Governance, Firm Internationalization, and Stock Liquidity Among Selected Emerging Economies from Asia*

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Abstract

The study is conducted to find out the impact of the country- and corporate-level governance and firm internationalization on stock liquidity of 120 listed firms in Japan, Hong Kong, Pakistan, and India. Panel data is used in the current study. The annual time span covered in the current study is 10 years. The current study explores results based on secondary data. The findings of the 'robust panel corrected standard error' estimator shows that the internationalization strategy of firms positively influences the stock liquidity. The internationalization strategy of multinational corporations proves to be an effective methodology for improving stock liquidity in the home market as well as abroad. The study also shows that a stronger relationship exists between stock liquidity and internationalization in those countries where the regulatory settings are effective, the judiciary system is efficient and shareholders' rights are protected. Corporate governance and stock liquidity are negatively associated. The study also finds a negative relationship between country-level governance mechanisms and stock liquidity. Whereas the 'robust panel corrected error' estimator shows a positive association between corporate governance mechanisms and firm internationalization. The study depicts that effective corporate governance motivates multinational companies to expand their business abroad.

Keywords: Firm-Level Governance, Country-Level Governance, Firm Internationalization, Stock Liquidity

JEL Classification Code: G34, M38, F23, G12

1. Introduction

The objective of the study is to examine the impact of corporate level governance, country level governance and firm internationalization on stock liquidity. Liquidity of stock persists to be a famous research area in the market micro-structure literature, since the current financial crisis around the globe (Ali et al., 2016). Efficient markets demand liquidity so that securities holders' may easily exchange any amount of a security without adversely distressing the price of security. Stock liquidity is essential for investors, owners, shareholders and for corporations, so it is very crucial to explore the background of stock liquidity. The market with effective corporate governance proves to be the successful. The systematic and planned markets pull more investing players and maximized transactions thus maximizing liquidity. Corporate governance has limited and broad sense definitions. It covers the laws and regulation concerning to the level of relations between shareholders, the board of directors, administration, staff, management and other interested stakeholders (Murthy, 2003). More recently, Chung et al. (2010) emphasized on firm level governance as a tool to improve firm stock liquidity. In fact, such instruments minimize problematic situation of asymmetry information between or among various categories of shareholders and as a result improve firm stock liquidity (Chen et al., 2007).

To determine stock liquidity, the conventional studies stress the essential role of insider corporate

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governance quality. Chung et al. (2010) discover that the better firm level governance increase the stock liquidity in United States. However numerous studies are also conducted to find the link between the external firm governance quality and the liquidity of stock in context of cross countries' regulatory setting and legality.

Bacidore et al. (2002) also found that corporations which are listed in U.S New York Stock Exchange and based in United Stated have a higher stock liquidity, conversely those based in outside the United States. In addition, Brockman et al. (2003) argued that corporations listed on Stock Exchange of Hong Kong have tighter spread and higher depth than the companies listed in mainline China. This prove that poor system of shareholder's protection rights leads low level of stock liquidity. Eleswarapu et al. (2006) proved that firms of those countries that have effective judicial system and sound political stability show more stock liquidity. The regulatory system also affects corporate values and thus the liquidity.

The corporations from developing economies which go for internationalization issue depository receipts cross listing or even raise capital at international level on the bases of liquidity of corporations in the home stock market. Domowitz et al. (1998) hold that internationalization may actually stimulate domestic trading of international firms due to the increased integration of markets.

The study derives its motives for the followings reasons. First, the existing literature provides evidence from developed economies of the world like U.S. and Canada, where the degree of the firm stock liquidity is high, effective financial reporting system, investors and shareholders are efficiently protected, regulatory settings and judicial system is efficient, stocks markets are well developed with the variety of institutional characteristics, ownership is highly detached and there is no or minimum expropriation risk. Similarly, stock prices are greatly influenced by policy uncertainty depending upon the size of economy (Khan, Ahmed, et al., 2020). But in case of developing economies like Pakistan, India, Japan and Hong Kong the stock markets are not well planned and protected, low level of liquidity, regulatory setting and institutional characteristics needed to be developed and judicial system demand more attention. So an up to date research should be conducted in case of developing economies' structure to know better the link between governance and stock liquidity. Second the existing studies focus on country specific results, for example, Ahmed et al. (2017) conducted research in Australian market based to examine the effect of country and corporate level governance on stock liquidity however, Cross country facts are necessary to better know the link between stock liquidity and governance indicators. That is why the current study primarily focus on cross country facts by considering the diverse characteristics of country regulations. Barreiro et al. (2009) argued that when there

is no government's guarantee to minor's shareholders then agency conflict exists between minor and major shareholders in an organization.

Third internationalization has proved to be the effective methodology for organization in the economies of emerging markets to gain and to explore wide range of opportunities worldwide and to shape their competitive benefits (Guillén et al., 2009). However, our understanding of the performance implications of the internationalization strategies undertaken by firms in emerging economies remains in its infancy. Study on firm internationalization has widely been limited. This represents a gap in internationalization research.

In current study we, therefore purpose to answer four key questions: 1. How does firm level governance affect stock liquidity? 2. What is the influence of country level governance on stock liquidity? 3. What is the influence of firm level governance on internationalization? 4. How does firm internationalization affect stock liquidity?

To our best of knowledge no research was carried in Asian firm prospective, our study will find out new cross country evidence from Pakistan, India, Japan and Hong Kong, where the regulatory settings and investors shareholders protection rights are poor and also high degree of information asymmetry problems due to poor stock markets and lack of information disclosures. Previous studies focused on only principle component analysis of the corporate and country governance for example Porta et al. (1998) use country level governance index and Javid et al. (2010) use corporate governance index to describe the effect of these variables on stock liquidity, whereas individual indicator of governance has also significant impact on stock liquidity which is being studied and will reveals new insight on stock liquidity. Moreover, less research has been conducted on this area. In the context of internationalization our study provides significant managerial tools for both developing and emerging economy corporations, and specifically internationalizing corporations from Pakistan, China, Japan and Hong Kong. First the study provides essential clue to a mystery facing managers of internationalizing firms in these markets cited above, whether the internationalization is the right choice.

