# BABEȘ-BOLYAI UNIVERSITY CLUJ-NAPOCA FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION Ph.D. SCHOOL OF ECONOMICS AND BUSINESS ADMINISTRATION

### Ph.D. THESIS

### - SUMMARY -

### **Cultural Determinants of Stock Market Liquidity**

Ph.D. supervisor:

Prof. Ph.D. TODEA Alexandru

Ph.D. student: DIMCEA Andrei

Cluj-Napoca

2023

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## Keywords:

liquidity, culture, bias, social norms, psychic distance, financial literacy, cultural tightness-looseness

#### **INTRODUCTION**

The role of capital markets in the global economy has consistently increased since 1602, when the first modern stock exchange, the Amsterdam Stock Exchange, was established. Its initial purpose was to facilitate the trading of shares of the Dutch East India Company (VOC). The company was founded by the States General of the Netherlands in 1602 to finance its expeditions to Asia, it offered the opportunity for any resident of the Dutch Republic to "participate in its success" by becoming a shareholder, which is considered today the first official initial public offer (IPO). This event marked the beginning of a new era, in which capital could be accumulated and traded in a transparent and efficient manner. With the emergence and development of other stock markets in Europe and North America, they became the primary instrument for financing wars, expanding empires, and establishing new industries.

Nowadays, at the heart of any developed economy lies the stock market, a vital instrument in efficiently allocating capital and managing risk. Stock markets, alongside the banking system, have become pillars of economic development, significantly contributing to the integration of the global economy. However, the recent financial crisis has shown us how sensitive the global economy is to stock market fluctuations and how crucial liquidity can be in such a context.

Four distinct perspectives on liquidity have emerged over recent years: a) Corporate finance perspective; b) Financial asset valuation and portfolio management perspective; c) Market microstructure perspective; d) Macro-level liquidity perspective.

Corporate finance places liquidity in a narrow company level context. It tries to explain whether the stock liquidity can influence management decisions and vice versa. The main directions on which the studies in this area are focused are:

- the agency theory, which refers to the impact of liquidity on the quality of governance, determined by the presence and the proportion of various types of shareholders, through the lens of the efficiency of investors' monitoring of management decisions and the possible discrepancies between the interests of management and the interests of minority shareholders (Coffee, 1991; Bhide, 1993; Maug, 1998; Admati and Pfeiderer, 2009; Kang and Kim, 2013 and others);
- *the market feedback effect* refers to the fact that a higher level of stock liquidity ensures a greater degree of incorporation of information into the price (including information about management performance), which in turn leads to the appearance of a feedback effect from the market, due to which managers of companies with strong performance are

better rewarded (Fang et al., 2009; Jayaraman and Milbourn, 2012; Kang and Liu, 2008; Fereira et al., 2011 and others);

- *the discount effect* refers to the way in which stock liquidity determines the cost of capital and the decisions regarding the capital structure of the company, which in turn are influenced by the existing information asymmetry between insiders (management and majority shareholders) and other investors (Butler and others 2005; Bharath et al., 2009; Lipson and Mortal, 2009; Gao and Ritter, 2010; Stulz et al., 2013);
- *market frictions* that refer to how corporate decisions (financial transparency, dividend policy, share buybacks, stock splits or share consolidation actions) influence liquidity (Miller and Modigliani, 1961; Diamond and Verrecchia, 1991; Brockman and Chung, 2001; Brav et al., 2005; Eleswarapu and Venkataraman, 2006; Brockman et al., 2008; Amihud and Mendelson, 2008; Chung et al., 2010; Lang et al., 2012);

Thus, corporate finance studies analyzing stock liquidity have identified its numerous benefits, such as increasing the quality of corporate governance, facilitating price informativeness, enhancing the effectiveness of management policies and compensation systems, reducing costs for financing the company through the stock market, and, last but not least, reducing market frictions through dividend distribution, lower transaction costs, and others.

The role liquidity plays in asset valuation is rather intuitive because a rational investor will always consider the risks and costs involved in holding an illiquid asset. There is a vast literature that shows that:

- illiquid stocks and stocks with higher transaction costs will always be valued at a price lower than their intrinsic value (Amihud and Mendelson, 1986; Brennan and Subrahmanyam, 1996; Datar et al., 1998; Chordia et al., 2001; and others);
- liquidity shocks are positively correlated with stock return shocks (Amihud, 2002; Jones, 2002);
- furthermore, the systematic component of liquidity and its associated risk have a significant impact on an investor's decision to acquire (or not) a particular asset (Pastor and Stambaugh, 2003; Acharya and Pedersen, 2005; Sadka, 2006; Korajczyk and Sadka, 2008; Lee, 2011).

In other words, both the liquidity level (as a characteristic of the individual security) and its variations over time (as a characteristic of the market) are important factors in determining the price of the asset and in estimating its future returns. Market microstructure, on the other hand, gives us important insight into how stock markets structure and related trading mechanisms impact liquidity and the price discovery process. More specifically, the studies in this branch analyzed:

- the differences between the types of existing markets (Jain, 2003), and the factors that determine the investors' behavior according to market-type (Wuyts, 2007);
- the impact of algorithmic trading on the liquidity and informational efficiency of the security (Gai et al., 2013; Chung and Chuwonganant, 2014; Brogaard et al., 2014) and on how algorithmic trading contributes to the spread and amplification of liquidity shocks (Kirilenko et al., 2011);
- how liquidity is affected by market policies and regulations regarding: the minimum value of the price step (tick size) (Lau and McInish, 1995; Hsieh et al., 2008; Pan et al., 2012), the restrictions on short selling (Biais et al., 1999; Charoenrook and Daouk, 2005; Lin, 2008; Chuang and Lee, 2010; Lecce et al., 2012).

Thus, studies that focus on market microstructure contribute significantly to the in-depth understanding of the market, offering stock market administrators a clearer picture of the tools they can use to increase market liquidity.

From the macro perspective, liquidity, or more precisely commonality in liquidity, is considered one of the main mechanisms leading to the spread of financial crises. Studies such as Brunnermeier and Pedersen (2009) show that a temporary drop in prices can generate significant losses that lead to a reduction in available funding, which in turn increases the level of the systematic component and ultimately leads to a "dry up" in market liquidity.

This phenomenon is often explained through the "flight to liquidity" effect (Rosch and Kaserer, 2013), which suggests that a significant portion of market investors liquidate their positions in illiquid assets to acquire assets with higher liquidity. Studies such as Naes et al. (2011) demonstrate a strong relationship between market liquidity and economic cycles, showing that the composition of investors' portfolios varies depending on the phase of the economic cycle at that time.

Indeed, when analyzing market liquidity, we cannot overlook the impact of the real economy. At an aggregate level, market investors are exposed to the same economic environment, trading under the same economic conditions. This includes macroeconomic variables such as inflation, exchange rates, and interest rates, as well as the overall level of financial system

development and the level of investor protection and institutional quality that ensures market integrity.

Together, all these factors directly or indirectly determine the systematic component of liquidity and its evolution over time. Thus, from a macro perspective, market liquidity can be considered an indicator of the overall state of the economy, while also being a significant determinant of its performance. Therefore, the liquidity of securities is crucial for both the capital market and the entire economy. However, it remains one of the most unpredictable characteristics of the capital market to date.

The motivation for this research stems from the need to better understand the "animal spirits" that influence market liquidity and are likely to determine or amplify the next financial crisis. Culture represents a fundamental dimension of society, which is why its impact on individual behavior is inevitable, whether we are talking about the day-to-day life or individual decisions regarding the accumulation and investment of capital.

The aim of this research is to identify cultural dimensions that allow us to capture individual characteristics of investors that influence their decision to enter and trade on a stock market.

The research methodology employed in this study consists of two main components: firstly, an extensive literature review, and secondly, two empirical studies based on panel analysis. The first part of the research involved a comprehensive review of the specialized literature regarding the dimensions and determinants of liquidity. In the second part, an empirical analysis was conducted to examine how culture can affect the liquidity of stock markets.

The originality of this study lies in the analysis of the impact of investor culture on market liquidity from a new perspective, namely the social norms within their own country and the perceived distance of investors towards capital markets in other countries.

