Does free float affect shareholder wealth? New evidence from the Stock Exchange of Thailand*

Associate Professor Dr. Pattaragit NETINIYOM*

Abstract

This research aims on the investigation on illiquidity stock characteristics in emerging market, the Stock Exchange of Thailand. The period to choose sample data are developed from the bootstrapping technique. The list of listed companies is ranked from their turnover ratio with totally 169 companies are selected. The OLS model could be threaten by autocorrelation so the TSLS is implemented for final prediction. The outcomes of the study is very impressive. For illiquidity stock, the shareholder wealth of illiquidity stocks depends on the investors' choice whether they prefer to today payment as the dividend yield or they could wait on wealth in future. The regulators could apply the results for their monitoring criteria of turnover ratio or promoting of more listed companies, e.g. stock analysis report issuance.

Key words: illiquidity stock, family control business, turnover ratio

1. Introduction

Funding is one of the main contributions for the success of the firm. One of the main objectives for the companies to go public is to create the shareholder wealth through initial public offering process (IPO). Thai listing companies mostly are under control by family shareholders (Suehiro and Wailerdsak, 2004). Thus, the controlling shareholders do not sell their own stake in order to make the confidence of their controlling power of the listed companies. These could lead to the lower free float ratio of the stocks. Free float is defined as the shares held by retail

investors or the total outstanding shares subtracts with restricted share, held by major shareholders. Normally major shareholders of the Stock Exchange of Thailand (SET) listed companies are related to the board members.

A company's free float is important to potential investors because it offers insight into the company's stock volatility. Stocks with small free float tend to be more volatile because there are only a limited number of shares that can be bought or sold in the event of major trading news. For the same reason, companies with larger free floats are generally less volatile which is preferable to the institutional investors.

In the normal situation, Thai listed firms must meet requirements relating to their distribution of minority shareholdings or free float. The Stock Exchange of Thailand (SET)'s Board of Governors (BoG)'s notification re: *Maintaining the status of listed companies on the Exchange (4ᵗʰ amendment), 2007*, requires the listed companies to have at least 150 minority shareholders, or when such shareholders hold not less than 15% of a company's paid-up capital, as shown on the shareholder list used for a company's annual general meeting of shareholders (AGM). If the companies do not satisfying with the requirement for two consecutive years, they will be charged additional fees until the situation is rectified. Additional fees are calculated based on the length of time in breach and the size of the shortfall in free-float.

Other ASEAN emerging markets also develop the same requirement of free float. For example, the Philippine Corporate Governance proposes for minimum free float of 10% but the survey of the Philippine listed companies in the first quarter 2013 is above 30% (Visto, 2013).

The Stock Exchange of Thailand defines free float as the remaining of strategic shareholders. The strategic holders are;

1. Directors, managers, and the top four executives subordinate to the managers, including any individuals in positions equivalent to the fourth-ranking executive, together with *related persons* - parents, spouses, siblings, children and children-in-law - and any juristic persons defined as related under Section 258 of the Securities and Exchange Act.

2. Shareholders holding more than 5% of paid-up capital, together with *related persons*. This provision excludes securities companies, life insurance companies, insurance companies, mutual funds, provident funds, pension funds, retirement funds or investment projects approved in accordance with the relevant law, unless there is a representative involved in management.

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3. Controlling persons and related persons. Controlling persons refers to shareholders or any individuals who, by their behavior, influence a company's policy processes, management or operation significantly. Regardless of whether such an influence is acquired by shareholding or authorized by contract or any other means. It is the main responsibility of audit committees to certify the related relationships that could lead to any indirect control on the company.

In the finance point of view, the maximization of shareholder wealth reflects on the effectiveness of financial function. Thus, the shareholder wealth is defined as the market capitalization.

In this paper, Tobin Q ratio or Q ratio is applied as the shareholder wealth index. The Q ratio is hypothesized that the combined market value of all the companies on the stock market should be about equal to their replacement costs (Tobin, 1958). The Q ratio is calculated as the market value of a company divided by the replacement value of the firm's assets as shown on equation

The study of the relationship between free float and shareholder wealth on the Stock Exchange of Thailand through the liquidity indication i.e. turnover list ratio could benefit to the policy implementation of minority shareholder and the measurement of market intervention of Thai regulation.

2. Research Objectives:

1. To investigate the free float of listed SET companies effects on the shareholder wealth.

2. To implicate the trading liquidity index i.e. turnover list ratio as the observation tools for the encouragement to new listed companies from families business.

3. Benefits and Contributions:

1. The guideline of free float effects on shareholder wealth could lead to the market regulator whether the minimum requirement of free float should increase or not. Moreover, the investor could apply the relationship between free float ratio and shareholder wealth on their investment decision as the value investors.