The objectives of our study is to explore the influence of firm level governance and country level governance on stock liquidity. And to explore the effect of corporate governance on internationalization. The remaining portion is organized as follows. Section 2 represents the relationship between corporate and country level governance and stock liquidity and the association between firm internationalization and stock liquidity. Section 3 is utilized to show the measures of explanatory and interested variable empirical setup. Next section describes the sample and control variables and provides descriptive statistics and empirical results. Section 5 finally concludes.

2. Literature Review

2.1. Firm Level Governance and Liquidity

Amihud et al. (2006) argue that investors take guidance and information about the liquidity of security and its trading and then they decide whether to invest or not, because it boots the early performance of orders and to convert into cash. The concept of liquidity has been described by various authors differently in their articles. The basic and the most important concept of liquidity is given by Kyle (1985), he points out that "market liquidity is a slippery and elusive concept, in part because it encompasses a number of transactional properties of markets. These include tightness, depth, and resiliency." The concept of Tightness explains the transactional cost; transactional cost includes the bid and asks spread cost. Market depth is a situation of the market absorption a huge quantity of business dealings without large effect on price. The degree to which assets can be converted into cash resources without losing much value (Al-Qudah, 2020).

2.2. Board of Director's Size and Liquidity

Corporate governance is composed of owners and managers in a company. Managers of the organization hold more psychical and relevant information about the future performance picture of the organization (Watts et al., 1990). Kubota et al. (2010) pointed out that problematic situation of asymmetric information occurs when managers have a better informative tool than other stakeholders in the group.

Beekes et al. (2015) proved that the firms with better firm governance have more informative confession to the owners of the organizations. So, the effective and capable governance mechanisms should decrease information asymmetric problems and maximize stock liquidity. The board is one of the essential elements of internal firm governance that lessens agency conflicts into the organization. It presents for providing controlling tools to protect owner's interests (Fama et al., 1983). The indicators which regulate the effect of the size of the board on stock liquidity are commonly the elements referred to the leader monitoring and to the quality of the procedure of making decision. According to agency theory, if the size of the board is large it favors the governance of the leader by floating alliances and conflicts of group. This leads in disjointed boards that have trouble working efficiently and reaching agreement on making decisions. In this framework, (Jensen, 1993) suggests small size. So according to existing literature work the board size and decision usefulness and liquidity is negative, meaning smaller board size improve qualitative decision making and thus increase stock liquidity.

H1: Board size has significant and negative impact on stock liquidity.

2.3. Board of Directors Independence and Liquidity

There is a much debate in the existing literature about independence of directors in corporate governance of the enterprises. It is supposed that the independence of the directors and its effectiveness are linked (Fama et al., 1983). The tool by which an expectation toward board to affect corporate governance, agency theory guides us that the maximum portion of the independent directors will be capable of monitoring the actions of self-interested behavior of the managers.

Internal board of directors also affects company value through various dimensions. The internal proportion on the board to discover links with performance of corporate is focused by the stewardship theory. In this regard one expectation is that the larger the proportion of insiders greater the performance of the firm as insider's directors can easily get updated information, decision-making and influence of their presence in the internal management of the firm.

The rooting theory argues that independence directors do not hold enough power and opportunity to minimize the problem of asymmetric information. In this framework, Fama (1980) and Fama et al. (1983) reported that the most powerful directors are the internal members, as they have lawful and precise information concerning the activity of the corporation. Kanagaretnam et al. (2007) find that board independence is negatively related to asymmetric information and thus the stock liquidity.

H2: Board independence is negatively associated with stock liquidity

2.4. Frequency of Board Meetings and Liquidity

In order to keep the communication channel of organization efficient and effective the board must conduct regular periodic meetings so that the board members and management team can change their views. The formation of timely and effective plan of meetings of board of directors and the disclosures of reports and financial statement give self-assurance to various stakeholders and minimize the level of asymmetry of information between or among them. The meetings of the board are the source of provision of signals into the market and consequently raise the expectation of owners and investors and maximize the level of market trading (Cappellari et al., 2002). Foo et al. (2010) find positive association between board meetings and stock liquidity. The presence of the board members in the meetings is an

essential factor for the improvement of the quality. Thus more the frequent meetings, more will be the information sharing and trading volume enhance stock liquidity. Corporate governance improves stock liquidity and thus the firm performance (Tahir et al., 2020).

H3: Board meetings is significantly and positively nexus with stock liquidity.

2.5. Country-Level Governance and Liquidity

Country-level variables, for example, monetary policy, fiscal policy, tax regulations, political situation, exchange rate, inflation, and basic infrastructure of the country also have an impact on firm liquidity (Islam et al., 2020). The political framework of every country affects stock liquidity. Regulatory settings are considerably diverse from one country to another and the differences lead to different firm behavior across capital markets (Clayman et al., 2012).

H4: Country-level governance variables with strong judicial and regulatory settings are significantly and positively associated with stock liquidity.

2.6. Corporate Governance Firm Internationalization and Stock Liquidity

Corporate inside properties are extensively accredited as being essential for commercial international extension (Sanyal et al., 2020). First there should be consideration about two-part "movement and spillover" instrument. "Movement or migration" represent that firm internationalization intends a modification in the swapping of global Corporation out of the home market and into global financial markets (Virglerova et al., 2020). This can happen as global centers have fewer information and transaction cost (Lang et al., 2003) and more efficient risk pricing (Patro, 2000). Elsewhere the probability that corporate elements affect the stock liquidity of all corporations in the marketplace, there could be spillovers term, whereby entire activity of market impacts the liquidity of separate firms. For instance, globalization could permit firms to lighten agency conflicts and problematic situation of informational asymmetry by "attaching" themselves into the markets with stronger investor's protection systems and higher level of disclosure requirement and thus improve stock liquidity. Organization with internationalization maximize at one level and then, decrease after an initial minimization, that stock liquidity returned to the home market, (flow back influence) (Halling et al., 2005). Lu et al. (2009) found positive relationship between corporate governance and internationalization. Corporate governance mechanisms enhance internationalization which indirectly improves stock liquidity. The firm which

launch their products at international level and carry their operations into international markets have more foreign sales, foreign assets, foreign talented and dynamic network of employees, and that consequently the liquidity of the firm improves as sales provides cash resources quickly.