The first chapter of this study provided a concise presentation of the definition and dimensions of liquidity, along with the main measures used in empirical finance to estimate it. A brief review of the advantages and disadvantages of existing measures was then conducted, followed by a proposal to popularize a relatively new measure of liquidity that could better capture market liquidity. This section provided a solid theoretical foundation for the subsequent investigation of the determinants and impact of culture on market liquidity.

Chapter II focused on a comprehensive review of the existing literature regarding the main determinants of liquidity. These determinants were categorized into company-level, market-level, and macroeconomic factors. Moreover, we provided a brief overview of the main types of capital markets, considering their trading mechanisms and specific characteristics. Additionally, a comparative analysis was conducted to examine how liquidity is provided in quote-driven markets versus order-driven markets. This chapter laid the groundwork for further exploration of the impact of culture on market liquidity, moving beyond traditional finance theories.

Chapter III aimed to explore market liquidity from the perspective of behavioral finance, going beyond the conventional theories. We delved into the influence of cognitive biases and explore how culture can impact these biases. In this regard, we introduced the concept of cultural tightness-looseness, proposed by Gelfand et al. (2011), as a measure of social norms and their strictness. Using this measure, we analyzed the impact of social norms on the liquidity of securities, revealing that countries with moderate levels of norm strictness tend to exhibit higher market liquidity. This chapter provided valuable insights into the relationship between culture and liquidity, taking into account behavioral factors in investment decision-making.

Chapter IV focused on the impact of perceived distance on market liquidity, specifically examining the phenomenon of "foreign bias" in investment decisions. We introduced the concept of perceived distance, which was measured using psychic distance borrowed from the fields of International Management and International Business. Psychic distance refers to the factors that hinder the flow of information between two countries. By analyzing the perceived distance and its influence on liquidity, we gained a deeper understanding of how investors' subjective perceptions affect their investment decisions and the liquidity of the market. This chapter shed light on the role of perceived distance in shaping market liquidity and provided valuable insights into the interplay between cultural factors and investment behavior.

Therefore, in this doctoral thesis, our aim was to investigate the impact of investors' subjective perception on investment decisions, as captured by market liquidity.

#### **CHAPTER I SUMMARY**

Liquidity has been one of the most widely discussed and debated topics in academic literature over the past two decades, being considered by Amihud and Mendelson (1991) a "key attribute of the stock market". However, the concept of liquidity does not yet have a universally accepted definition, making it a concept that is as simple to understand as it is challenging to define.

Examining the various definitions found in academic literature in an attempt to identify a comprehensive and accurate definition of liquidity common elements are revealed. Most definitions include three key aspects: the significant volume or quantity of the asset to be traded, the price and its continuity in relation to the transaction's impact on equilibrium, and the time or duration required to complete the transaction. These elements highlight the ability to trade a substantial volume of assets, maintain price stability, and execute transactions efficiently.

#### Liquidity dimensions

Early works by Black (1971), Grossman and Miller (1988), and Harris (1990) highlighted four dimensions of liquidity: tightness, depth, resilience, and immediacy. Other authors such as Garbade (1982), Kyle (1985), and Holden (1990) focused on three dimensions: tightness, depth, and resilience. Meanwhile, authors like Bernstein (1987) emphasized breadth, depth, and resilience. According to Schwartz (1988), immediacy is not necessarily considered a separate dimension but rather an implicit characteristic of automated markets. More recent studies, such as those by Bervas (2006) and Sarr and Lybek (2002), have identified five dimensions of liquidity:

- *Depth:* It refers to the number of potential buyers/sellers or the number of buy/sell orders around the reference price. Depth represents the thickness or size of the order book.
- *Breadth:* It captures the volume of the asset that can be bought or sold at a specific price. In other words, it represents the actual size of orders in the order book.
- *Tightness:* It refers to the spread between the best bid and ask prices, which represents an estimate of the transaction cost. Tightness reflects the liquidity cost associated with trading.
- *Immediacy:* It represents the time it takes for an order to be executed. Immediacy is often associated with the efficiency of trading and settlement systems.
- *Resilience*: is the ability of the market to recover after the occurrence of an unexpected event.

The five dimensions of liquidity essentially encompass three characteristics of the order book: tightness (bid-ask spread), depth (number of orders near the reference price), and breadth (size or volume of orders at each price level). In addition, there are two characteristics related to the temporal evolution of events, namely, how the order book will appear after the execution of a transaction (resilience) and how long it will take to execute the order (immediacy). The major challenge faced by studies in the field of liquidity, both nowadays as in the past, is the absence of a comprehensive measure capable of incorporating all these dimensions. Most measures capture a single dimension, with a few exceptions that manage to capture two or three dimensions. In essence, measures that capture market breadth are based on trading volume and examine the impact of volume on price changes. Measures based on trading frequency, along with volume-based measures, are often used to analyze market depth. The latter focus on the trading volume of the asset and are among the easiest to measure.

#### Liquidity measures

The multidimensionality of liquidity is the reason behind the lack of a universally accepted definition in empirical finance, and it is also what has hindered the construction of an adequate measure that would capture all the intricacies of a liquid market. However, over the past two decades, there has been an exponential increase in the number of studies that either propose a new estimation method or provide improvements to existing measures. More recently, studies such as Goyenko, Holden, and Trzcinka (2009), Marshall et al. (2013), and Fong et al. (2017) have initiated the so-called "horse races" among existing measures. They compare the most commonly used liquidity measures and offer recommendations on the use of a particular measure based on the research objectives and its nature.

To facilitate easier navigation through the multitude of measures proposed, some authors such as Saar and Lybek (2002), Le and Gregoriou (2020), or Diaz and Escribano (2020) have attempted to classify the measures based on the following criteria:

- a) Frequency of used data:
  - high-frequency measures (using intra-day data);
  - low-frequency measure (within which daily data are used);
- b) The dimension or the characteristic of the market they capture:
  - measures that capture transaction cost (tightness);
  - measures based on trading volume (breadth și depth);
  - measures that capture price impact (resilience);
  - measures that capture multiple dimensions;
- c) The information required to compute the measure:
  - Volume based measures;
  - Price based measures;
  - Bid-ask spread measures;
  - Measures based on trading frequency.

The efficiency of existing liquidity measures has always been a subject for debate, the main dilemma being: what measure should be used to capture market liquidity, depending on the type of market, data availability, the phenomenon being studied, the dimensions of liquidity that are considered to have a significant impact on that phenomenon and many other criteria.

#### **CHAPTER II SUMMARY**

From a micro perspective, liquidity refers to the ease an investor, either as a seller or a buyer, can achieve their primary objective of selling or buying a certain quantity of an asset within a short time frame and at the most favorable price. From a macro perspective, liquidity is the market's ability to absorb a substantial volume of the asset without having a significant impact on the price. Thus, liquidity can be seen as the measure for which both conditions are met.

In academic literature, this measure is determined by a wide range of factors, whose importance varies across studies. It begins with the classical determinants of liquidity presented by Chordia et al. (2001): asset price, trading volume, and return volatility. However, it extends to factors such as the political party affiliation of the country's president (Marshal et al., 2018), the CEO's legal background (Pham, 2020), or shocks in the international oil market demand (Zhang and Wong, 2022).

In this chapter we focus on the factors whose importance has been highlighted and confirmed in a larger number of studies, and which refer to company characteristics, such as size, profitability, predictability, growth opportunities, quality of corporate governance and others; stock market characteristics such as the size, type, structure and mechanisms of the stock market, applicable regulations and others; country-level characteristics such as the level of financial openness, economic growth, inflation, political risk, the quality of institutions, the level of investor rights protection, the volume of foreign investment and others.

The main channels through which these factors influence liquidity are inventory risk, information asymmetry and liquidity financing.

