, the privatization of state-owned enterprises has led to a rapid increase in listings, with market capitalization exceeding US\$52 billion in 2014, which is around 32.0% of GDP⁴.

² See https://www.wto.org/english/thewto_e/acc_e/a1_vietnam_e.htm (accessed March 19, 2015) and a timeline of the legislative action plan that began in 2000. See also Brown (2002) for a discussion of doi-moi reforms pre WTO accession.

³ See <http://tuoitrenews.vn/business/21256/vietnams-stock-market-capitalization-tops-52bn-minister>

⁴ Ibid 2. (accessed March 19, 2015).

One of the most prominent features of the Vietnam stock market has been the rapid increase in the level of stock ownership and trading volume by foreign investors, increasing from 17.5% in 2007 to over 25.0% in 2014. Foreign investment has also led to higher overall levels of trading, improved visibility and extensive analyst coverage of Vietnamese corporations.

As the importance of foreign investment in this and other emerging markets has become recognized, the characteristics of foreign investment behavior and their investment choices has become an important area of financial market research, and one that we contribute to in this paper. While the Vietnamese stock markets are small relative to those in major world markets, our results confirm the positive impact of deregulatory developments, thereby offering insights to those emerging countries in the process of undertaking regulatory reform.

Foreign investment in Vietnam has been dominated by institutional investors (Coval & Moskowitz 1999; Dahlquist & Robertsson 2001) despite the large number of small foreign held investment accounts⁵. Therefore, in this study we assume that these foreign investors collectively share similar investment strategies to institutional investors. These foreign investors tend to be well capitalized foreign financial institutions with a long history of successful investment in other stock markets and comprise mutual funds, hedge funds, and foreign investment banks. These types of investors tend to be momentum investors over all horizons; that is, they tend to increase their market exposure when the market is rising and decrease their exposure when the market is falling. Momentum investors can also take short positions subject to domestic regulations, to profit from expected declines in market prices (see Batten and Vo, 2014).

⁵ Ibid 2: 1.3 million accounts

In Vietnam, foreign ownership restrictions prevent foreign investors owning more than 30% of a commercial bank and 49% of other listed companies under the current securities laws. Vietnam remains a bank based economy although the banking sector size is modest despite significant financial sector reforms. Thus the lower permitted foreign ownership of commercial banks must be considered in this context⁶. Foreign investors must therefore choose whether these ownership and corporate control restrictions inhibits their ability to maximize their investment portfolio outcomes. Thus the degree of foreign ownership in a specific firm will likely reflect the tradeoff between preferred investment choices, and specific firm attributes that facilitate investor influence.

This paper deepens the existing understanding of the motivations of foreign investors in general and also their holdings in emerging markets. By analyzing a rich and detailed firm level dataset of equity ownership, and studying the determinants of foreign ownership in Vietnamese firms, we are able to identify various shared firm attributes that are common to foreign investors. In this paper we specifically consider firm attributes including size, dividend yield, risk, book-to-market ratio, financial strength, financial leverage and firm performance. In addition, this article provides an extensive empirical analysis of the link between foreign investor ownership and domestic firm characteristics over a key time period of international portfolio readjustment, triggered by the Global Financial Crisis.

The remainder of this paper is structured as follows. Section two reviews the literature on the relationship between foreign ownership and firm attributes. Section three introduces the data. Section four presents the research method. Section five reports the empirical results, and finally, section six concludes the paper.

2. Literature Review

⁶ Domestic credit provided by the banking sector in Vietnam was 108.2 % versus the United States 240.5% (World Bank Development Indicators: <http://data.worldbank.org/indicator/FS.AST.DOMS.GD.ZS>)

There is a large and growing literature examining the relationship between foreign ownership and firms characteristics generally, and more specifically whether foreign investors have information disadvantages over domestic traders in developing markets (e.g. Coval and Moskowitz, 1999, 2001; Portes and Rey, 2005). Foreign investors are expected to have significant global investment experience utilizing well-developed technology and highly-skilled financial experts. This expertise and technology should put them in a stronger position when evaluating a firm's long-term and international prospects. Importantly, they can also make international comparisons concerning firm performance and can benefit from cross-border portfolio diversification, which may offset the idiosyncratic risks associated with a particular market. Thus, foreign investment in developing countries may provide foreign investors with these advantages over local investors. On the other hand, foreign investors may possess inferior information due to geological, cultural, and political differences.