H5: There is significant and positive association between corporate governance and stock liquidity as a channel effect of internationalization .

3. Data and Methodology

3.1. Sample

The current study explores results on the base of secondary data. We collect the secondary data from the published reports of the nonfinancial companies' websites and open doors websites. The data is obtained from the companies listed in stock exchange of Pakistan, Japan, Hong Kong and India from 2008 to 2017. As it is proved from the results of earlier research that secondary data is the most powerful and reliable source of information required to evaluate the phenomenon and seek convenient ways for solving problems (Uma et al., 2003). The initial sample consists of 120 corporations and 1200 observations from 2008 to 2017. The country level governance mechanisms are accessed through world bank website. Three out of six world governance indicators of Kaufmann et al. (2006), namely rule of law, voice and accountability and government effectiveness are gathered from 2007 to 2017. We gather data about corporate governance from Directors profile and from the table of directors' meetings. The data regarding internationalization is being collected from the geographic segments of the corporations. To collect the data about stock liquidity, we take into consideration the financial statement, the balance sheet and income statement of the firms. Data about annual share prices is being collected from the Stock Exchange of these markets.

3.2. Measurement of Variables and Model Specification

3.2.1. Panel A: Dependent Variables (Stock Liquidity)

There are the numbers of the measures of the liquidity. Zero return measure, stock turnover measures and the illiquidity measures are the most important measures of stock liquidity. The spread between the bids and ask price is the natural measure of stock liquidity. Liquidity measures can be trade based or order based. Order driven measures of the liquidity give the useful idea to investors to know about how the liquid market is as the spreads are real time measures of available liquidity. Liquidity measures can also provide better judgment about the existence of

information asymmetry in the market. The computed trade-based measure is stock turnover. Nessar-Ivanovic (1997) used stock turnover measures for the measurement of liquidity. For easiness in current study the computed trade-based measure that is stock turnover is used to measure the stock liquidity.

Stock turnover is the ratio of the numbers of the shares traded divided by the number of shares outstanding.

$$\text{Stock turnover ST} = \frac{\text{Volume}}{\text{shares outstanding}}$$

Data about volume for each stock is collected monthly, whereas the data about the number of shares outstanding is collected on a yearly basis.

3.2.2. Panel B: Independent Variables (Measurement of Corporate Level Governance)

Firm level governance is the mechanism by which corporations are controlled and directed (Hussain et al., 2021). The overall firm governance contains the size of board, meetings of board held in a year and board independence. The important logic behind the inclusions of these components of firm is explained by Dey (2008). The conflicts between shareholders and managers can be referred to as high, medium and low level. These level in a corporation based on these three instruments, board size, board meetings, board independence. High problematic situation of information asymmetries is found to be significantly related with these three indicators which reveal effective firm level governance. The current study follows the subjective based judgement of corporate governance.

Board Independence
Measurement: The percentage of the independent directors on the board in any particular fiscal Year.

Board Meeting:
Measurement: The Frequency of board meetings held during the year.

Board Size:
Measurement: The total number of directors of the company in a specific year.

3.3. Measurement of Country Level Governance

To measure the country level governance three out of six world governance indicators of Kaufmann et al. (2006), namely rule of law, voice and accountability and government effectiveness are taken into consideration. As in these six

indicators there is an issue of multicollinearity (Khan, Khan, et al., 2019; Khan, Kong, et al., 2019; Khan, Popp, et al., 2020), so only three indicators are chosen to measure the country level governance.

3.4. Measurement of Internationalization

The degree of the corporation's international involvement is referred to as firm internationalization. The ratio of foreign sales, foreign assets, foreign employees and foreign branches to the total of these figures are the measures of firm internationalization (Cadogan et al., 2009; Capar et al., 2003; Gomes et al., 1999). It is suggested that each proxy of internationalization should indicate the relative weight and strategic importance of foreign and domestic operations (Grant, 1987). Corporations typically move from different stages in case of internationalization starting from exporting through intermediaries and launching forms of international trade including buildings subsidiaries of sales, establishing foreign branches and making foreign direct investment in production facilities (Johanson et al., 1977). For the sample period (2008–2017), the corporations of Pakistan, Japan, Hong Kong and India are still at initial stages of internationalization. So the same proxies are used in this study to confirm or disprove the prior conception.

3.5. Control Variables

Kamran et al. (2014) used firm size as a control variable. In current study, taking the natural logarithm for the book value of total assets the size of the firm is measured. The Leverage is defined as the debt structure of the company. Jiang et al. (2008) proves that changes in the debt structure of the company has an impact on the firm. Dimitropoulos et al. (2010) used leverage as a control variable in his study. It is calculated as the long term debt divided by total assets. Firm age (AGE) is also used as a proxy in the current study and is measured as taking the natural logarithm of the number of years since the firm listing in stock exchange.

3.6. Estimation Method

While the Hausman test suggests that the fixed effect model is appropriate relative to random effect, yet Hausman test is confined to guide a choice between two mentioned estimators. Therefore, it is tested for possible diagnostic issues that document all the estimators using fixed-effect specifications suffer from heteroskedasticity, and autocorrelation. That is why the fixed-effect cannot be utilized in current situation. To handle these problems Panel Corrected Standard Error (PCSE) is applied. Thus, the time-series cross-sectional Prais-Winsten model of regression with PCSE is used.

3.7. Model Specification

The followings models are as under:

$$SL_{it} = \beta_0 + \beta_1 FLG_{it} + \beta_2 CLG_{it} + \beta_3 INT_{it}$$
$$+ \beta_4 LEV_{it} + \beta_5 FSIZ_{it} + \beta_6 FAG_{it} + \varepsilon_{it} \quad (1)$$

$$INTER_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BIND_{it} + \beta_3 BM_{it} + \varepsilon_{it} \quad (2)$$

Where:
It is assumed to be constant for firm *i* over time *t* for firm specific effect. ε is error term.