2．The limitation of security demand control through turnover list ratio needs to be proved. The relationship between shareholder wealth and liquidity index in Thailand has not been investigated.

4. Literature Review:

The study of the relationship between free float and shareholder wealth on the Stock Exchange of Thailand through the liquidity indication i.e. turnover list ratio is the new empirical study in Thailand. Actually, the study on free float effects on shareholder wealth is very limit as the financial theory e.g. Capital Asset Pricing Model (CAPM) based on the efficient market (McGuigan et. al., 2006).

Hamon, J. and Jacquillat, B. (1999) study on the relationship between size of the company and its stock return. They find that the smaller capitalization stocks on average outperform larger capitalization stocks over long periods of time. They introduces a new proxy for size i.e. free float. Evidence is presented of a negative link between historical returns and free float. They propose that liquidity premiums are estimated for portfolios from both a univariate and a multivariate perspective. Their results confirm the measurements of liquidity and liquidity premiums together with risk premiums are useful in active asset management.

Fenghua W. and Yexiao X. (2004) study on the three-factor model to A-shares in the Chinese equity market. Size was found to explain the cross-sectional differences in returns, but contrary to findings for the U.S. market, the book-to-market ratio was not helpful. As in the U.S. experience, beta did not account for return differences among individual stocks. Because of the speculative nature of Chinese capital markets, the large proportion of government-owned shares, and the low quality of the companies' accounting information, the free float was added to the study to serve as a proxy for company fundamentals.

Lim et. al. (2005) study the immediate price impact of a single trade executed in the Australian Stock Exchange (ASX). On the top 300 stocks on the ASX for their free float market capitalization, they find that higher cap stocks experiencing lower price impact than lower cap

stocks for the same traded volume. Moreover, there is the relationship between price impact and liquidity.

Rhee and Wang (2009) find that from January 2002 to August 2007, foreign institutions held almost 70% of the free-float value of the Indonesian equity market, or 41% of the total market capitalization. Over the same period, liquidity on the Jakarta Stock Exchange improved substantially. They find that foreign holdings have a negative impact on future liquidity with against that foreign institutions enhance liquidity in small emerging markets. Their findings are consistent with the negative liquidity impact of institutional investor ownership in developed markets.

Lam et. Al. (2011) find that the switch to free-float weighting in the S&P 500 Index shows the effect of the availability of shares on liquidity in the medium term while the differences in liquidity and price impact measures that gradually narrowed following each phase of the free float adjustment.

Chai et. al. (2010) examine two empirical issues regarding stock liquidity: (1) to what degree are different liquidity proxies correlated and (2) how different liquidity proxies are related to stocks' trading characteristics. Using data from the Australian equity market, their results confirm prior research that stocks' trading characteristics are important determinants of liquidity. Though the relationships are generally consistent with expectations, some proxies do react differently to certain trading characteristics. This finding is consistent with the contention that liquidity is a multifaceted concept and each alternative proxy may only capture a certain aspect of liquidity.

Generally, the market liquidity indexes are (1) turnover value (2) illiquidity ratio (3) adjusted zero return measure (4) illiquidity ratio (5) return reversal measure (6) Liu's measure or turnover adjusted number of zero daily volumes and (7) index of liquidity. The details of each measurement are as follows:

1. Turnover value is the trading value under the observed period which calculating on equation 4.1.

$$Turnover_t = (\frac{V_t}{Market\ Cap_t}) \dots\dots\dots\dots\dots\dots\dots\dots Equation\ 4.1$$

V_t　　　　　　　The trading value in the tth month

$Market\ Cap_t$　　　Market capitalization in the tth month

2. Illiquidity ratio is proposed by Amihud (2002) which calculates the absolute daily return to daily trading value as equation 4.2.

$$Amihud_t = \frac{1}{D_t}\sum_{d=1}^{D_{i,t}} lr_{d,t}l\ V_{d,t}$$ ....Equation 4.2

D_t　　　　　　The number of trading day in the tth month

$r_{d,t}$　　　　　The market return on the dth day in the tth month

$V_{d,t}$　　　　　The trading value on the dth day in the tth month

3. Adjusted zero return measure is the ratio between the days that have absolute daily return less than 0.15% and total observed days. This liquidity ratio is based on the assumption that high liquidity would lead to the less volatility as the investors be aware of commission and other trading costs. The adjusted zero return shows on equation 4.3.

$$LT_t = \frac{adjusted\ zero\ return_t}{Trading\ day_t}$$ ....Equation 4.3

$adjusted\ zero\ return_t$　The number of trading days that have absolute return less than 0.15%