Taken together these institutional and other effects suggest trade-offs are made and that there is a "pecking-order" associated with cross-border portfolio investment (e.g. Daude and Fratzscher, 2008; Park and Shin, 2013). The firms that are selected by foreign investors may also be compromised by investment barriers and the presence of asymmetric information between local and foreign investors. To avoid informational asymmetry, foreign investors will therefore tend to select firms with certain characteristics, such as large size and a low debt ratio (Dahlquist & Robertsson 2001; Kang & Stulz 1997; Lin & Shiu 2003).

This existing research also suggests that foreign institutional investors gain from portfolio diversification by adding foreign stocks to their domestic portfolios (e.g. Garg and Dua, 2014). The economic benefits of international portfolio diversification are well established in the literature. French and Poterba (1991) and Tesar and Werner (1995), for

example, argue that diversified international investment dramatically improves the performance of domestic portfolios. Theories assuming under-diversification of investor portfolios, as described in the well-known papers of Levy (1978) and Merton (1987) predict a positive relationship between idiosyncratic risk and expected return. However, in reality investors do not hold perfectly diversified portfolios and often domestic portfolios exhibit a bias for local investment-termed “home bias” (Solnik, 1974; Lewis, 1999; Fu 2009; Van Nieuwerburgh and Veldkamp, 2009; Hnatkowska, 2010; Ke, Ng and Wang, 2010).

The disproportional holding of local stocks is not only evident in international investment, but also apparent in the selection of the domestic portfolio (Coval & Moskowitz 1999; Dahlquist & Robertsson 2001) since global investors consider the specific advantages of individual stocks when selecting their foreign assets (Rhee & Wang 2009). In this sense, it is important better understand the factors that cause investors to deviate from the optimal international equity portfolio, typically measured in terms of lower returns and higher risk. For example, Lewis (1999) estimated that the cost of home bias due to forgone gains from international diversification was in the range of 20% to almost double lifetime (permanent) consumption.

The empirical evidence provides evidence on information trade-offs. For example, (Froot & Ramadorai 2001) state that foreign investors have better information than local investors. Seasholes (2000) employs Taiwanese data to investigate whether foreign traders have superior information to domestic investors by investigating net buying prior to positive and negative earnings surprises. His results indicate that foreign investors have superior information to domestic investors with foreign investors tending to buy prior to positive news and sell prior to negative earnings surprises (see also Dvorak, 2005).

On the other hand, many researchers argue that foreign investors stand at an informational disadvantage relative to domestic investors. For example, Brennan & Cao (1997) develop a model of international equity portfolio flows that relies on informational differences between foreign and domestic investors. They find that U.S. investors are at an informational disadvantage relative to locals in foreign markets, and trade on new information with a lag. Additional research by Hau (2001) using German data, Dvorak (2005) using Indonesian data, and Choe et al (2005) using Korean data are all consistent with the view that foreign investors are in fact at an information disadvantage.

The problem of information asymmetry and investment barriers tends to be more material in emerging markets where the standard of corporate governance practice is low. Therefore, foreign investors are likely to depart from holding diversified portfolios. Many studies in the literature investigating the link between foreign investors' ownership in domestic markets indicate that foreign ownership is normally associated with firm attributes such as size, industry performance, leverage (Kang and Stulz, 1997), lower dividends and cash-holdings due to tax considerations (Dahlquist and Robertsson, 2001 and Jeon et al. 2011) and low book-to-market stocks (Lin and Shiu, 2003; Ko et al. 2007).