    SL   = Stock Liquidity
    FLG   = Firm level governance
    BOS   = Board Size
    BOM   = Board meetings
    BIND = Board independent
    CLG   = Country level governance
    VA   = Voice and accountability
    GE   = Government effectiveness
    RL   = Rule of Law
    INT   = Internationalization
    FA   = Foreign assets
    FS   = Foreign sales
    FE   = Foreign employees
    FB   = Foreign branches

Control variables
1) LEV = Leverage, FSIZ = Firm size, FAG = Firm age

4. Empirical Results[1]

4.1. Descriptive Statistics

Table 1 explains the descriptive statistics for the given variables. The mean value of foreign sales to the total sales is 0.485 which represents that if the companies invest one rupee in total sales the foreign sales would be 48%. The average ratio of foreign assets to the total assets is 42.3%. Average numbers of foreign employees to the total employees are 32.3%. The average numbers of foreign branches to the total branches are 44%. In terms of corporate governance, the average board size is 9.828. The average numbers of board meetings are 5.968. The average ratio of board independence to the total board is 0.457. In context of stock liquidity, the value for stock turnover is 0.049. In context of country level governance statistics, the average value of government effectiveness is 66.915. The average value of voice and accountability is 57.675. The mean value of rule of law is 64.36. In regard to control variables the average value of leverage is 0.183. These values are relating with previous study of Mohamed et al. (2014). The firm age average years are 33.325. The mean value of firm size is 12.774.

4.2. Matrix of Correlation Analysis

Table 2 provides correlation coefficients for explanatory variables. The correlation matrix shows no serious multicollinearity problem because the values of all variables are less than 0.70 expect, for small numbers of variables.

Table 1: Descriptive Statistics for Governance and Internationalization and Stock Liquidity

Variables	Obs	Mean	Std. Dev.	Minimum	Maximum
FSTS	1200	0.485	0.325	0	0.995
FATA	1200	0.423	0.363	0	0.999
FETE	1200	0.323	0.29	0	0.997
FBTB	1200	0.441	0.336	0	0.994
BS	1200	9.828	2.755	7	22
BM	1200	5.968	2.035	1	11
BIND	1200	0.457	0.196	0.053	0.875
ST	1200	0.049	0.069	0	0.205
VA	1200	57.675	19.767	24.2	85
GE	1200	66.915	29.2	22.3	99
RL	1200	64.36	28.501	17.8	95.2
LEVERAGE	1200	0.183	0.18	0	0.77
FIRM AGE	1200	33.325	19.269	3	90
FIRM SIZE	1200	12.774	2.336	7.319	19.51

Table 2: Matrix of Correlation Analysis for Explanatory Variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) FSTS	1.000											
(2) FATA	0.410	1.000										
(3) FETE	0.178	0.434	1.00									
(4) FBTB	0.174	0.544	0.447	1.000								
(5) BS	0.090	0.266	0.369	0.433	1.000							
(6) BM	0.035	0.051	−0.081	0.069	0.001	1.000						
(7) BIND	−0.079	−0.316	−0.454	−0.360	−0.322	−0.014	1.000					
(8) VA	0.237	0.676	0.619	0.667	0.457	0.100	−0.599	1.000				
(9) GE	0.275	0.695	0.497	0.650	0.374	0.085	−0.475	0.861	1.000			
(10) RL	0.279	0.704	0.525	0.675	0.402	0.087	−0.493	0.888	0.992	1.000		
(11) LEVERAGE	0.013	0.053	0.033	0.092	0.045	0.242	−0.139	0.151	0.149	0.150	1.000	
(12) FIRM AGE	0.230	0.306	0.255	0.192	0.233	0.086	−0.273	0.487	0.411	0.413	0.106	1.000
(13) FIRM SIZE	0.146	0.168	0.041	−0.049	−0.060	0.074	−0.175	0.242	0.269	0.251	0.193	0.340

The variables among which multicollinearity exists are voice and accountability, government effectiveness, and the rule of law. The highly correlated case's value is 0.92 which exists between RL and GE.

4.3. Regression Results

4.3.1. Diagnostic Testing

We employed the time series cross sectional Prais-Winsten model of regression with panel-corrected standard error (PCSE). We apply fixed effect at initial stage. As seen in Table 3, the value of probability is 0.000 which is significant in ST (stock liquidity). So the problems of serial correlation and hetrocidascity are prevailed. It means these problems are not fit for our model. That is why we used Panel-Corrected standard error (PCSE) methodology that is capable for handling these problems. The PCSE is used when $n > t$, number of firms greater than time (Khan, Islam, et al., 2020).

4.3.2. Do Governance and internationalization Affect Stock Liquidity?

In Table 4 model (1) reveals the empirical relationship between the independent variable (FSTS one of the proxy of internationalization) and the dependent variable (ST) stock turnover (measure of stock liquidity). The signs of coefficient values are indicative of the effect of each predicator on the stock liquidity. In Table 4 model (1) shows effect of explanatory variable FSTS (one of the proxy of internationalization) on the ST (Stock turnover) is significant

and positive as the coefficient value is 0.009. It means when FSTS increases the stock liquidity also improves. It means that the firms which go for internationalization have more stock liquidity and thus convenience for investors and shareholders. In Table 4 model (1) shows the negative association between voice and accountability and stock liquidity as the coefficient value is −0.001. The overall empirical relationship between the rule of law and ST is significant and positive. The findings show that country level governance has negative moderate level influence on stock liquidity. In terms of corporate governance and stock liquidity, in Table 4 model (1) reflects that the value of BS (board size) is insignificant to stock liquidity. Large size of board raised conflicts among directors which indirectly affect the decision making procedures and thus reduce liquidity. In Table 4 model (1) BM has no relationship with ST as coefficient value is 0.0000 respectively. Board independence is insignificant to stock liquidity. In terms of control variables, the relationship between leverage and ST is significant negative as the coefficient value is −0.054. In Table 4 model (1) firm age has no relationship, and firm size has significant negative impact on stock liquidity. The value of the R-squared is 0.109.

In Table 4 model (2) reveals the empirical relationship between the FATA and stock liquidity. The overall effect of explanatory variable FATA on the stock liquidity is significant and positive as the value of coefficient is 0.024. It means when FATA increases the stock liquidity also increases. The value of R-squared is 0.114. The results reflect that corporations with good economic conditions are motive to access and trade in international markets around the globe.