$Trading\ day_t$　　　The total trading days in the tth month

4. Illiquidity ratio is developed on Amihud (2002) on the assumption that small trading value should not effect on price volatility. The illiquidity ratio is as equation 4.4.

$$LT_t = \frac{adjusted\ zero\ return_t}{Trading\ day_t}$$ ....Equation 4.4

$adjusted\ zero\ return_t$　The number of trading days that have absolute return less than 0.15%

$Trading\ day_t$　　　The total trading days in the tth month

5. Return reversal measure is proposed by Pastor and Stambaugh (2003). The model demonstrates the effects of trading value on asset price. They define liquidity as the resistant degree of price change when there are more trading volume. The model shows on equation 4.5.

$$r_{t+1}^e = \gamma_0 + \gamma_1 r_{t+1} + \lambda[sign(r_t^e)xV_t] + \varepsilon_t \ldots\ldots\ldots\text{Equation 4.5}$$

r_{t+1} The expect return in the tth month

r_t^e The excess return in the tth month weighted by trading value.

V_t The trading value on the dth day in the tth month

6. Liu's measure or turnover adjusted number of zero daily volumes is presented by Liu. (2006). Liu applies the CAPM and the Fama–French three-factor model, describing the liquidity premium, subsuming documented anomalies associated with size, long-term contrarian investment, and fundamental (cash flow, earnings, and dividend) to price ratios. The adjusted zero return measure through the deflator as describe on equation 4.6.

$$LM_t = \left[NoLV_t + \frac{1/turnover_t}{Deflator}\right] x \ \frac{21}{NoTD_t} \ldots\ldots\ldots\text{Equation 4.6.}$$

NoL Number of the days that the market index change is not greater than 0.15%.

V_t The turnover volume of the market in the tth month.

           The total trading day in the tth month.

Deflator   The adjustment factor for 1/turnover$_t$ which values 0 to 1.

7. Index of liquidity is published on Chai et. Al (2010). Chai et. al. revise illiquidity index to be liquidity index through the standardized process as the equation 4.7.

$$IOL_t = \sum \frac{Liquidity\ ratio_{i,t} - \overline{Liquidity\ ratio_i}}{\sigma_i} \ldots\ldots\ldots\text{Equation 4.7}$$

$Liquidity\ ratio$ The combination of liquidity index i.e. Turnover Ratio, Amihud, Liu, Illiquidity Ratio in the tth month.

$\overline{Liquidity\ ratio_i}$ The average of combination liquidity index.

σ_i The standard deviation of liquidity index.

In this paper, the market liquidity measurement is applied on turnover list ratio as the Securities Exchange Committee (SEC) already has monitored the market by this index.

5. Variable and Model Development:

In this paper, Tobin Q ratio or Q ratio is applied as the shareholder wealth index. The Q ratio is hypothesized that the combined market value of all the companies on the stock market should be about equal to their replacement costs (Tobin, 1958). The Q ratio is calculated as the market value of a company divided by the replacement value of the firm's assets as shown on equation

Mackie Mason (1988) study on tax effects on asset values and investment decision and find that non debt tax shield e.g. the amount of tax carry forward or tax exemption significantly effects on the level of debt usage. Thus, the non-debt tax shield level (NDT variable) could effect on the valuation of the firm.

The optimal debt level leads to the higher stock price. The LEV variable defines as the ratio of total debt to total asset. The expectation on its relationship with TOBINQ is positive as Modigliani and Miller (1958, 1963) propose when firms must pay tax, the valuation of firms would increase from the borrowing.

To develop the relationship among the variables, this paper reviews the study on the "family business" proposed by Claessens et. al. (2000) for the important roles of family firms in East Asian region. The common characteristics of family business and illiquid stocks, the sample data, is the low turnover ratio (Anderson and Reeb, 2003). The previous studies recommend the relationship between corporate governance characteristic, size, dividend yield and valuation of the firms (Daily and Dollinger, 1991; Gallo, 1995). The determination of shareholder wealth is measured by TOBINQ with ROA or ROE (Goopers et. al., 2010; Lee, 2006; Zellweger and Nason, 2008).

In summary, the sample data is illiquidity stocks that relate to the companies under the limited number of families controlling. These sample are observed their characteristics through turnover ratio (TUR).

6. Research Framework and Methodology:

In this paper, there are two main investigation; (1) the free float effects on the shareholder wealth of listed SET companies and (2) the trading liquidity index i.e. turnover list ratio and its effects on the shareholder wealth. Thus, the sample data are listed SET companies and the study period is from 2011 to 2014 with the quarterly data.