This study fits in with this literature and our results are consistent with foreign investors avoiding firms where information asymmetries provide advantages to domestic investors. Our findings enrich the literature by examining whether foreign investors are attracted to the specific firm attributes described above. An aversion towards international investments may also be due to informational asymmetries between foreign and domestic investors. For example, since Vietnam is an emerging economy an environment of high informational asymmetry is expected. Thus foreign investors are expected to hold more stocks with these key specific characteristics.

3. Data description

This paper employs a detailed dataset of foreign investors' stock ownership and firm characteristics of Vietnamese firms listed on the Ho Chi Minh City Stock Exchange (HOSE) from 2007 to 2012. There were approximately 340 firms listed in 2014, which is a considerable increase on the 33 recorded in 2005, just prior to WTO accession. Pooling this data allows 708 firm years of data to be investigated for the sample period from 2007 to 2012. Note that delays in reporting limits the current investigation to the 2012 year end. Foreign investors are only able to purchase securities after registering through a licensed domestic securities company, which acts as custodian. The foreign investor is then issued with a transaction code that also enables their financial interests to be monitored. Using this data we are able to identify the investment choices of foreign investors and explain these investment choices in terms of specific firm characteristics. The data employed in this paper are collected from different sources: The firm attributes data is hand collected data taken directly from the financial reports of listed companies; whereas, the market data are provided by the Ho Chi Minh Stock Exchange Corporation.

3.1. Foreign ownership in Vietnamese firms.

Foreign ownership (FOWN) is measured as the monthly average of foreign investor holding in a firm at year end. The data are from the annual report of firms and also recorded by the Ho Chi Minh City Stock Exchange Corporation. Table 1 presents the average foreign ownership in Vietnamese listed firms over the period from 2007 to 2012. An important point to note here is that the average level of foreign ownership in Vietnamese firms steadily declined from 17.96 % in 2007 to 11.91% in 2012 as a result of the Global Financial Crisis (GFC). However, the average level of foreign investor ownership in Vietnamese firms is well

above the legal level to be considered as a large shareholder. Variation in this ratio, reported by the standard deviation was greatest in 2007 with 16.23% and lowest in 2009 with 13.01%. The slight increase in foreign ownership in 2012 on the previous year (from 10.26% to 11.91%) was also matched with an increase in the standard deviation. As reported earlier, the most recent news reports claim that foreign ownership has now increased to 25%, although detailed data is not yet available. As expected from financial variables, the data also displays slight skewness and kurtosis, the latter being greatest in 2011, due to a surge in investment flows later in that year.

[INSERT TABLE 1 ABOUT HERE]

3.2. Firm characteristics

In this subsection, a number of firm-specific attributes are introduced to then be used in the empirical analysis of foreign ownership determinants. To enable easy comparison, we choose the same attributes as those identified by leading research in this field (e.g. Kang and Stulz, (1997); Dahlquist & Roberts (2001) and Lin & Shiu, (2003).

These variables are reported in Table 2. First, some general comments: To facilitate comparison of the variation in the various firm attributes and ownership statistics the coefficient of variation (CV) is also reported along with the standard deviation. Interestingly, over the full sample period the greatest variation occurred in the foreign ownership variable (1.0326), followed by the current ratio (CURR). All these variables display some third or fourth moments, with the BETA statistic having the greatest kurtosis of 45.467. This is likely due to firm risk changing significantly over the sample period likely due to the same shocks that caused foreign investors to alter their investment preferences. In this case it is likely due to the effects of Quantitative Easing in the US later in the sample period, which stabilized the US economic position. This likely encourage investment prospects abroad and also

resulted in an improvement in average Vietnamese firm betas. In turn this encouraged greater foreign participation following their withdrawal as the unravelling of positions began after the onset of the GFC. The individual variables include:

FOWN: Foreign ownership, which is for the sample period and reflects the relevant statistics reported in the right hand column of Table 1.