Table 3: Diagnostic Testing After Estimating Internationalization on ST (Fixed Effect)

	FSTS	FATA	FETE	FBTB
Wooldridge test for autocorrelation in panel data	18.269	18.509	18.533	18.717
Prob	0	0	0	0
Modified Wald test for groupwise heteroskedasticity	1.10E+07	1.10E+07	1.10E+07	1.10E+07
Prob	0.000	0.000	0.000	0.000

Note: All the estimator using fixed-effect specifications, suffer from diagnostic problems such as; heteroskedasticity, and autocorrelation.

Table 4: Impact of Governance and Internationalization on Stock liquidity (PCSE Results)

Variables	(1)	(2)	(3)	(4)
	ST	ST	ST	ST
	Overall	Overall	Overall	Overall
	INT:FSTS	INT:FATA	INT:FETE	INT:FBTB
INT	0.009** (2.10)	0.024** (2.39)	−0.006 (−0.70)	−0.025*** (−3.78)
VA	−0.001*** (−3.20)	−0.001*** (−3.35)	−0.001*** (−3.25)	−0.001*** (−2.71)
GE	−0.001* (−1.67)	−0.001* (−1.89)	−0.001* (−1.76)	−0.001* (−1.88)
RL	0.002** (2.47)	0.002** (2.56)	0.002** (2.56)	0.002*** (2.83)
BS	−0.001 (−1.15)	−0.001 (−1.02)	−0.001 (−1.18)	−0.001 (−0.65)
BM	0.000 (0.27)	0.000 (0.35)	0.000 (0.12)	0.000 (0.36)
Bind	−0.005 (−0.45)	−0.008 (−0.77)	−0.005 (−0.41)	−0.002 (−0.17)
Leverage	−0.054*** (−4.73)	−0.052*** (−4.85)	−0.055*** (−4.78)	−0.054*** (−4.65)
Firm Age	−0.000 (−0.80)	−0.000 (−0.39)	−0.000 (−0.53)	−0.000 (−1.08)
Firm Size	−0.007*** (−6.40)	−0.007*** (−6.22)	−0.007*** (−6.57)	−0.008*** (−6.86)
Constant	0.168*** (10.03)	0.176*** (10.05)	0.170*** (9.97)	0.169*** (9.93)
Observations	1,200	1,200	1,200	1,200
Number of Cross-Sections	120	120	120	120
R^2	0.109	0.114	0.107	0.114

Note: t-statistics in parentheses ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.

In Table 4 model (3) reveals the empirical relationship between the FETE and ST (measure of stock liquidity). The overall effect of explanatory variable FETE on the ST is insignificant. In Table 4 model (1) reflects that the impact of FBTB on the ST is significant negative. Under each proxy of the internationalization except (FETE) there is a positive association between internationalization and stock liquidity.

Table 5 reveals the empirical relationship between the independent variable firm governance (the size of the board, the independence of board, board meetings) and the dependent variables internationalization (foreign sales, foreign assets, foreign employees, and foreign branches).

The overall effect of explanatory variable BS (board size) on the FSTS is significant and positive as the coefficient value is 0.009. It means when BS one unit increases the foreign sales to total sales also increases by factor 0.009. The board size has also significant positive effect on FATA, FETE and FBTB. There is a significant positive association between BM and FATA and negative association between BM and FETE. The BM has significant positive impact on FBTB. Board independent has significant negative association with FSTS. The results for Bind and FATA, FETE, FBTB are negative. The values of R-squared for FSTS, FATA, FETE and FBTB are 0.012, 0.132, 0.269 and 0.246 respectively.

Table 5: Impact of Corporate Governance on Internationalization (PCSE Results)

Variables	(1)	(1)	(1)	(1)
	FSTS	**FATA**	**FETE**	**FBTB**
BS	0.009*** (5.92)	0.024*** (12.49)	0.026*** (15.26)	0.043*** (18.43)
BM	0.005 (1.52)	0.008** (2.41)	−0.012*** (−5.90)	0.011*** (3.31)
Bind	−0.091** (−2.21)	−0.473*** (−11.19)	−0.555*** (−11.50)	−0.421*** (−12.40)
Constant	0.410*** (10.84)	0.352*** (10.76)	0.393*** (10.71)	0.144*** (3.53)
Observations	1,200	1,200	1,200	1,200
Number of Cross-Sections	120	120	120	120
R^2	0.012	0.132	0.269	0.246

Note: t-statistics in parentheses ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.

4.3.3. Country Specific Results

In terms of country-specific panel, regression provides Coefficient around 0.090 in four respective models. Tables 6 and 7 in Appendixes show a significant positive association between governance and stock liquidity. The internationalized corporations from Pakistan, India, Japan and Hong Kong would enhance more opportunities and improve stock liquidity. R-squared value is 0.144, 0.132, 0.132 and 0.0123 respectively for the overall result, Japan, Hong Kong and India.

5. Conclusion

The current study explores results on the association between corporate and country level governance and stock liquidity and the effect of internationalization on stock liquidity. Firm internationalization has significant and positive impact on stock liquidity. Internationalization may support companies to lessen agency and the problem of information asymmetry by "bonding" themselves into markets with greater disclosure requirements and the strong shareholder's protection system. This study indicate that the moderate level of internationalization will be favorable strategy for corporations, despite the potential benefits if there are no effective management and implementation strategies, the advantages will be useless. In terms of corporate governance value of BS (board size) is insignificant to stock liquidity whereas BIND is negatively influence to stock liquidity. Large size of board raised conflicts among directors which indirectly affect the decision making procedures. Thus there are difficulties in functioning effectively. At the end we concluded our study results by analyzing the effect of firm governance on internationalization. We find out positive association between company governance and internationalization. Liou et al. (2012) found positive relationship between corporate government and internationalization.

It is suggested for future research that the impact of international board members on stock liquidity should be investigated in relation to corporate governance. The research should also be conducted to find out the negative or positive effect of trade barrier on stock liquidity in context of internationalization strategy. Whether the internationalization strategy is the right choice or not.

References

Ahmed, A., & Ali, S. (2017). Boardroom gender diversity and stock liquidity: Evidence from Australia. *Journal of Contemporary Accounting & Economics, 13*(2), 148–165.