The research methodology mainly deals with structural models as two equation models are applied. The special relationship of the variable – exogenous variable with its determination from outsides equation is observed. In this paper, exogenous variable is predetermined type not strictly category with the implication of Hausman test. The consideration of order condition and rank condition is recognized under the matrix form to limit the unidentified and over identified. The inferential statistics would apply the reduced form equations and save the residuals to create series of fitted values by constructing new variables which are equal to the actual values minus the residuals.

In summary the models of this research are as follows;

$$\boldsymbol{Tobin\ Q} = a_0 + a_1 DY + a_2 ROA + a_3 LEV + a_4 NDT \text{ --------------------- Equation 6.1}$$

$$ROE = b_0 + b_1 TUR + b_2 \boldsymbol{TobinQ} + b_3 SIZE + b_4 CG + b_5 DY \text{ ------------- Equation 6.2}$$

Where:

- Tobin Q is the ratio between the summation market capitalization and its total outstanding debt divided by total asset.
- Dividend yield (DY) is the ratio of total dividend paid-out within past 12 months and quarterly price.
- Leverage ratio (LEV) is the ratio of total debt to total asset.
- Non debt tax shield (NDT) is the ratio of depreciation and amortization divided by total asset.

- Return on equity (ROE) is the ratio of net profit and total equity.

- Return on asset (ROA) is the ratio of net profit and total asset.

- Turnover ratio (TUR) is the ratio of average weekly trading value and average market capitalization on free float computing as follows;

$$Turnover\ Ratio = \frac{Average\ weekly\ trading\ value\ x\ 100}{Free\ Float\ Ratio\ x\ Average\ Weekly\ Market\ Capitaliztion}$$ while

$$Free\ Float\ (FF) = \frac{Total\ paid-up\ capital - Total\ stocks\ under\ strategic\ shareholder\ x\ 100}{Total\ shares}$$

- Size is the natural logarithm of total tangible asset.

- Corporate governance (CG) is the score of corporate governance evaluation conducted by Thai Institute of director association (IOD).The total score is 5 consisting of 204 evaluation category.

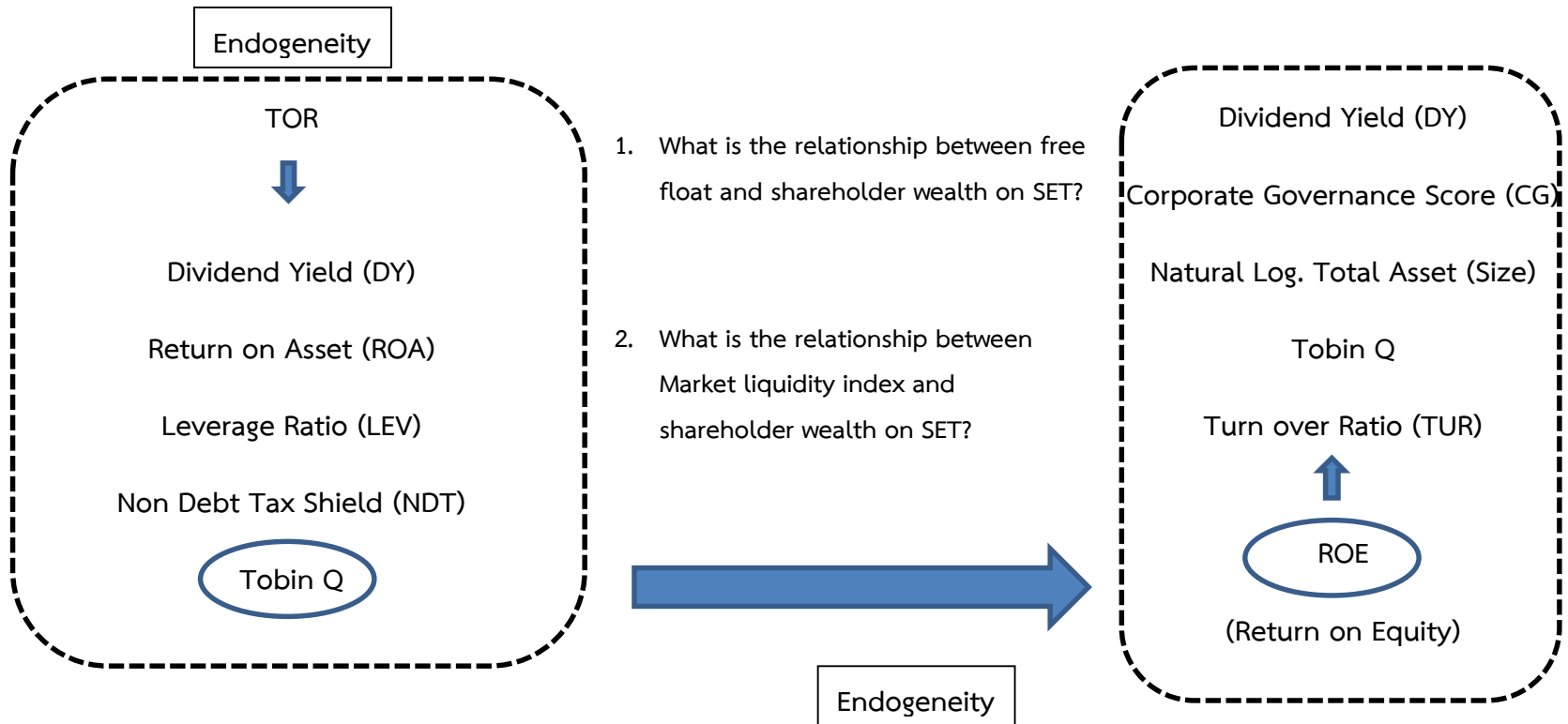The conceptual model of this study is proposed as the figure 6.1.