Table	<b>1</b> .	Liquidity	y dete	rminants
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Company-level factors		Market-level factors		Macro level factors	
ROA, ROE	Frieder and Martel, 2006; Banerjee et al. 2007; Gopalan et al. 2009; Lipson and Mortal, 2009;	<i>Market</i> Type	Jain (2003)	Macroeconomic variables	Goyenko and Ukhov (2009), Naes et al. (2011), Busch and Lehnert (2014)
Financial leverage	Beaupain and Joliet (2013), Norvaišienė and Stankevičienė (2014),	Market regulations	Bessembinder (2000), Chung and Chuwonganant (2004), Jain et al. (2005), Anand and Venkataraman (2016)	Level of financial development	Lee and Chou (2018), Carvajal and Bebchuk (2019)
Company size	Chordia, Shivakumar and Subrahmanyam (2004),	Tick size	Bourghelle and Declerck (2004), Ahn et al. (2007), Pan et al. (2012), Holden et al. (2014)	Financial openness	Levine and Zervos (1996), Baldwin and Forslid (2000)
Ownership structure	Chung (2007), Agarwal (2009), He et al.(2013) și Ng et al. (2016)	Short selling constraint	Lamont and Thaler (2003), Chanroenrook and Daouk (2005), Bai and Qin (2014)	Institutional investors	Aragon and Strahan (2011), Ding et al. (2017), Dang et al. (2018)
Corporate governance	Bacidore and Sofianos (2002), Brockman and Chung (2003), Chen et al. (2007), Ali et al. (2017)	High- frequency trading	Hasbrouck and Saar (2013), Brogaard et al. (2014), Chaboud et al. (2014), Conrad et al., (2015), Weller (2018)	Legal framework	Bhatttacharya and Daouk (2002), Lesmond (2005), Chung (2006)
Dividend policy	Brennan and Tamarowski (2000), Banerjee et al. (2007), Hu et al. (2019),	Transparency	Madhavan (2000), Boehmer et al. (2005)	Institutional Quality and Rule of law	Bhattacharya (2006), Eleswarapu and Venkataraman (2006).

All these factors, however, belong to the perspective of classical finance, which refers either to the profit opportunity or to the associated risk. Most of the time, however, the investment decision is affected by investor's personal perception, which until recently was not included in any empirical finance theoretical models.

Behavioral finance challenges some of the assumptions made by classical theories and seeks to shift the focus of empirical studies towards investors. Ultimately, regardless of company's profitability, economic context, or market opportunities, it is the investor who decides what, how, and when to buy or sell. These decisions are not always rational, and even when they are, they often come bundled with an under- or overestimation of the market, the company, or the information held.

#### **CHAPTER III SUMMARY**

Behavioral finance seeks to explain the irrational decisions frequently made by investors through psychological biases, such as heuristics, overconfidence, mental accounting, narrow framing, disposition effect, representativeness, conservatism, and others. These biases are often seen as cognitive errors and are borrowed from the field of psychology.

For example, the concept of heuristics refers to the human tendency to use the so-called "shortcuts" or "rules of thumb" in their decision-making process. Mental accounting, defined by Thaler (1985), refers to the "set of cognitive operations used by individuals or households to organize, evaluate, and keep track of financial activities." These concepts highlight how behavioral finance incorporates psychological insights to understand and explain the biases and cognitive processes that influence financial decision-making.

According to Bailey et al. (2009), narrow framing refers to the tendency of investors to make investment decisions on an individual basis without considering the overall perspective of their portfolio. In other words, investors may focus on the specific characteristics or individual investment performance without taking into account the broader context of their entire portfolio. This narrow focus can lead to suboptimal decision-making and a failure to effectively diversify or manage risk at the portfolio level.

The disposition effect, initially proposed by Shefrin and Statman (1985), refers to the tendency of investors to sell "winning" stocks too early (stocks that increased in value) and hold onto "losing" stocks too long (stocks that decreased in value). This behavioral bias can be attributed to the fact that investors typically dislike losses more than they enjoy gains, leading them to be more risk-averse when it comes to realizing profits and more willing to take risks to avoid recognizing losses. As a result, they may prematurely sell stocks that have generated gains to secure a profit, while holding onto declining stocks in the hope of a future recovery.

Representativeness, in the context of behavioral finance, refers to the tendency of investors to assign greater importance to recent experiences while forgetting or ignoring historical events. This cognitive bias involves disregarding or underestimating information from the past and overly focusing on recent events or patterns.

All these biases are complex psychological concepts, the determinants of which are most often investigated at the individual level. Further exploration in the fields of psychology and anthropology has revealed the existence of shared societal traits and patterns. These shared societal traits, encompassing customs, beliefs, and values, are often attributed to the culture of a society, as described by Hofstede as the "collective programming of the mind."

Numerous attempts have been made to formalize and measure those common characteristics (dimensions) that underlie a culture. Among the most well-known are the dimensions of Hofstede, Schwartz, Globe or those found in WVS (World Value Survey). Most of these approaches have focused on individual societal values, ignoring, or underestimating the role of the social norms behind these values.

Hofstede	Schwarz	Globe	WVS
1. Individualism	1.Autonomy vs	1. Performance orientation	1. Traditional values
2. Power distance	embeddedness	2. Assertiveness	2. Secular-rational values
3. Masculinity	2.Egalitarianism	3. Future orientation	3. Survival values
4. Uncertainty avoidance	vs hierarchy	4. Humane orientation	4. Self-expression values
5. Long term orientation	3.Harmony vs	5. Institutional collectivism	
6. Indulgence	mastery	6. In-group collectivism	
		7. Gender egalitarianism	
		8. Power distance	
		9. Uncertainty avoidance	

Table 2. Cultural dimensions

Social norms are the implicit guidelines governing the behavior of individuals within a society, promoting coordination, predictability, and social cohesion among its members.

The concept of cultural tightness-looseness, while related to the dimension of individualism-collectivism, captures a unique construct by measuring the intensity of social norms and the degree of acceptance for deviations from those norms within a society.

The concept of Cultural Tightness-Looseness (CTL) was first introduced in anthropology by Pertti Pelto in his work "The differences between 'tight' and 'loose' societies" (1968). Pelto describes tight societies as those with strict norms and severe punishments for their violation, while loose societies are characterized by more relaxed and permissive norms.

In general, tight societies are characterized as more orderly and strict, with a higher level of trust in institutions but also a greater distance from power. They tend to have more censorship, discrimination, and punishment for rule-breaking. On the other hand, loose societies are described as more relaxed and creative, with a greater degree of diversity, more rights, and freedoms, but weaker institutions. They may have a higher tolerance for deviant behavior, higher crime rates, and less coordination. Extreme manifestations of tight societies can involve repression, dictatorship, discrimination, and inequality, while extreme loose societies can exhibit disorder, vices, and high levels of crime.

According to Gelfand (2006) these features, or more precisely the strictness of social norms is determined on the one hand by distant ecological and historical factors, i.e. the extent and frequency of threats that society has encountered throughout history (epidemics, natural disasters, wars and others), and on the other hand contemporary processes, i.e. the current way of life and organization of that society. Basically, the author suggests that the more threats a society had to face, the tighter it became, strict and clear rules being necessary to deal with crisis situations, any deviation from them could represent an existential threat. In the absence of such threats, a society allows itself to discard or ignore existing rules, with the emphasis being on freedom and creativity.

In 2011, starting from this theoretical model, Gelfand together with his collaborators develops the first measure of the dimension of cultural tightness loosens. In this sense, the authors built a questionnaire consisting of 6 questions, regarding the existing social norms, the society's expectations regarding a certain behavior in certain situations, the tolerance for a deviant behavior, and the extent to which the members of the society respect the social norms. Nearly 7 thousand respondents from 33 countries were asked to answer these questions using the Likert scale of agreement-disagree.

An alternative measure of the Cultural Tightness Looseness is proposed by Uz. The measure is actually an indicator of the dispersion of responses obtained in the year 2000 by the World Values Survey to certain questions regarding divorce, abortion, suicide, euthanasia and others. The author believes that the greater the dispersion of the answers, the greater the diversity in that country and respectively the looser that country is.