Size: This variable is the market capitalization of the firm at the end of the year. In the regression analysis we consider the log of market capitalization. Merton (1987) and Huberman (2001) argue that investors prefer familiar securities. Therefore, it is more likely that foreign investors will invest in those Vietnamese firms where they have some knowledge, or familiarity. It is commonly assumed that more information is available on large firms than on small ones. It is also argued that foreign investors should favor large firms since the degree of informational asymmetry is higher for foreign investors than for local investors. Similarly, foreign investors should favor blue-chip stocks.

Leverage ratio (LEVR): This is a measure of long-term financial distress. It is defined as the ratio of total liabilities to total equity at year-end. This variable is also a proxy for the type of financial management practice: A lower level of leverage indicates that a firm follows a conservative financial management approach, whereas the reverse is the case for a high level of leverage.

Current ratio (CURR): This variable is a proxy for a firm's ability to avoid short-term financial distress. The ratio is calculated as the current assets divided by current liabilities at year-end, and measures the ability of the firm to meet its short-term payment requirements. A high current ratio is associated with a high level of conservative management. This variable is very relevant for Vietnam given the difficulties faced by many firms in raising

short-term finance due to undeveloped money and bond markets and limited access to short-term bank credit lines.

Book-to-market ratio (BMAR): This is a market valuation measure of the firm. Growth firms typically have low book-to-market ratios, while firms with higher ratios are referred to as value firms. The ratio is defined as the book value of equity divided by the market value of equity at year-end. Fama and French (1996) proposed the book-to-market equity ratio as a proxy for profitability and growth. Low book-to-market firms have persistently high earnings while high book-to-market firms have consistently poor earnings. The financial performance of low book-to-market firms is more consistent than high book-to-market firms therefore we propose that foreign investors would prefer to hold more shares of low book-to-market firms.

Dividend yield (DIVY): The dividend yield is the value of all dividends paid during the year divided by the market value of the firm at year-end. This indicator measures the yield earned by investors and can be used to analyze the investment style of foreign investors: a preference for dividend income, or capital gain.

Systematic risk (BETA): Systematic risk is the beta coefficient of the market model, estimated using weekly returns. The market portfolio is the value-weighted portfolio in our sample. Stulz (1981) developed an international investment barrier model, showing that investment barriers (e.g capital controls) raise the cost of cross-border investment. Accordingly, foreign investors seek assets with higher expected returns to cover these costs. We propose that foreign investors, who face such barriers, will hold more shares of high beta stocks, yielding higher expected returns.

Liquidity (TOVR): We employ the trading turnover rate to proxy for the level of liquidity of a firm's shares. This ratio is defined as the total value of stocks traded over a year divided

by the market value of the firm. This liquidity measure has been used extensively (e.g. Brennan et al. 1998; Chordia et al. 2001; Datar et al. 1998; Rouwenhorst 1999) and can conveniently be applied to the Vietnamese stock market. The use of the liquidity indicator also allows a comparison to be made with other research on the relation between share ownership structure and liquidity (Rubin 2007). Tesar and Werner (1995) document that the turnover rate on international equity investments is high when compared with the turnover rate in the investor's home country, and when compared with the market of the foreign security. Their findings suggest that market liquidity is an important feature for foreign investors. Consequently we propose that foreign investors will prefer to hold more liquid stocks. This view is supported empirically by many other studies (e.g. Agarwal et al. 2009; Chan et al. 2005; Covrig et al. 2006; Ferreira & Matos 2008; Rhee & Wang 2009).

[INSERT TABLE 2 ABOUT HERE]

4. Research Method

In this article, multivariate linear regression analysis is employed to establish the relationship between foreign ownership and key firm characteristics. The estimated equation is a standard linear regression model as follows.

$$y_{i,t} = \alpha + \sum_{i=1}^n \beta_i X_{i,t} + \varepsilon_{i,t}$$

where $y_{i,t}$ denotes the foreign ownership of firm i at time t ; $X_{i,t}$ represents the firm characteristic variables i at time t ; and $\varepsilon_{i,t}$ is the error term. The aggregate level statistics for $y_{i,t}$ was previously reported in Table 1.