Figure 6.1 Research conceptual model

7. Data selection and study period:

To concentrate on the free float effect on the shareholder wealth, the study set the sample data on "low free float listed companies". The observation bases on the period of year 2011 and 2012 as shown on figure 7.1. The implication of bootstrapping technique on SET index during this period return nearly 0% return so the classification on this period assumes to be stable. The SET index is significant increase after that. Thus, the uptrend of the SET index could control the effects of free float ratio to be more illuminated.

Figure 7.1 SET index movement and period of screening

Figure 7.2 summarizes the sample set derived from SET listed companies. The total listed companies on SET from 2011 to 2012 is 953 companies. With the period of screening 107 weeks, the floating score is set up 3 levels; (1) free float ratio less than 25% is 10 points (2) free float between 25% to 30% is 5 points and (3) free float ratio greater than 30% is 0 point. The total floating score ranks from maximum to minimum with the highest 150 companies is the sample set. However, the equal score of the sample set results 187 companies needed to delete on 18 delisted companies. The final sample set of this study is 169 companies.

Population from 2011 to 2012

- List companies on SET : 953
- Period of Observation: 107 weeks

Data Screen by
Free Float Factor

Ranking Criteria to Sample List by Score Ranking

- Free Float Ratio   ≤ 25% = 10 points
- Free Float Ratio   25.01% - 30% = 5 points
- Free Float Ratio   > 30% = 0 point

List Companies 187 Companies

- Delist 18 Companies
- Delist Code : NPG
- *SPSU, ICBCT, SICCO, MGR , PTTAR , PTTCH (2011)*
- *BLS,UST, PYT, PHATRA (2012)*
- *PPC (2013)*
- *TCP, SECC, VGM, ITV, CAWOW, DTM, PICNI (2014)*