In the field of financial literature there are numerous studies that have analyzed the influence of culture on financial decisions. Among the most important we mention the following:

- *Grinblatt and Keloharju (2001)* conducted a study that examined the impact of cultural proximity on investor behavior in the context of Finnish companies. They found that investors were more inclined to hold, buy, and sell stocks of Finnish companies that were geographically closer to their location, communicated in their native language, and had a CEO with a cultural background similar to their own.

- *Guiso, Sapienza, and Zingales (2008)* conducted a study investigating the relationship between investor trust and participation in the stock market. They found that countries with higher levels of investor trust tend to have greater levels of participation in the capital market. The authors suggest that risk perception is influenced by both the objective characteristics of securities and investors' subjective perceptions.
- Chui et al. (2010) conducted a study examining the impact of cultural differences, as captured by the individualism, on trading volume and stock price volatility. The authors associated individualism with overconfidence and self-attribution bias, which are psychological biases that can affect investor behavior.

Individualism refers to the extent to which individuals prioritize their personal goals and autonomy over collective interests. In more individualistic cultures, people tend to have a stronger focus on their own achievements and attributes. This can manifest in overconfidence, where individuals have an inflated belief in their own abilities and knowledge, leading them to engage in more active trading.

- Anderson et al. (2011), while investigating the determinants of international diversification by institutional investors across 60 countries, showed that the home bias effect is stronger in countries characterized by a higher degree of uncertainty avoidance and weaker in countries with a higher level of masculinity and long-term orientation.
- *Eun et al. (2015)* extends the analysis of the impact of culture on stock prices in the capital market by incorporating, in addition to Hofstede's cultural dimensions, the dimension of Cultural Tightness Looseness. The study shows that the co-movement effect of stock prices is stronger in countries with collectivist and tight cultures.
- *Zadeh (2022)*, using the Social Capital index as a proxy for social trust in each US state, demonstrates that the level of trust impacts the informational environment of a company, increasing its credibility and its stock liquidity.

In this study, combining the findings from the aforementioned studies and the theoretical framework developed by Gelfand et al. (2011), we assume that the level of tightness-looseness influences market/stock liquidity through four channels: risk aversion, informational asymmetry, decision-making, and trust level.

Risk aversion is considered to be determined by the predominant focus type in tight vs. loose societies. Prevention focus refers to the prevention of failure (kiasu - it is more important not to lose than to win), while promotion focus refers to achieving desired outcomes. Informational asymmetry is determined by the type of communication characteristic of each society. Narrow socialization refers to rigid and rule-bound communication, while broad socialization refers to open and informal communication. Decision-making style essentially refers to the type of thinking, where members of a tight society (due to their fear of failure) prefer to adapt an existing idea rather than come up with a new one, while members of a loose society are more creative and lazy, preferring to explore new ideas that could reduce their workload. The weaker institutions in loose societies have led to an increase in interpersonal trust, while the stronger institutions in tight societies have led to an increased trust in institutions.

Based on these four channels, we might assume a linear relationship between CTL and liquidity, where looser societies would have a higher propensity for investment in the capital market. However, as mentioned in the previous section, each of the two types of societies has its advantages and disadvantages. When taken to the extreme, neither approach is correct or efficient. A recent study conducted by Gelfand, Harrington, and Boski, analyzing 32 nations, shows that when compared to moderate societies, both tight (highly constrained) and loose (highly permissive) societies tend to be characterized by lower levels of happiness, health, and economic development. For this reason, we believe that the relationship between CTL and liquidity is curvilinear, with the highest level of liquidity corresponding to countries with a moderate level of CTL.

Thus, our working hypotheses are the following:

H<sub>1</sub>: There is a curvilinear (inverted U-shaped) relationship between tightness-looseness and liquidity, whereby a moderate level of CTL corresponds to the highest level of liquidity.

H<sub>2</sub>: The way in which the strictness of social norms influences stock liquidity is shaped by the level of financial education within society.

In this study, we test the two hypotheses on a sample of 45 countries (26 developed countries and 19 emerging countries) over the period 2000-2022. Following the methodology proposed by Griffin et al. (2010), securities from each country were manually filtered to exclude closed-end funds, preference shares, depository receipts, Mexican ordinary participation certificates, Peruvian investment shares, cumulative preference shares, stapled securities, rights, units, and other securities with special characteristics. Furthermore, following the approach proposed by Karolyi et al. (2012), days where more than 90% of listed securities on a particular stock market had zero returns were excluded. Additionally, in line with the caution raised by Ince

and Porter (2006) regarding data errors in Datastream, returns exceeding 200% or returns that were reversed the following day were eliminated.

In this study, we use Amihud's measure as a proxy for liquidity, considering it one of the most reliable measures for analyzing international markets. To reduce the impact of extreme values and facilitate interpretation, we followed Karolyi's suggestion of taking the logarithm and inverting the sign of the obtained values. The main data sources for this study are the Datastream platform and the World Bank website. For measuring Cultural Tightness Looseness, we use the measure proposed by Gelfand et al. (2010) as we believe it captures the societal members' perception of social norms more effectively.

Our empirical study consists of three stages: confirming the existence and significance of the relationship between CTL and liquidity, validating the obtained results through robustness tests, and analyzing the mechanisms through which policy makers can influence the relationship between the two variables.

At first, we use Pooled OLS regressions with fixed time effects and Tobit regressions and confirm the U-shaped relationship between CTL and liquidity. The coefficients remained significant at the 1% threshold, regardless of the model specification used.

Secondly, the sample of securities was divided in subsamples: based on country development level, on company size, and on industry/sector. The results for all sub-samples (except for the insurance companies at industry level) confirm a significant relationship between CTL and stock liquidity. Furthermore, the models used in the first stage were rerun using random effects regressions and random effects Tobit regressions, and the results once again confirm the robustness of the theoretical model defined by us.

In the third stage, we included in our model the measure of financial education in order to investigate the impact of financial education on the relationship between CTL and stock liquidity. There are numerous studies that have analyzed the effect of financial education on various economic decisions. There studies show that most people have a low level of financial education, which can be associated with portfolio under-diversification, low levels of investment in stock market, lack of savings for retirement, frequent changes in the allocation of accumulated capital for retirement, questionable financial decisions, and irresponsible financial behavior (excessive use of credit cards, over-indebtedness, and others).

That is why, in the last part of this study, we investigate whether the decision-making factor could influence the relationship between culture and stock liquidity, through policies aimed to increase the level of financial literacy.

The results confirm this hypothesis. Moreover, they indicate that a high level of financial literacy could reverse the relationship between CTL and stock liquidity. In other words, as the level of investors' financial literacy increase, they are more likely to overcome cognitive biases and make rational financial decisions. This finding suggests that promoting financial education can have a positive effect on market liquidity by enhancing investors' decision-making capabilities and reducing the influence of cultural factors.

The moderating effect of financial education on the relationship between CTL and liquidity has several important implications for policy makers and financial market regulators. Firstly, as the results of this study show increasing the level of financial literacy can diminish the effect of culture on stock liquidity. This means that authorities in countries with lower levels of market liquidity should implement measures aimed at increasing the level of financial literacy in order to increase liquidity.

Secondly, the results confirm our assumption that the level of development of a stock market is influenced by the extent to which the society has managed to find a balance between freedom and obedience. A "healthy" stock market cannot be developed in a conservative and overregulated environment, because innovation is one of the main driver of development, but at the same time a lack of clear rules and adequate control mechanisms leads to chaos and the population's lack of confidence in the capital market.

#### **CHAPTER IV SUMMARY**

While the preceding chapter delved into the examination of social norms and disparities within a given society, the subsequent chapter will shift the focus towards investigating the implications of variances across different societies.

Real and perceived differences between members of a society or members of different societies have a significant impact on the decisions we make. In fact, these differences lead to biased decisions. Because, as many psychological studies show, we tend to like more people who are similar to us (speak the same language, share the same religion, have the same skin, hair, eye color, etc.). Some studies explain this bias through the fact that most of us prefer to stay in the comfort zone, to reduce the probability of conflict situations. That is, we like more people who are similar to us because we subconsciously associate differences with conflict. The natural question that arises in this context is: "What is the connection between stock market liquidity, perceived differences and the probability of a conflict?". This is the question we aim to answer in this study.