In the first approach, the estimated regressions are based on a normal panel least squared estimator. As is well known, least squares estimation is inefficient if

heteroskedasticity is present in the residuals. White's (1980) procedure is therefore used to correct the standard error of the estimated coefficients. We employ a common panel data technique of fixed effects and random effects estimators to analyze factors affecting foreign ownership. In order to establish the preference for fixed or random effects panel estimation, we use the Hausman test for the selection. The Hausman test confirms the selection of fixed effects estimation in our analysis. However, to conserve space, we do not report the results of Hausman tests here.

In the second approach, we estimate the regression in differenced form. The dependent variable is now the change of foreign ownership over the year. All of the independent variables enter the regressions in differenced form. According to Chen et al. (2013), unlike the model where the variables are in level forms, the first difference form specification of the model takes into account time invariant firm attributes, which are unobservable and could be determining factors for foreign ownership. This technique allows modeling of the variations of these first differences over time to provide a more reliable conclusion in the case of our data set.

We further enhance the robustness of the analysis using the GMM estimator as suggested by a number of studies including Arellano & Bond (1991), Arellano & Bover (1995), and extended by Blundell & Bond (1997, 1998). This approach has the advantage of addressing bias due to the presence of lagged dependent variables, or endogeneity of other explanatory variables, associated with the fixed effects in short panels (see Nickell (1981)). This adjustment ensures efficiency and consistency provided the models are not subject to serial correlation of order one and order two, and the over-identification of restrictions are valid. In order to ensure the validity of the GMM estimator, we employ AR(1), AR(2) and

Sargan/Hansen J-tests to test for serial correlations of order one, order two and over-identifying restrictions.

5. Empirical Results

We begin the presentation of results by reporting the matrix of correlation coefficients between foreign ownership and various firm characteristics for the data set in Table 4. At first glance it can be seen that foreign ownership positively and significantly correlates with firm size where the correlation coefficient is 0.449. This tends to confirm the size effects of foreign investment choice. Other firm characteristics preferred by foreign investors include firm profitability and firm stock return.

[INSERT TABLE 3 ABOUT HERE]

The regression results on the relationship between foreign ownership and other firm attributes are presented next. Table 4 reports the results of regressions estimated using fixed effects analysis. The findings are as follows: The coefficients for firm size measure are positive and significant in all regressions, thereby confirming that firm size is a key determinate of foreign investor stock selection. Firm size tends to have the largest impact on the equity holding of foreign investors in Vietnamese firms. Size is a key firm characteristic associated with firm visibility and recognition in emerging stock markets. Larger firms are normally associated with wide media coverage, high frequency reporting and are the focus of analyst reports. Moreover, larger firms are more recognized internationally. In addition, foreign investors may prefer larger firms since these firms would have better governance and provide lower degrees of information asymmetry. This finding supports the hypothesis of Merton (1987), Kang & Stulz (1997) and Lin & Shiu (2003) that investors hold shares in familiar firms to overcome information asymmetries.

The results also suggest that foreign investors prefer to hold shares of firms with low leverage, implying a preference for investment in firms which adopt a more conservative financial management practice. Most of the coefficients for dividend yield are also positive and significant suggesting that foreign investors do not favor high dividend paying firms. This approach is consistent with a buy-and-hold strategy to better allow stock prices to adjust so they reflect their long-term growth prospects.

The coefficients for book-to-market variable are also positive and significant indicating that foreign investors prefer to invest in firms with high book value in comparison with market value. This again confirms the value investment preference style of foreign investors in Vietnam markets. Foreign investors do not like to invest in firms where stock price are high relative to accounting book value. This fact might relate to the fact that as an emerging market, Vietnam stock prices tend to depart from true value in the early stage of development. Unlike local investors, foreign investors do not follow the herd to invest in firms where stock price may become overvalued. Instead, we find that foreign investors are investing in firms with higher market risk where the coefficients for BETA are positive and significant in most of the regressions. This outcome supports the idea that foreign investors shift their stock portfolio toward high beta stocks for higher income to cover the cost of cross border investing.