Sample Output

Final Sample List

Sample List 169 Companies

- Service 40 companies
- Industrial goods 36 companies
- Property and Construction 26 co.
- Consumer Goods   25 companies
- Agriculture and Food Industry 22 co.
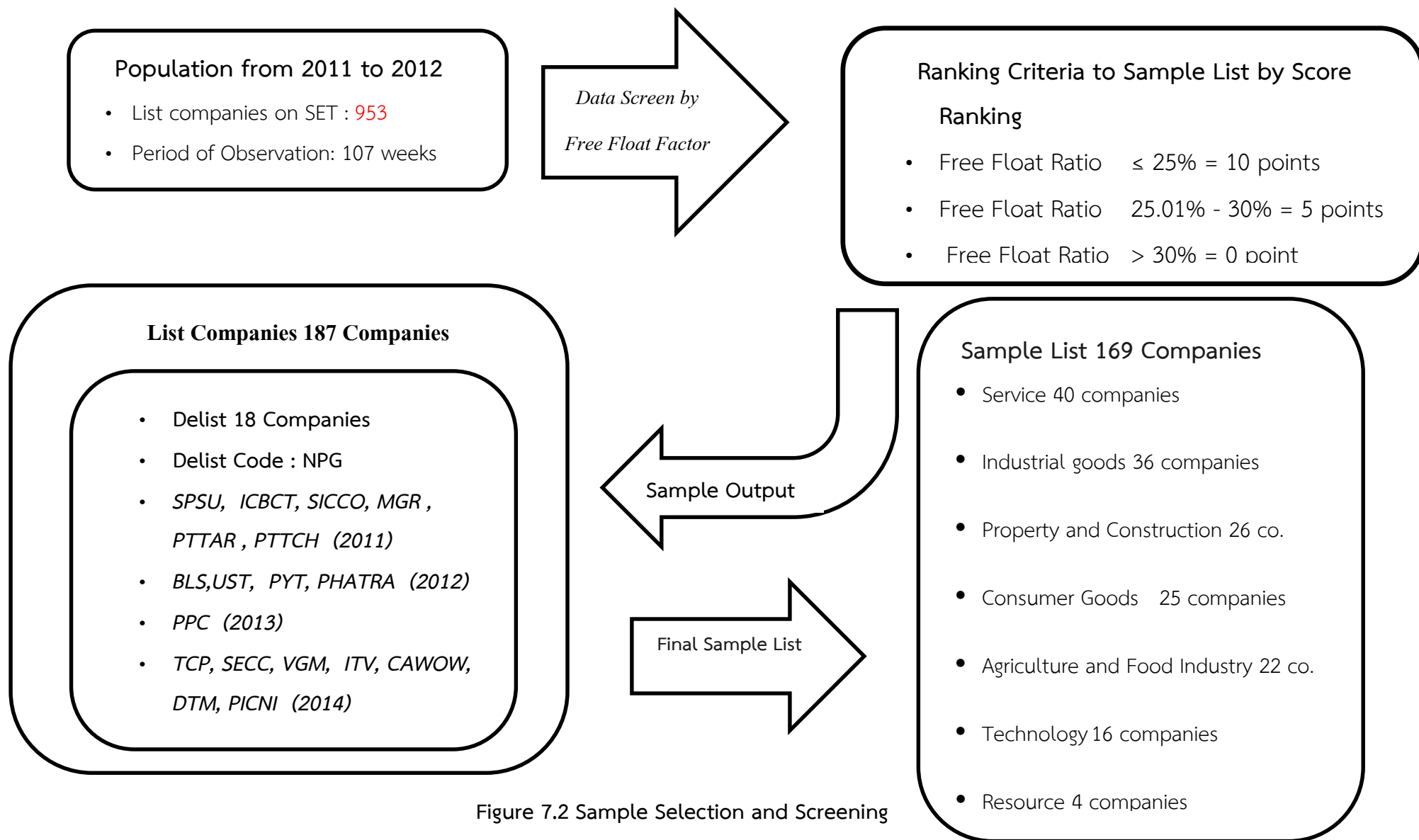- Technology 16 companies
- Resource 4 companies

Figure 7.2 Sample Selection and Screening

After the sample data have been set, the study period has been implemented from 2011 to 2014. The quarterly data from financial statement of the observations are collected to analyse.

8. Research Outcomes:

The descriptive statistics of the sample data is summarized on Table 8.1. The global view of the sample reveals that the low liquidity stocks have high dividend yield at 4.16% comparing with average 12 month fixed deposit rate of only 2%. The corporate governance score is also impressive with average of 3.54 from 5. The leverage ratio implies that these stocks is conservative with average ratio at 1.12. Return on asset and return on equity are average above 7.5% while average ROA and ROE of total SET is only 4% (SET Fact Sheet, 2013).

The equation 6.1 and 6.2 have been test for the asymptotic of the model as follows;

1. Test of stationarity through Maddala - Wu Test for unbalanced panel reveals that the sample data is stationarity as the H_0 is rejected with the p-value from Chi-square of Dickey-Fuller test is less than 0.01.

2. Multicollinearity test as shown on Table 8.2 shows that there are no any simple correlation coefficients between the variables is greater than 0.8 (Harvey, 1990)

3. The heteroskedasticity test for model residual (i_ε) for the unbiased predictor, consistency and efficiency of the model through White's heteroskedasticity test finds that the p values of F-statistics have the figure less than 0.05.

4. The test for autocorrelation for the evaluation of covariance [Cov (i_ε, j_ε)=Σ (i_ε , j_ε)=0 for all $i \neq j$]. The DW statistic of the model shows some concern of positive autocorrelation; however, Harvey (1990) suggest that minor positive autocorrelation is normal symptom for the financial data research.

Table 8.1 Summary of the sample characteristics

Items	CG	DY	LEV	NDT	ROA	ROE	SIZE	TUR	TOBINQ
Max.	5.0000	21.7602	28.6698	0.208	66.3101	184.3000	7.8014	536.8400	13071.280
Avg.	3.5392	4.1616	1.12427	0.0108	7.5885	8.90682	5.8887	20.7421	1109.5721
Min.	3.0000	0.1100	-4.3722	0.000	-79.4301	-280.7607	3.9572	0.0100	19.4000
S.D.	0.6380	2.7040	2.4421	0.015	11.6710	24.0231	0.6291	52.6666	1179.7361
Total Observation	590	590	590	590	590	590	590	590	590

Tobin Q is the ratio between the summation market capitalization and its total outstanding debt divided by total asset.; **DY** is the ratio of total dividend paid-out within past 12 months and quarterly price.; **LEV** is the ratio of total debt to total asset.; **NDT** is the ratio of depreciation and amortization divided by total asset.; **ROE** is the ratio of net profit and total equity.; **ROA** is the ratio of net profit and total asset.; **TUR** is the ratio of average weekly trading value and average market capitalization on free float.; **Size** is the natural logarithm of total tangible asset.; **CG** is the score of corporate governance evaluation conducted by IOD.