Let's begin with the fact that academic literature associates these differences most oftenly with the concept of distance (cultural, institutional, economic, psychological, geographical, etc.), the greater the distance, the more differences there are.

International Management and International Business studies have always placed particular emphasis on the impact of distance on investment decisions. Considering during the internationalization of a company it faces a series of critical decisions such as where and how much to invest, how to organize and control foreign enterprises so as to maximize the benefits and minimize the risks and costs. In fact, according to Zaheer et al. 2012 "International management is the management of distances". Distance in this context does not only refer to geographical distance but also to cultural, economic, administrative, institutional, linguistic, religious differences and various combinations thereof. Quoting Johanson and Vahlne (1977): "Distance represents an important barrier to information transfer, increasing the level of uncertainty and ambiguity that investors encounter when they want to enter a new market".

Prior to 1988, the research predominantly in the field of International Affairs revolved around the influence of geographic distance. However, with the emergence of seminal works of Hofstede (1980) and Kogut and Singh (1988), there was a gradual shift towards examining the role of cultural distance. As the field progressed, criticism regarding the limitations of cultural distance, particularly highlighted by Shenkar, prompted scholars to explore alternative dimensions. Consequently, a growing body of literature emerged in the early 2000s, seeking to enhance and broaden the conceptual framework by introducing additional constructs such as institutional and psychic distances.

The concept of cultural distance primarily pertains to the cultural disparities between two countries, based on cultural dimensions (often employing Hofstede(1980)'s dimensions), which are aggregated using a composite index.

Cho and Padmanabham (2005) emphasize that since the creation of Hofstede's renowned cultural dimensions in 1980, and their inclusion by Kogut and Singh (1988) in a composite index of cultural distance, researchers have extensively employed it to explain variations in performance, strategy, and the impact of companies at an international level. They state that it has reached a

point where no study in the field of international business can be considered comprehensive without explicitly incorporating a control variable for cultural distance.

The term "psychic distance" was first introduced by Beckerman (1956) in his work on European trade flows. Although the author did not provide a clear definition of the concept, he mentioned it briefly in the closing remarks of his study. Beckerman highlights that in a similar context with equal costs involved, an Italian entrepreneur will almost always prefer to collaborate with a Swiss supplier rather than a Turkish one, considering the former to be "psychologically closer."

In the 1970s, the concept was embraced by researchers at the Uppsala University, who provided the first formal definition, specifically referring to "differences in spoken languages, culture, political systems, and levels of industrial development." Subsequently, studies such as Boyacigiller (1990) suggested expanding this list to include "religious differences, forms of government, economic development, and levels of emigration.

In International Business studies, there have been numerous studies that have demonstrated the impact of distance on various aspects:

- *decision to export* (Wierdesheim-Paul et al., 1978; Holzmuller and Kasper, 1990; Fletcher and Bohn, 1998);
- *market selection* (for export Johanson şi Valhne, 1977; Dow, 2000; for direct investment Green and Cunningham, 1975; Davidson, 1980; Terpstra and Yu, 1988; Grosse and Trevino, 1996; Barkema, 1996; Dow, 2000; Habib and Zurawicki, 2002; Brewer, 2007; Buckley et al., 2008; Dow and Ferencikova, 2010; Palmero et al., 2013);
- *entry mode choice* (Chang and Rosenweig, 2001; Brouthers et al., 2001; Tihanyi et al., 2005; Shaver, 1998; Padmanabhan and Cho, 1999; Brouthers and Brouthers, 2000; Harzing, 2002; Dow and Larimo, 2009);
- *performance in foreign market* (O'Grady and Lane, 1996; Evans and Mavondo, 2002;
  Pothukuchi et al., 2002; Brouthers, 2002; Evans et al., 2008; Dikova, 2009; Griffith and Dimitrova, 2014);
- *degree of adaptation in foreign markets* (Mueller, 1991; Dow, 2001; Sousa and Bradley, 2005);
- know-how transfer (Dinur et al., 2009; Reus and Rotting, 2009; Sarala and Vaara, 2010)

Indeed there is an International Business framework called the CAGE framework, developed by Professor Pankaj Ghemawat (2004), which aims to assist companies in the process of making internationalization decisions. The CAGE framework is based on the idea that differences between countries can create barriers to international trade and investment. It consists of four key dimensions that capture the distance or dissimilarity between countries:

- Cultural Distance: This dimension refers to differences in language, religion, social norms, values, and beliefs between countries. Cultural differences can affect consumer behavior, communication, and the acceptance of foreign products and services.
- Administrative Distance: Administrative distance encompasses differences in governmental policies, regulations, and political systems between countries. It includes factors such as trade barriers, legal systems, bureaucratic procedures, and political stability. Administrative differences can affect market access, business operations, and the ease of doing business in foreign markets.
- Geographic Distance: Geographic distance refers to the physical separation between countries, including factors such as distance, time zones, transportation costs, and infrastructure. Geographic distance can impact transportation and logistics costs, communication, and the speed of market entry.
- Economic Distance: Economic distance represents differences in income levels, wealth distribution, market size, and economic development between countries. Economic differences can affect consumer purchasing power, market demand, and the attractiveness of a market for investment.

By analyzing these dimensions, companies can assess the level of distance or dissimilarity between their domestic market and potential foreign markets. This assessment helps in identifying opportunities and challenges in internationalization decisions.

The CAGE framework provides a structured approach for companies to evaluate potential markets, understand the risks and barriers associated with international expansion, and make informed decisions about market selection, entry strategies, and the degree of adaptation required.

In this study, our aim was to addapt the theoretical framework developed in the field of International Business and apply it to the analysis of trading activities in capital markets. Specifically, we adopted one of the most comprehensive methods available for estimating psychic distance, as proposed by Dow and Karunaratna (2006). Using this method, we calculated the psychic distance between the United States and a sample of 44 countries. Subsequently, we investigated the extent to which this distance influences the level of stock market liquidity of these countries.

According to the methodology employed, psychic distance is an aggregate measure of six stimuli: culture, language, religion, level of education, political system, and level of industrial development. Each of these stimuli represents a measure of differences as perceived by investors between the home country and the host country. In essence, psychic distance can be considered a measure of the perceived "familiarity" of American investors with the 44 countries under analysis. Previous studies in financial literature, such as Grinblatt and Keloharju (2001), Chan et al. (2005), and Beugelsdijk and Frijins (2010), among others, have shown that the perceived level of familiarity significantly influences capital allocation decisions in international markets.

Indeed, this study contributes to the existing body of financial literature by bridging the gap between the fields of finance and international business. By adopting a measure borrowed from the field of International Business, namely psychic distance, we aim to analyze the impact of country familiarity on stock market liquidity. While previous studies have extensively examined the relationship between various factors and market liquidity, the incorporation of psychic distance as a proxy for familiarity provides a novel perspective. It allows us to explore how investors' perceived familiarity with a foreign market influences the liquidity of its stock market. To achieve this objective, a series of fixed-effects regression models were conducted, which revealed that as the psychic distance from the US increases, the stock market liquidity level decreases. This relationship was confirmed through the individual analysis of each component of psychic distance. Notably, this relationship holds true for both developed and emerging capital markets. The robustness of the results was confirmed by employing alternative measures of psychic distance and cultural distance, as well as by instrumenting psychic distance with geographic distance.

Furthermore, the coefficients remained negative and statistically significant even after controlling for variables such as economic development, macroeconomic stability, capital market development, investor protection, freedom of press, and market concentration levels.

From our perspective, psychic distance has a significant impact on market liquidity through three channels: informational asymmetry, transaction costs, and trading activity. Each of these channels affects, on one hand, the presence and trading activity of foreign investors, and on the other hand, the trading intensity of local investors (both in the domestic market and in the US capital market).

Indeed, informational asymmetry naturally arises when discussing a capital market in a distant country with a different culture, language, and less widespread religion (e.g., Japan). From this perspective, psychic distance can be seen as a measure of "informational frictions," the effects of which on trading activity have been extensively studied in the financial literature. Psychic

distance captures the perceived psychological and cultural differences between countries, which can result in information barriers and increased uncertainty levels for market participants. These barriers can impede the flow of information and make it more challenging for investors to obtain accurate and timely information about the market and its participants. As a result, there may be a higher level of informational asymmetry between local and foreign investors.