Al-Qudah, A. M. (2020). Macroeconomic and Bank-Specific Variables and the Liquidity of Jordanian Commercial Banks. *The Journal of Asian Finance, Economics, and Business, 7*(12), 85–93.

Ali, S., Liu, B., & Su, J. J. (2016). What determines stock liquidity in Australia? *Applied Economics, 48*(35), 3329–3344.

Amihud, Y., & Mendelson, H. (2006). Stock and bond liquidity and its effect on prices and financial policies. *Financial Markets and Portfolio Management, 20*(1), 19–32.

Bacidore, J. M., & Sofianos, G. (2002). Liquidity provision and specialist trading in NYSE-listed non-US stocks. *Journal of Financial Economics, 63*(1), 133–158.

Barreiro, L. B., Ben-Ali, M., Quach, H., Laval, G., Patin, E., Pickrell, J. K., . . . Gicquel, B. (2009). Evolutionary dynamics of human Toll-like receptors and their different contributions to host defense. *PLoS Genet, 5*(7), e1000562.

Beck, T., Demirgüç-Kunt, A., & Levine, R. (2003). *Bank concentration and crises.* Washington, DC: The World Bank.

Beekes, W., Brown, P., & Zhang, Q. (2015). Corporate governance and the informativeness of disclosures in A ustralia: a re-examination. *Accounting & Finance, 55*(4), 931–963.

Brockman, P., & Chung, D. Y. (2003). Investor protection and firm liquidity. *The Journal of Finance, 58*(2), 921–937.

Cadogan, J. W., Kuivalainen, O., & Sundqvist, S. (2009). Export market-oriented behavior and export performance: quadratic and moderating effects under differing degrees of market dynamism and internationalization. *Journal of International Marketing, 17*(4), 71–89.

Capar, N., & Kotabe, M. (2003). The relationship between international diversification and performance in service firms. *Journal of International Business Studies, 34*(4), 345–355.

Cappellari, L., & Jenkins, S. P. (2002). Who stays poor? Who becomes poor? Evidence from the British household panel survey. *The Economic Journal, 112*(478), C60–C67.

Chen, W. P., Chung, H., Lee, C., & Liao, W. L. (2007). Corporate governance and equity liquidity: Analysis of S&P transparency and disclosure rankings. *Corporate Governance: An International Review, 15*(4), 644–660.

Chung, H. (2006). Investor protection and the liquidity of cross-listed securities: Evidence from the ADR market. *Journal of Banking & Finance, 30*(5), 1485–1505.

Chung, K. H., Elder, J., & Kim, J.-C. (2010). Corporate governance and liquidity. *Journal of Financial and Quantitative Analysis*, 265–291.

Clayman, M. R., Fridson, M. S., & Troughton, G. H. (2012). *Corporate finance: A practical approach* (Vol. 42). Hoboken, NJ: John Wiley & Sons.

Dey, A. (2008). Corporate governance and agency conflicts. *Journal of Accounting Research, 46*(5), 1143–1181.

Dimitropoulos, P. E., & Asteriou, D. (2010). The effect of board composition on the informativeness and quality of annual earnings: Empirical evidence from Greece. *Research in International Business and Finance, 24*(2), 190–205.

Domowitz, I., Glen, J., & Madhavan, A. (1998). International cross-listing and order flow migration: Evidence from an emerging market. *The Journal of Finance, 53*(6), 2001–2027.

Eleswarapu, V. R., & Venkataraman, K. (2006). The impact of legal and political institutions on equity trading costs: A cross-country analysis. *The Review of Financial Studies, 19*(3), 1081–1111.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy, 88*(2), 288–307.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics, 26*(2), 301–325.

Foo, Y.-B., & Zain, M. M. (2010). Board independence, board diligence and liquidity in Malaysia: A research note. *Journal of Contemporary Accounting & Economics, 6*(2), 92–100.

Gomes, L., & Ramaswamy, K. (1999). An empirical examination of the form of the relationship between multinationality and performance. *Journal of International Business Studies, 30*(1), 173–187.

Grant, R. M. (1987). Multinationality and performance among British manufacturing companies. *Journal of International Business Studies, 18*(3), 79–89.

Guillén, M. F., & García-Canal, E. (2009). The American model of the multinational firm and the "new" multinationals from emerging economies. *Academy of Management Perspectives, 23*(2), 23–35.

Halling, M., Pagano, M., Randl, O., & Zechner, J. (2005). Where is the market? Evidence from cross-listings. T*he Review of Financial Studies, 21*(2), 725–761.

Hussain, W., Khan, M. A., Hussain, A., Waseem, M. A., & Ahmed, M. (2021). How Governance and Firm Internationalization Affect Accrual Quality. *Studies of Applied Economics, 39*(3). http://dx.doi.org/10.25115/eea.v39i3.4462

Islam, M. A., Khan, M. A., Popp, J., Sroka, W., & Oláh, J. (2020). Financial Development and Foreign Direct Investment—The Moderating Role of Quality Institutions. *Sustainability, 12*(9), 3556. https://doi.org/10.3390/su12093556

Javid, A. Y., & Iqbal, R. (2010). Corporate governance in Pakistan: Corporate valuation, ownership and financing. PIDE-Working Papers 2010:57, Pakistan Institute of Development Economics.

Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance, 48*(3), 831–880.

Jiang, W., Lee, P., & Anandarajan, A. (2008). The association between corporate governance and earnings quality: Further evidence using the GOV-Score. *Advances in Accounting, 24*(2), 191–201.

Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies, 8*(1), 23–32.

Kamran, K., & Shah, A. (2014). The impact of corporate governance and ownership structure on earnings management practices: Evidence from listed companies in Pakistan. *The Lahore Journal of Economics, 19*(2), 27–70.

Kanagaretnam, K., Lobo, G. J., & Whalen, D. J. (2007). Does good corporate governance reduce information asymmetry around quarterly earnings announcements? *Journal of Accounting and Public policy, 26*(4), 497–522.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2006). *Governance matters V: aggregate and individual governance indicators for 1996–2005*. Washington, DC: The World Bank.