Table 8.2 Correlation matrix summary

Between	TOBINQ	DY	LEV	NDT	ROA	CG	TUR	SIZE
TOBINQ	1.0000	-0.1296	-0.1996	0.2798	0.6742	0.0666	0.0845	0.1109
DY	-0.1296	1.0000	-0.1095	0.1044	0.2111	-0.0247	-0.1862	-0.1349
LEV	-0.1996	-0.1095	1.0000	-0.2138	-0.2213	0.1880	0.1567	0.4144
NDT	0.2798	0.1044	-0.2138	1.0000	0.1660	-0.0770	-0.1330	0.0529
ROA	0.6742	0.2111	-0.2213	0.1660	1.0000	0.0827	0.0477	0.0704
CG	0.0666	-0.0247	0.1880	-0.0770	0.0827	1.0000	0.0251	0.4555
TUR	0.0845	-0.1862	0.1567	-0.1330	0.0477	0.0251	1.0000	-0.0007
SIZE	0.1109	-0.1349	0.4144	0.0529	0.0704	0.4555	-0.0007	1.0000

Tobin Q is the ratio between the summation market capitalization and its total outstanding debt divided by total asset.; **DY** is the ratio of total dividend paid-out within past 12 months and quarterly price.; **LEV** is the ratio of total debt to total asset. **NDT** is the ratio of depreciation and amortization divided by total asset.; **ROE** is the ratio of net profit and total equity.; **ROA** is the ratio of net profit and total asset.; **TUR** is the ratio of average weekly trading value and average market capitalization on free float.; **Size** is the natural logarithm of total tangible asset.; **CG** is the score of corporate governance evaluation conducted by IOD

The correlation between variables is less than 0.8 with highest figure of 0.6742 but ROA is the independent variable while Tobin Q is exogenous variable.

Table 8.3 and Table 8.4 show the outcomes of OLS analysis for equation 6.1 and 6.2.

Table 8.3 Outcomes of OLS analysis on Tobin Q

Dependent Variable: TOBINQ
Method: Least Squares
Date: 07/14/15   Time: 21:00
Sample (adjusted): 2 583
Included observations: 463 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	202.0086	89.21580	2.264269	0.0240
DY	-110.0669	15.35347	-7.168861	0.0000
ROA	101.9831	5.337449	19.10709	0.0000
LEV	115.1645	29.89789	3.851927	0.0001
NDT	33108.55	5067.690	6.533262	0.0000

R-squared	0.542832	Mean dependent var	1255.380
Adjusted R-squared	0.538839	S.D. dependent var	1304.648
S.E. of regression	885.9707	Akaike info criterion	16.42199
Sum squared resid	3.60E+08	Schwarz criterion	16.46667
Log likelihood	-3796.690	Hannan-Quinn criter.	16.43958
F-statistic	135.9550	Durbin-Watson stat	1.408167
Prob(F-statistic)	0.000000		

Tobin Q is the ratio between the summation market capitalization and its total outstanding debt divided by total asset.; **DY** is the ratio of total dividend paid-out within past 12 months and quarterly price.; **ROA** is the ratio of net profit and total asset.; **LEV** is the ratio of total debt to total asset.; **NDT** is the ratio of depreciation and amortization divided by total asset.

The outcomes of OLS analysis on Tobin Q shown on Table 8.3 with the adjusted R square 53.88%. All independent variables are significant with p-value less than 0.01. From the model, the valuation of shareholders could benefit from return on asset (ROA), leverage level (LEV) and tax shield benefit (NDT) but not dividend yield (DY).