Foreign investors face several challenges when investing in a market with high psychic distance. They need to allocate time and resources to effectively monitor market developments, and there is always a possibility of misinterpreting information or signals in the market. As a result, foreign investors may prefer to invest in markets that are perceived as more "proximate" or familiar. Alternatively, if they do invest in a market with high psychic distance, they may have suspicions that their counterparties possess superior information, leading to hesitation in executing trades which could significantly widen the bid-ask spread.

The costs associated with reducing the discrepancies between local and foreign investors further increase the transaction costs. Foreign investors need to invest time and money in bridging the informational gap, which adds to their trading costs. This, in turn, puts additional pressure on the profitability of foreign investors and consequently affects the volume and number of transactions they undertake.

The informational asymmetry between local and foreign investors has two main effects on trading costs. Firstly, it increases the cost of obtaining and interpreting information. Foreign investors may need to rely on translators, consultants, or local experts to gather and understand market information, which adds to their expenses. Secondly, the bid-ask spread, representing the difference between the buying and selling prices of an asset, tends to be higher in markets with higher informational asymmetry. This is due to the suspicion that one party possesses privileged information, leading to a wider spread as both parties seek to compensate for the potential information disadvantage.

The impact of psychic distance on trading activity can be analyzed from various perspectives. Firstly, it can be examined in terms of the presence of foreign investors (both institutional and retail) on the stock market. As mentioned earlier, the level of familiarity with the market plays a crucial role in attracting foreign investors. The presence of foreign investors, in turn, can have implications for the quality of corporate governance in local firms and the informational efficiency of the market.

Foreign investors bring in external expertise, knowledge, and capital, which can contribute to improving the governance practices of local firms. Their participation in the market trades can enhance transparency, accountability, and adherence to international standards. This, in turn, can enhance the confidence of domestic investors and lead to improved governance practices among local firms. Moreover, the presence of foreign investors can also enhance the informational efficiency of the market. Foreign investors often conduct thorough research and analysis before making investment decisions. They bring in new information and perspectives, which can enhance price discovery and reduce information asymmetry in the market. This, in turn, can improve market efficiency and facilitate better resource allocation.

However, the impact of psychic distance on trading activity is not solely limited to the presence of foreign investors. It also extends to the behavior of local investors. Higher psychic distance can create barriers for local investors in understanding and accessing foreign markets. This may result in a higher concentration of trading activity on domestic markets and a reluctance among local investors to engage in cross-border transactions. Consequently, the liquidity and trading volume in domestic markets may be higher compared to foreign markets with higher psychic distance.

Indeed, institutional foreign investors play a crucial role in enhancing corporate governance through the close monitoring of management decisions. Their active engagement in overseeing company operations and ensuring alignment with shareholder interests can lead to improved governance practices. By closely monitoring company activities, foreign institutional investors can identify potential agency problems, advocate for better disclosure and transparency, and encourage responsible decision-making.

Furthermore, the presence of foreign institutional investors can contribute to the informational efficiency of the market. Through their extensive research capabilities and access to global networks, they can quickly incorporate new information into stock prices. This rapid information incorporation enhances price discovery and reduces information asymmetry, benefiting all market participants.

Moreover, the trading activity of foreign institutional investors positively impacts the overall trading volume on the market. As foreign institutional investors engage in higher volumes of trades, the market liquidity increases. This increased liquidity attracts more market participants, including both domestic and foreign investors, leading to further trading activity and reduced transaction costs. Reduced transaction costs, in turn, encourage higher trading volumes as it becomes more cost-effective for investors to execute transactions.

#### **CONCLUDING REMARKS AND FUTURE RESEARCH DIRECTIONS**

Over the last two decades, we are witnessing a gradual change in the economic paradigm. This change determined by the financial crisis of 2008 and intensified by the Covid-19 pandemic affected multiple branches of economic science, but it had a particular impact on behavioral finance.

Founded in the early 80s as a response to the multiple critiques of classical theories, the field of Behavioral Finance is at the verge between finance, psychology, sociology and anthropology. The new interdisciplinary approach, brought to light by behavioral finance, allowed the analysis of investor behavior from a new perspective, that of the subjective financial decision-making process and the biases associated with it.

Some authors such as Schleifer (2000), Gromb and Vayanos (2010) or Baker (2009) focused on analyzing the impact of psychological biases on investment decisions, while others such as Grinblat and Keloharju (2001), Chan and others (2005), Chui et al. (2010) or Eun et al. (2015), went further by investigating the factors that could be driving these biases. Among the most important factors in this regard, authors highlight culture, analyzed through cultural values/dimensions.

In this paper, we set out to extend the analysis of the impact of culture on the capital market, investigating in particular its effect on stock liquidity. In this sense, in the first part of the empirical study, the impact of the strictness of social norms on the liquidity of securities in 26 developed countries and 19 emerging countries was analyzed. The strength of social norms and tolerance towards deviant behavior was estimated using the measure of cultural tightness-looseness (CTL) constructed by Gelfand et al. (2011).

The results suggest that there is a non-linear relationship (inverted U-shape) between CTL and stock liquidity, and that countries characterized by a moderate level of CTL are generally countries with more liquid capital markets.

At the same time, we have shown that one of the instruments through which policymakers could influence the relationship between the two variables is financial education. Thus, countries with a high/low level of cultural tightness-looseness (CTL) can enhance their stock market liquidity through measures aimed at increasing the level of financial literacy. Understanding financial concepts and market mechanisms helps investors to overcome cognitive biases, manifested by under-/overestimation of risks, under-/overconfidence in their abilities, nonconformity, external locus of control, and others.

In the second part of our empirical study, building upon the concept of psychic distance from International Business studies, we focused on the impact of perceived differences by investors between the home country and the host country of investments. Specifically, using the measure constructed by Dow and Karunaratna (2006), we analyzed the impact of psychic distance from the USA on the liquidity of capital markets in 45 countries.

According to our results, the greater the psychic distance from the USA, the lower the liquidity of the analyzed country's capital market. Furthermore, we highlight that psychic distance is a construct distinct from that of cultural distance, and its impact on market liquidity is more pronounced in developed countries.

By analyzing both the impact of the components/stimuli of psychic distance and the factors influencing investors' perception of this distance, we can conclude that one of the mechanisms through which policymakers (in countries with low market liquidity) could influence liquidity levels is by implementing measures aimed at reducing the discrepancies in education levels.

According to Dow (2009), investors' perception of the distance between the home country and the destination country is influenced by their level of knowledge of the local language and religion, as well as their previous travel experiences in that country.

As future research directions, it would be interesting to expand the study conducted on psychic distance by constructing a measure such as "distance to wealth." This measure could potentially provide a better understanding of a country's potential to attract foreign investors from developed countries. Additionally, considering the significant disparities among countries in our sample in terms of the number of securities and trading volume, it would be valuable to analyze the impact of psychological distance on liquidity at the individual security level while controlling for firm-specific factors such as size, profitability, or industry affiliation. This approach would allow for a more nuanced examination of the relationship between psychological distance and liquidity.

#### REFERENCES

Abdi, F., Ranaldo, A., (2017). A simple estimation of bid-ask spreads from daily close, high, and low prices. *Review of Financial Studies*. 30 (12), 4437–4480

Acharya, V.V., Pedersen, L.H., (2005). Asset pricing with liquidity risk. Journal of Financial Economics, 77 (2), 375–410

Acker, D., Stalker, M. and Tonks, I. (2002) 'Daily closing inside spreads and trading volumes around earnings announcements', *Journal of Business Finance and Accounting*, Vol. 29, Nos. 9–10, pp.1149–1179

Admati A. and P. Pfleiderer. The "wall street walk" and shareholder activism:Exit as a form of voice. *Review of Financial Studies*, 22:2645–2085, 2009

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

Agarwal P. (2009). Institutional ownership, liquidity and liquidity risk. Cornell University. PhD Thesis.