Khan, M. A., Ahmed, M., Olah, J., & Popp, J. (2020). US Policy Uncertainty and Stock Market Nexus revisited through Dynamic ARDL Simulation and Threshold Modelling. *Mathematics, 8*(11), 2073. https://doi.org/10.3390/math8112073

Khan, M. A., Gu, L., Khan, M. A., & Oláh, J. (2020). Natural Resources and Financial Development: The Role of Institutional Quality. *Journal of Multinational Financial Management*, 100641. https://doi.org/10.1016/j.mulfin.2020.100641

Khan, M. A., Islam, M. A., & Akbar, U. (2020). Do economic freedom matters for finance in developing economies: a panel threshold analysis. *Applied Economics Letters*, 1–4. https://doi.org/10.1080/13504851.2020.1782335

Khan, M. A., Khan, M. A., Abdulahi, M. E., Liaqat, I., & Shah, S. S. H. (2019). Institutional quality and financial development: The United States perspective. *Journal of Multinational Financial Management, 49*, 67–80. https://doi.org/10.1016/j.mulfin.2019.01.001

Khan, M. A., Khan, M. A., Ali, K., Popp, J., & Oláh, J. (2020). Natural Resource Rent and Finance: The Moderation Role of Institutions. *Sustainability, 12*(9), 3897. https://doi.org/10.3390/su12093897

Khan, M. A., Kong, D., Xiang, J., & Zhang, J. (2019). Impact of Institutional Quality on Financial Development: Cross-Country Evidence based on Emerging and Growth-Leading Economies. *Emerging Markets Finance and Trade*, 1–17. https://doi.org/10.1080/1540496X.2019.1588725

Khan, M. A., Popp, J., Talib, M. N. A., Lakner, Z., & Oláh, J. (2020). Asymmetric Impact of Institutional Quality on Tourism Inflows Among Selected Asian Pacific Countries. *Sustainability, 12*(3), 1223. https://doi.org/10.3390/su12031223

Kubota, K., Suda, K., & Takehara, H. (2010). Dissemination of Accruals Information, Role of Semi-Annual Reporting, and Analysts' Earnings Forecasts: Evidence from Japan. *Journal of International Financial Management & Accounting, 21*(2), 120–160.

Kyle, A. S. (1985). Continuous auctions and insider trading. *Econometrica: Journal of the Econometric Society*, 53(6), 1315–1335. https://doi.org/10.2307/1913210

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1997). Legal determinants of external finance. *The Journal of Finance, 52*(3), 1131–1150.

Lang, B., & Colgate, M. (2003). Relationship quality, on-line banking and the information technology gap. *International Journal of Bank Marketing, 21*(1), 29–37. https://doi.org/10.1108/02652320310457785

Liou, R.-S., Rose, A. S., & Ellstrand, A. E. (2012). Emerging-market multinational corporations as agents of globalization: Conflicting institutional demands and the isomorphism of global markets. In: *Institutional theory in international business and management.* Emerald Group Publishing Limited.

Lu, J., Xu, B., & Liu, X. (2009). The effects of corporate governance and institutional environments on export behaviour in emerging economies. *Management International Review, 49*(4), 455–478.

Modugu, K. P., & Dempere, J. (2020). Country-Level Governance Quality and stock market performance of GCC countries. *The Journal of Asian Finance, Economics, and Business, 7*(8), 185–195. https://doi.org/10.13106/jafeb.2020.vol7.no8.185

Mohamed, A., & Seelanatha, S. L. (2014). The Global Financial Crisis (GFC), Equity Market Liquidity & Capital Structure: Evidence from Australia. *Journal of Applied Research in Accounting and Finance, 9*(1). Available at SSRN: https://ssrn.com/abstract=2470927

Murthy, C. J. I. S. (2003). US and the Third World at the UN: An Ambivalent Relationship. *International Studies, 40*(1), 1–21. https://doi.org/10.1177/002088170304000101

Nessar-Ivanovic, L. J. (1997). Jewelry clasp. United States Patent 3,225,406A. In: Google Patents. https://patents.google.com/patent/US3225406

Patro, D. K. (2000). Return behavior and pricing of American depositary receipts. *Journal of International Financial Markets, Institutions and Money, 10*(1), 43–67.

Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy, 106*(6), 1113–1155.

Sanyal, S., Hisam, M. W., & Baawain, A. M. S. (2020). Entrepreneurial orientation, network competence and human capital: The internationalization of SMEs in Oman. *The Journal of Asian Finance, Economics and Business, 7*(8), 473–483. https://doi.org/10.13106/jafeb.2020.vol7.no8.473

Tahir, S. H., Sadique, M. A. B., Nausheen, S., Rehman, F., & Ullah, M. R. (2020). Mediating role of liquidity policy on the corporate governance-performance link: Evidence from Pakistan. *The Journal of Asian Finance, Economics and Business, 7*(8), 15–23. https://doi.org/10.13106/jafeb.2020.vol7.no8.015

Uma, S., & Roger, B. (2003). *Research methods for business: A skill building approach.* Hoboken, NJ: Wiley.

Virglerova, Z., Khan, M. A., Martinkute-Kauliene, R., & Kovács, S. (2020). The internationalization of SMEs in Central Europe and its impact on their methods of risk management. *Amfiteatru Economic Journal, 22*(55), 792–807.

Watts, R. L., & Zimmerman, J. L. (1990). Positive accounting theory: a ten year perspective. *The Accounting Review*, 65(1), 131–156.