The coefficients of the liquidity measure are negative and significant in most of the estimation, suggesting foreign investors do not show a preference for high liquid stocks. The result would also be consistent with a longer term buy and hold strategy, which reduces the need for frequent trading for price discovery. This outcome is different from the findings in other developed markets (Dahlquist & Robertsson 2001) thereby highlighting the differences in investment and trading style needed to overcome potential information asymmetries and

inefficiencies in price adjustment in emerging markets. This finding is consistent with the results of Amihud and Mendelson (1980) formalizing the important link between market microstructure and asset pricing. Our results confirm those previous studies that argue, in equilibrium, illiquid assets would be held by value seeking investors with longer investment horizons.

[INSERT TABLE 4 ABOUT HERE]

As a robustness test, Table 5 presents the regression results of the estimated model where the variables enter the regressions in a differenced form. These results are similar to the results presented in Table 4 and therefore validate the earlier findings.

[INSERT TABLE 5 ABOUT HERE]

Table 6 presents the results where a GMM estimator is employed. These results are again similar to the earlier results except the two insignificant variables are leverage and dividend yield. AR(1) and AR(2) tests confirm that the model is free from serial correlation. The Sargan/Hansen J test also suggests that there are no over-identifying restrictions in the instruments. The similar results obtained by different estimation techniques are consistent with the findings being robust to estimation methods.

[INSERT TABLE 6 ABOUT HERE]

6. Conclusion

This study investigates foreign ownership in Vietnam, during and after the Global Financial Crisis. The results suggest foreign investment preferences are linked to attempts to resolve problems due to asymmetric information. The findings indicate that foreign investors allocate a disproportionately high share of their funds to large firms, valued firms (high book-to-market ratio) and firms with a conservative financial management approach (low leverage and high current ratio). The data also reveals that foreign investors are long term

investors and adopt a buy and hold strategy to their investments. Extensions of this work could focus on how foreigners have performed relative to the general market, what determines foreigners' purchases and sales of shares, and how flows are related to returns.

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Table 1: Foreign Ownership (FOWN) in Vietnam

Year	2007	2008	2009	2010	2011	2012	Whole
Mean	0.1796	0.1573	0.1213	0.1126	0.1026	0.1191	0.14117
Median	0.1266	0.1096	0.0674	0.0504	0.0423	0.0474	0.08690
Maximum	0.4900	0.4900	0.4900	0.4900	0.4900	0.4900	0.49000
Minimum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00000
Std. Dev.	0.1623	0.1488	0.1301	0.1382	0.1327	0.1451	0.14584
Skewness	0.7499	0.8442	1.2100	1.3057	1.4890	1.3199	0.96442
Kurtosis	2.2451	2.5464	3.5418	3.5594	4.2625	3.5993	2.76642

Table 2: Descriptive Statistics of Attributes of Vietnamese Firms

	FOWN	SIZE	DIVY	BETA	BMAR	CURR	LEVR	TOVR
Mean	0.1412	11.7872	0.0424	0.8768	0.7858	2.4680	1.2059	0.0051
Median	0.0869	11.7046	0.0300	0.9423	0.6156	1.7089	0.8417	0.0035
Maximum	0.4900	13.4638	0.1875	2.1094	3.7982	19.4824	7.0212	0.0259
Minimum	0.0000	10.7160	0.0000	-2.9491	0.0393	0.1138	0.0319	0.0002
Std. Dev.	0.1458	0.6180	0.0386	0.3786	0.6082	2.4546	1.1804	0.0046
Skewness	0.9644	0.6287	1.1294	-4.9151	1.5031	3.7468	1.8931	1.6425
Kurtosis	2.7664	2.8039	4.0324	45.4671	5.7955	21.2130	7.0975	5.6978
Observations	708	708	708	708	708	708	708	708