Aggarwal, R., Goodell, J.W., (2010). Financial markets versus institutions in European countries: influence of culture and other national characteristics. *International Business Review*, 19 (5), 502–520.

Aggarwal, R., Kearney, C., & Lucey, B. (2012). Gravity and culture in foreign portfolio investment. *Journal of Banking & Finance*, 36(2), 525–538

Ahern, K. R., Daminelli, D., & Fracassi, C. (2015). Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics*, 117(1)

Ahn, H-J., Bae, K-H. and Chan, K. (2001) 'Limit orders, depth, and volatility: evidence from the stock exchange of Hong Kong', *Journal of Finance*, Vol. 56, No. 2, pp.767–787

Ahn, H. J., Cai, J., and Hamao, Y. (2007). Tick size change and liquidity provision on the Tokyo Stock Exchange. *Journal of the Japanese and International Economics*, 21(2), 173–194

Ahn, H. J., Cai, J., Hamao, Y., & Melvin, M. (2014). Little guys, liquidity, and the informational efficiency of price: Evidence from the Tokyo Stock Exchange on the effects of small investor participation. *Pacific Basin Finance Journal*, 29, 163–181.

Ailon, G. (2008). Mirror, Mirror on the Wall: Culture's Consequences in A Value Test of its Own Design. *Academy of Management Review*, 33(4), 885–904.

Aitken, M., and Comerton-Forde, C. (2003). How should liquidity be measured? *Pacific-Basin Finance Journal*, 11(1), 45–59

Akerlof, G. A., & Shiller, R. J. (2009). Animal spirits: How human psychology drives the economy, and why it matters for global capitalism. Princeton University Press.

Alan, N.S., Hua, J., Peng, L. and Schwartz, R.A. (2015) Stock Resiliency and Expected Returns, *Working Paper* 

Allen, F., Gale, D., (1999). Bubbles, crises, and policy. *Oxford Review of Economic Policy*, 15 (3), 9–18.

Aman H., Moriyasu H. (2022), "Effect of corporate disclosure and press media on market liquidity: Evidence from Japan", *International Review of Financial Analysis*, Elsevier

Ambos, B. Leicht-Deobald, U. & Leinemann, A.(2019) Understanding the Formation of Psychic Distance Perceptions: Are Country-level or Individual-level Factors more Important? *International Business Review*, 28 660-671

Amihud, Y., (2002). Illiquidity and stock returns: cross-section and time-series effects. *J. Financial Mark.* 5 (1), 31–56.

Amihud, Y., Hameed, A., Kang, W., Zhang, H., (2015). Stock liquidity and the cost of equity capital in global markets. *Journal of Applied Corporate Finance*, 27 (4), 68–74.

Amihud, Y., Mendelson, H., (1988). Liquidity and asset prices: Financial management implications. *Financial Management* 5–15.

Amihud, Y., Mendelson, H., (2000). The liquidity route to a lower cost of capital. *Journal* of Applied Corporate Finance 12 (4), 8–25.

Amihud Y. and Mendelson H. (2008) Liquidity, the value of the firm, and corporate finance. *Journal of Applied Corporate Finance*, 20:32–45.

Amihud, Y. Hameed, A.,Kang, W., and Zhang, H. (2015) The Illiquidity Premium: International Evidence. *Journal of Financial Economics* (JFE), Vol. 117, No. 2.

Anderson, H. D., and Peng, Y. (2014). From cents to half-cents and its liquidity impact. *Pacific Accounting Review*, 26(3), 160–176.

Anginer, D., (2009) Liquidity Clienteles: Transaction Costs and Investment Decisions of Individual Investors . *World Bank Policy Research* Working Paper No. 5318.

Aren, S., & Aydemir, S. D. (2014). A literature review on financial literacy. *Journal of Financial Researches and Studies*, 5(11), 33-49.

Aren, S. and Aydemir S. (2015) The moderation of financial literacy on the relationship betweene individual factors and risky investment intention. *International Business Research*, Vol.8, No 6.

Asquith, O., Healy, P., Palepu, K., (1989). Earnings and stock splits. *Accounting Review* 64, 387–403

Atawnah, N., Balachandran, B., Duong, H.N., Podolski, E.J., (2018). Does exposure to foreign competition affect stock liquidity? Evidence from industry-level import data. *J. Financial Mark.* 39, 44–67.

Attig, A., Gadhoumm, Y., & Lang, L. H. P. (2003). Bid-ask spread, asymmetric information and ultimate ownership. EFMA Conference in Helsinki.

Avloniti, A., Filippaios, F. (2014). Unbundling the differences between Psychic and Cultural Distance: An empirical examination of the existing measures. *International Business Review* 23 (3), 660-674

Bacidore, JM (1997). The impact of decimalization on market quality: An empirical investigation of the Toronto Stock Exchange. *Journal of Financial Intermediation*, 6, 92–120

Bacidore, J. M., and G. Sofianos. (2002) "Liquidity Provision and Specialist Trading in NYSE-Listed NonU.S. Stocks." *Journal of Financial Economics*, 63 133–158

Bagehot, W., (1971), The Only Game in Town, Financial Analysts Journal, 22, 12-14

Bai, M. and Qin, Y. (2014), "Short-sales constraints and liquidity change: cross-sectional evidence from the Hong Kong market", *Pacific-Basin Finance Journal*, Vol. 26, pp. 98-122

Baker, K. (1996). Trading Location and liquidity- An Analysis of US dealer and Agency Markets for Common Stocks. *Financial Markets, Institutions and Instruments,* 5(4)

Baker M.,(2009). Capital market-driven corporate finance. Annu. Rev. Financ. Econ. 1:181–205

Baker, M., & Stein, J. C. (2004). Market liquidity as a sentiment indicator. *Journal of Financial Markets*, 7(3), 271–299.

Barkema, H. G., Bell, J. H. J., & Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal*, 17(2), 151–166.

Balakrishnan, K., Billings, M.B., Kelly, B., Ljungqvist, A., (2014). Shaping liquidity:On the causal effects of voluntary disclosure. *Journal of Finance*, 69 (5), 2237–2278.

Baldwin, R.E., Forslid, R., (2000). Trade liberalisation and endogenous growth: a q-theory approach. *J. Int. Econ.* 50 (2), 497–517.

Banerjee, S., Gatchev, V., & Spindt, P. (2007). Stock Market Liquidity and Firm Dividend Policy. *Journal of Financial and Quantitative Analysis*, 42(2), 369-397

Barber, B., Odean, T., (2001). Boys will be boys: gender, overconfidence, and common stock investment. *Quarterly Journal of Economics* 116, 261 – 292

Barberis, N., Thaler, R., (2003). A survey of behavioral finance. In: Constantinides, G., Harris, M., Stulz, R. (Eds.), Handbook of the Economics of Finance. North-Holland, Amsterdam.

Barclay, M.; Christie, W.; Harris, J.; Kandel, E. and Schultz, P., (1999), Effects of Market Reform on the Trading Costs and Depths of NASDAQ Stocks, *Journal of Finance*, 54,1-34.

Barkema, H. G., Bell, J. H., & Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal*, 17(2), 151–166.

BAYER, P., BERNHEIM, B.D, SCHOLZ, J.K. (1996). The effects of financial education in the workplace: evidence from a survey of employers, National Bureau of Economic Research, NBERWorking Paper Series, *Working Paper* 5655, pp.1-29

Bayer, C. Born, B. and Luetticke, R, (2020). The Liquidity Channel of Fiscal Policy CESifo Working Paper No. 8374

Bebchuk, L., A. Cohen, and A. Ferrell. (2008) "What Mattersin Corporate Governance?" *Review of Financial Studies* 22 (2): 783–827

Beber, A. and Pagano, M. (2013), "Short-selling bans around the world: evidence from the 2007-09 crisis", *Journal of Finance*, Vol. 68 No. 1, pp. 343-381.

Beber, A., Driessen, J., & Tuijp, P. (2011). Pricing Liquidity Risk with Heterogeneous Investment Horizons. SSRN Electronic Journal

Bekaert, G., Harvey, C. R., & Lundblad, C. (2007). Liquidity and Expected Returns: Lessons from Emerging Markets. *Review of Financial Studies*, 20(6), 1783–1831.