Appendixes

Measurement of Variables

Firm Level Governance		
Acronym	Variables	Measurement
BS	Board size	No. of board of directors
BM	Board meetings	No. of board meetings
BIND	Board Independence	No. of independent director to the total director
Internationalization Notations		
FA	Foreign Assets	Foreign Assets/total Assets
FS	Foreign Sales	Foreign sales/total sales
FB	Foreign Branches	Foreign branches/total branches
FE	Foreign Employees	Foreign employees/total employees
Country Level Governance		
VA	Voice and Accountability	World Bank Indicators Standard Error values are Taken
RL	Rule of Law	World Bank Indicators Standard Error values are Taken
GE	Government Effectiveness	World Bank Indicators Standard Error values are Taken
Stock Liquidity		
ST	Stock turnover	Stock turnover

Table 6: Impact of Governance and Internationalization (FSTS, FATA) on Stock Liquidity (specific countries)

Variables	(1)	(1)	(1)	(1)	(1)	(1)
	ST	ST	ST	ST	ST	ST
	JP	HK	IND	JP	HK	IND
FSTS, FATA INTER	0.008*	0.008*	0.008*	0.019**	0.020**	0.021**
	(1.76)	(1.76)	(1.92)	(2.08)	(2.15)	(2.24)
VA	−0.000	0.001*	−0.001***	−0.000	0.001	−0.002***
	(−0.83)	(1.72)	(−3.58)	(−1.38)	(1.16)	(−3.64)
GE	−0.000	−0.001*	−0.000	−0.000	−0.001**	−0.001
	(−0.74)	(−1.85)	(−0.70)	(−0.97)	(−2.01)	(−1.03)
RL	0.001	0.000	0.001**	0.001	0.000	0.001**
	(1.36)	(0.01)	(2.37)	(1.47)	(0.11)	(2.45)
BS	−0.002**	−0.002*	−0.002*	−0.002**	−0.001*	−0.001
	(−2.07)	(−1.94)	(−1.73)	(−1.98)	(−1.86)	(−1.59)
BM	0.000	0.000	0.000	0.001	0.000	0.000
	(0.67)	(0.60)	(0.53)	(0.70)	(0.64)	(0.56)
Bind	−0.013	−0.014	−0.008	−0.015	−0.017	−0.010
	(−1.21)	(−1.31)	(−0.76)	(−1.37)	(−1.49)	(−0.98)
Leverage	−0.051***	−0.051***	−0.052***	−0.050***	−0.050***	−0.051***
	(−4.73)	(−4.73)	(−4.78)	(−4.83)	(−4.83)	(−4.88)
Firm Age	0.000	0.000	−0.000	0.000	0.000	0.000
	(0.53)	(0.70)	(−0.17)	(0.74)	(0.95)	(0.07)
Firm Size	−0.005***	−0.006***	−0.006***	−0.005***	−0.006***	−0.006***
	(−3.33)	(−4.24)	(−4.07)	(−3.40)	(−4.22)	(−4.19)

Table 6: Continued

Variables	(1)	(1)	(1)	(1)	(1)	(1)
	ST	ST	ST	ST	ST	ST
	JP	HK	IND	JP	HK	IND
Dummy	−0.033*** (−3.75)	0.055*** (3.81)	0.020*** (2.95)	−0.030*** (−3.53)	0.052*** (3.72)	0.017*** (2.65)
Constant	0.131*** (6.41)	0.143*** (7.93)	0.156*** (8.92)	0.141*** (6.72)	0.151*** (8.18)	0.165*** (9.13)
Observations	1,200	1,200	1,200	1,200	1,200	1,200
Number of cross-sections	120	120	120	120	120	120
R^2	0.119	0.122	0.113	0.123	0.126	0.117

Note: *t*-statistics in parentheses ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.

Table 7: Impact of Governance and Internationalization (FETE, FBTB) on Stock Liquidity (Countries Specific)

Variables	(1)	(1)	(1)	(1)	(1)	(1)
	ST	ST	ST	ST	ST	ST
	JP	HK	IND	JP	HK	IND
FETE, FBTB INTER	−0.012 (−1.11)	−0.010 (−0.97)	−0.011 (−1.04)	−0.037*** (−5.47)	−0.033*** (−4.86)	−0.035*** (−5.22)
VA	−0.000 (−0.30)	0.001* (1.80)	−0.001*** (−3.73)	0.000 (0.80)	0.001*** (2.69)	−0.002*** (−3.67)
GE	−0.000 (−0.84)	−0.001** (−1.97)	−0.000 (−0.73)	−0.000 (−0.83)	−0.001** (−2.24)	−0.000 (−0.55)
RL	0.001 (1.44)	0.000 (0.06)	0.002** (2.48)	0.001 (1.63)	0.000 (0.11)	0.002*** (2.85)
BS	−0.002** (−2.14)	−0.002** (−2.01)	−0.002* (−1.78)	−0.002* (−1.75)	−0.001 (−1.46)	−0.001 (−1.49)
BM	0.000 (0.39)	0.000 (0.36)	0.000 (0.28)	0.001 (0.91)	0.001 (0.76)	0.001 (0.77)
Bind	−0.015 (−1.21)	−0.015 (−1.28)	−0.009 (−0.80)	−0.013 (−1.14)	−0.013 (−1.18)	−0.006 (−0.61)
Leverage	−0.052*** (−4.75)	−0.052*** (−4.75)	−0.053*** (−4.81)	−0.049*** (−4.53)	−0.050*** (−4.58)	−0.051*** (−4.61)
Firmage	0.000 (0.78)	0.000 (0.94)	0.000 (0.10)	0.000 (0.29)	0.000 (0.39)	−0.000 (−0.41)
Firmsize	−0.005*** (−3.34)	−0.005*** (−4.38)	−0.006*** (−4.01)	−0.005*** (−3.59)	−0.006*** (−4.81)	−0.006*** (−4.24)
Dummy	−0.035*** (−3.63)	0.057*** (3.76)	0.022*** (2.86)	−0.044*** (−4.79)	0.066*** (4.30)	0.031*** (4.42)
Constant	0.130*** (6.52)	0.144*** (8.08)	0.156*** (9.13)	0.119*** (5.92)	0.138*** (7.67)	0.149*** (8.64)
Observations	1,200	1,200	1,200	1,200	1,200	1,200
Number of cross-sections	120	120	120	120	120	120
R^2	0.120	0.122	0.113	0.132	0.132	0.123

Note: *t*-statistics in parentheses ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.

Endnotes

[1]Stock Turnover (ST), firm-level governance: board size (BS), board independent (BIND), board meetings (BM), country level governance: voice and accountability (VA), government effectiveness (GF), the rule of law (RL) internationalization (foreign sales, foreign assets, foreign branches, foreign employees) and the control variables. FSTS stands for foreign sales/ total sales, FATA stands for foreign assets to the total assets, FETE stands for foreign employees to the total employees, FBTB stands for foreign branches to the total branches and the control variables includes firm age, firm size, leverage.