Table 8.4 Outcomes of OLS analysis on ROE

Dependent Variable: ROE
Method: Least Squares
Date: 07/14/15   Time: 21:01
Sample (adjusted): 22 583
Included observations: 252 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-31.17990	5.711124	-5.459503	0.0000
TUR	0.075570	0.012456	6.066997	0.0000
TOBINQ	0.005996	0.000418	14.34235	0.0000
SIZE	3.467002	1.036527	3.344826	0.0010
CG	2.532983	1.014233	2.497436	0.0132
DY	1.686431	0.199294	8.462014	0.0000

R-squared	0.688335	Mean dependent var		15.96687
Adjusted R-squared	0.682000	S.D. dependent var		16.34532
S.E. of regression	9.217370	Akaike info criterion		7.303578
Sum squared resid	20900.14	Schwarz criterion		7.387612
Log likelihood	-914.2508	Hannan-Quinn criter.		7.337392
F-statistic	108.6616	Durbin-Watson stat		1.555938
Prob(F-statistic)	0.000000			

ROE is the ratio of net profit and total equity.; TUR is the ratio of average weekly trading value and average market capitalization on free float.; Tobin Q is the ratio between the summation market capitalization and its total outstanding debt divided by total asset.; Size is the natural logarithm of total tangible asset.; CG is the score of corporate governance evaluation conducted by IOD.; DY is the ratio of total dividend paid-out within past 12 months and quarterly price.

The outcomes of OLS analysis on ROE shown on Table 8.4 with the adjusted R square 68.20%. All independent variables are significant with p-value less than 0.05. From the   model, the valuation of shareholders could benefit from turnover ratio (TUR), market capitalization of equity and debt (Tobin Q), total asset (SIZE), corporate governance (CG) and dividend yield (DY).

Thus, the outcomes from Table 8.3 and Table 8.4 lead to the prediction model of equation 8.1 and 8.2 as follows;

$$Tobin\,Q = 202.01 - 110.07\,DY + 101.98\,ROA + 115.16\,LEV + 33108.55\,NDT \text{------------- Equation 8.1}$$

$$ROE = -31.17 + 0.076\,TUR + 0.006\,TobinQ + 3.467\,SIZE + 2.53\,CG + 1.68\,DY \text{------------- Equation 8.2}$$

To carefully consider the relationship among endogenous and exogenous variables, the two stage least square method is applied. The order condition for the models is satisfied due to more than 6 variables usage (Tsai and Gu, 2007). For the rank condition, Tsai and Gu (2007, p.3) propose that, *"In the rank condition, the first equation in two equation simultaneous system is identified if, and only if, the second equation includes at least one exogenous variable excluded from the first equation and the coefficient of the excluded exogenous variable has a nonzero coefficient."* In this paper, the Durbin-Wu-Hausman test is conducted with the result of p-value less than 5%.

The test of two stage least square (TSLS) get the results as shown on Table 8.5.

Table 8.5 Outcomes of TSLS analysis on Tobin Q

Dependent Variable: TOBINQ
Method: Two-Stage Least Squares
Date: 07/14/15   Time: 21:02
Sample (adjusted): 22 583
Included observations: 252 after adjustments
Instrument specification: DY ROA LEV NDT TUR SIZE CG
Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	682.1467	118.4187	5.760466	0.0000
DY	-125.0260	24.29725	-5.145682	0.0000
ROE	80.70107	4.630474	17.42825	0.0000

R-squared	0.527034	Mean dependent var	1457.329
Adjusted R-squared	0.523235	S.D. dependent var	1516.934
S.E. of regression	1047.415	Sum squared resid	2.73E+08
F-statistic	153.4718	Durbin-Watson stat	1.055638
Prob(F-statistic)	0.000000	Second-Stage SSR	2.41E+08
J-statistic	42.56501	Instrument rank	8
Prob(J-statistic)	0.000000		

Tobin Q is the ratio between the summation market capitalization and its total outstanding debt divided by total asset. **DY** is the ratio of total dividend paid-out within past 12 months and quarterly price. **ROE** is the ratio of net profit and total equity.

The final equation of the study on free float effect on shareholder wealth is on equation 8.3.

$$Tobin\ Q = 682.15 + 80.70\ ROE - 125.03\ DY \quad \text{.....................} \text{Equation 8.3}$$

The final outcome of this study is very impressive. The shareholder wealth of illiquidity stocks depends on the investors' choice whether they prefer to today payment as the dividend yield or they could wait on wealth in future.

9. Discussion and Conclusion:

This study propose the investigation whether free float of listed SET companies effects on the shareholder wealth by developing the new sample group. These listed companies are mainly control by few families as the majority shareholders leading to the low free float. The descriptive statistics reveal that the return of holding these stocks is impressive by their dividend payment.

In the past few years, the Securities Exchange Commission (SEC) has employed the turnover list ratio as one of her monitoring tool. This practice has been canceled from July 2015. Actually, the liquidity of the stocks is the fundamental required by institutional investors but the structure of Thai companies still relies on family business. With the promoting of more listed companies, the regulator should encourage the low free float securities e.g. stock analysis report issuance. The higher PE ratio would make the listing process is more lucrative and the SET market capitalization would be higher.

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