Table 3 Correlation Matrix

	FOWN	SIZE	DIVY	BMAR	CURR	LEVR	BETA	TOVR
FOWN	1							
SIZE	0.449	1						
DIVY	0.046	-0.004	1					
BMAR	-0.207	-0.568	0.254	1				
CURR	0.091	0.098	0.055	-0.039	1			
LEVR	-0.227	-0.105	0.014	0.048	-0.336	1		
BETA	-0.062	0.137	-0.056	0.083	-0.040	0.065	1	
TOVR	-0.183	-0.123	-0.104	0.024	-0.015	0.025	0.550	1

Table 4 Regression Results for fixed effects estimator

	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic
C	-0.5599***	-2.6579	-0.5801***	-2.7613	-0.6660***	-3.1023	-0.6348***	-2.9573
SIZE	0.0258***	3.3670	0.0263***	3.4376	0.0289***	3.7203	0.0281***	3.6237
LEVR	-0.0080**	-2.1001	-0.0068*	-1.7752	-0.0059	-1.5144	-0.0080**	-2.0694
DIVY	0.0943***	3.9684	0.0931***	3.9316	0.0955***	4.0345	0.0931***	3.9228
BMAR	0.0103***	2.3180	0.0103***	2.3200	0.0123***	2.7000	0.0106**	2.2669
CURR			0.0030***	2.0880	0.0030**	2.0405		
BETA					0.0156*	1.8390	0.0233**	2.5291
TOVR							-1.2512**	-2.0060
R-squared	0.9395		0.9401		0.9405		0.9405	
Adjusted R-squared								
R-squared	0.9064		0.9071		0.9075		0.9075	
F-statistic	28.3760		28.4881		28.5367		28.5274	
Prob(F-statistic)	0.0000		0.0000		0.0000		0.0000	

Notes: *, **, *** denotes significance at the 10%, 5% and 1% respectively.

Table 5 Regression Results in differenced form

	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic
C	-0.0045*	-1.9170	-0.0044*	-1.8831	-0.0041*	-1.7313	-0.0056**	-2.4094
SIZE	0.0332***	4.3067	0.0332***	4.2938	0.0336***	4.3563	0.0350***	4.6265
LEVR	0.0041	1.1566	0.0042	1.1857	0.0045	1.2720	0.0033	0.9569
DIVY	0.0494***	2.5852	0.0496***	2.5909	0.0522***	2.7248	0.0365*	1.9124
BMAR	0.0137***	3.2942	0.0137***	3.2650	0.0148***	3.5105	0.0107**	2.5281
CURR			0.0005	0.3414	0.0004	0.2744	0.0001	0.0470
BETA					0.0124*	1.7339	0.0200***	2.7643
TOVR							-2.4340***	-4.4159
R-squared	0.0519		0.0522		0.0584		0.0973	
Adjusted R-squared	0.0436		0.0418		0.0460		0.0833	
F-statistic	6.2466		5.0109		4.6952		6.9742	
Prob(F-statistic)	0.0001		0.0002		0.0001		0.0000	

Notes: *, **, *** denotes significance at the 10%, 5% and 1% respectively.

Table 6 Regression Results of GMM estimation

	Coefficient	t-Statistic
FOWN(-1)	0.1601***	5.0045
SIZE	0.0257***	4.4979
LEVR	0.0049	1.3937
DIVY	0.0088	1.5364
BMAR	0.0056*	1.9242
CURR	0.0012**	2.6381
BETA	0.0165**	3.6350
TOVR	-0.7871***	-2.9740
AR(1)	-1.7309	
AR(2)	1.4492	
Sargan/Hansen J Statistics	49.5391	

Notes: *, **, *** denotes significance at the 10%, 5% and 1% respectively.

Foreign Ownership in Emerging Stock Markets

Highlights

Key firm characteristics are used to establish the extent that information asymmetry impacts the level of foreign ownership in Vietnam.

Foreign investors adopt a long term investment horizon and employ a buy and hold strategy to exploit potential growth prospects.

Firms with riskier financial management practices and where information asymmetries provide advantages to domestic investors are avoided

Financial market openness and transparency are therefore important institutional characteristics necessary to enhance and encourage international portfolio investment.