Ben-Raphael, A., Kadan, O., Wohl, A., (2015). The diminishing liquidity premium. J. Financ. Quant. Anal. 50 (1-2), 197–229.

Benston, G. J., & Hagerman, R. (1974). Determinants of bid-asked spreads in the overthecounter market. *Journal of Financial Economics*, 1, 353–364.

Bernstein, S., (2015). Does going public affect innovation? *Journal of Finance* 70 (4),1365–1403.

Bernstein, P.L., (1987). Liquidity, stock markets, and market makers. *Financ. Manage*. 54–62.

Berry, H., Guillén, M. & Zhou, N. (2010) An institutional approach to cross-national distance. *J Int Bus Stud* 41, 1460–1480

Bervas, A., (2006). Market liquidity and its incorporation into risk management. *Financial Stability Review* 8 (May), 63–79.

Bharath,S. Jayaraman,S., and Nager.V., (2013) Exit as governance: An empirical analysis. *Journal of Finance*, 68:2515–2547

Bhattacharya, U., Daouk, H., (2002). The world price of insider trading. *Journal of Finance* 57, 75–108

Bhide, A. (1993), "The Hidden Costs of Stock Market Liquidity." *Journal of Financial Economics*, 34,31–51.

Biais, B., Foucault, T., Hillion, P., (1997). Microstructure Des Marchés Financiers: Institutions, Modèles Et Tests Empiriques. Presses universitaires de France, Paris.

Biasutti, R, (1954) Le Razze e i Popoli Della Terra, Vol. I (Turin: UTET)

Black, F. (1971).Towards a Fully Automated Exchange. *Financial Analysts Journal*, 27, 28-35

Blau, B.M., (2017). Social trust and the liquidity of cross-listed securities. J. Bus.Res. 78, 155–171.

Blau, B., Van Ness, R., Warr, R., (2012). Short selling of ADRs and foreign market shortsale constraints. *Journal of Banking and Finance* 36,886–897.

Boehmer, Ekkehart, and Julie Wu, (2012), Short selling and the price discovery process, *Review of Financial Studies* 

Bollen, NPB and RE Whaley (1998). Are "teenies" better? Journal of Portfolio Management, 25, 10-24.

Bolton, P., & Von Thadden, E. (1998). Block, liquidity, and corporate Control. *Journal of Finance*, 53, 1–25

Bond, M. H. (1997). Adding value to the cross-cultural study of organizational behavior. In P. C. Earley & M. Erez (Eds.), New perspectives in international industrial/organizational psychology (pp. 256–275). SanFrancisco: New Lexington Press

Booth, J., & Chua, L. (1996). Ownership dispersion, costly information, and IPO underpricing. *Journal of Financial Economics*, 41, 291–310.

Bourghelle, D., and Declerck, F. (2004). Why markets should not necessarily reduce the tick size. *Journal of Banking and Finance*, 28(2), 373–398.

Brav, A., Jiang W., and Kim H.(2010) Hedge fund activism: A review. *Foundations and Trends in Finance*, 4:185–246.

Brennan, M.J., Copeland, T.E., (1988). Stock splits, stock prices, and transaction costs. *Journal of Financial Economics* 22, 83-101.

Brennan, M.J., Hughes, P.J., (1991). Stock prices and the supply of information. *Journal* of Finance 46, 1665–1691

Brennan, M., Huh, S.-W., & Subrahmanyam, A. (2013). An Analysis of the Amihud Illiquidity Premium. *Review of Asset Pricing Studies*, 3(1), 133–176.

Brewer, P. (2007). Operationalizing psychic distance: A revised approach. *Journal of International Marketing*, 15(1), 44–66.

Brock, J.K-U., Johnson, J.E., Zhou, J.Y., (2011) Does distance matter for internationally oriented small firms? *Industrial Marketing Management* 40 (3), 384-394

Brockman P. and Chung D.,(2001) Managerial timing and corporate liquidity: Evidence from actual share repurchases. *Journal of Financial Economics*, 61:417–448

Brockman, P., and D. Y. Chung.(2003) "Investor Protection and Firm Liquidity." *Journal* of Finance, 58, 921–937

Brockman, P., Chung, D,Y., & Perignon, C. (2009). Commonality in liquidity: a global perspective. *Journal of Financial and Quantitative Analysis*, 44, 851-882

Brockman, P., Chung, D.Y., Yan, X.S., (2009) Block ownership, trading activity, and market liquidity. *Journal of Financial and Quantitative Analysis*. 44 (6), 1403–1426.

Brockman, P., Howe, J. S., & Mortal, S. (2008). Stock market liquidity and the decision to repurchase. *Journal of Corporate Finance*, 15(70572065), 66–79.

Brockman, P., and E. Unlu. (2009) "Dividend Policy, CreditorRights, and the Agency Costs of Debt." *Journal of Financial Economics* 92 (2): 276–299

Brogaard, J., D. Li, and Y. Xia (2017) "Stock Liquidity and Default Risk." *Journal of Financial Economics* 124 (3):486–502.

Brouthers, K. D. (2002) Institutional, Cultural and Transaction Cost Influences on EntryMode Choice and Performance. *Journal of International Business Studies*, 33(2): 203-21.

Brouthers, K. D. & L. E. Brouthers (2000) Acquisition or Greenfield Startup? Institutional, Cultural and Transaction Cost Influences. *Strategic Management Journal*, 21(1): 89-97

Brouthers, K. D. & L. E. Brouthers (2001) Explaining the National Cultural Distance Paradox. *Journal of International Business Studies*, 32(1): 177-92.

Brunnermeier, M.K. and Pedersen, L.H. (2009). Market liquidity and funding liquidity. *Review of Financial Studies*, 22(6), 2201-2238

Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss H., & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, 38(4), 499–518

Buckley, P., Devinney, T., Louviere, J., (2007) Do managers behave the way theory suggests? A choice-theoretic examination of foreign direct investment location decision-making. *Journal of International Business Studies* 38, 1069–1094

Butler A., Grullon G., and Weston J, (2005), Stock market liquidity and the cost of issuing equity. *Journal of Financial and Quantitative Analysis*, 40:331–348

Chalmers, J.M.R., Kadlec, G.B., (1998) An empirical examination of the amortized spread. J. Financ. Econ. 48 (2), 159–188

Chan, K., Covrig, V., NG, L., (2005) What determines the domestic bias and foreign bias? Evidence from mutual fund equity allocations worldwide. *Journal of Finance*, 60 (3), 1495–1534

Chang, Eric C., Joseph W. Cheng, and Yinghui Yu, (2007), Short-sales constraints and price discovery: Evidence from the Hong Kong market, *Journal of Finance* 62, 2097–2121

Chang, Y.Y., Faff, R., Hwang, C.-Y., (2010). Liquidity and stock returns in Japan: new evidence. *Pacific Basin Finance Journal*, 18 (1), 90–115

Chang, S-J. & P. M. Rosenzweig (2001) The Choice of Entry Mode in Sequential Foreign Direct Investment. Strategic *Management Journal*, 22(8): 747-76.

Charoenrook, A., Daouk, H., (2009) A study of market wide short selling restrictions. Unpublished working paper, Cornell University

Chen, W.-P., Chung, H., Lee, C. and Liao, W.-L. (2007), "Corporate governance and equity liquidity: analysis of S&P transparency and disclosure rankings", *Corporate Governance: An International Review*, Vol. 15 No. 4, pp. 644-660.

Chen, Y., Hu, G., Yu, D. B., & Zhao, J. (2019). Catastrophic risk and institutional investors: Evidence from institutional trading around 9/11. *Pacific Basin Finance Journal*, 56, 211–233.

Cheng, F., Chiao, C., Wang, C., Fang, Z., Yao, S., (2021) Does retail investor attention improve stock liquidity? A dynamic perspective. *Econ. Model.* 94, 170–183.

Child, J., Ng, S. H., & Wong, C. (2002). Psychic distance and internationalization. International Studies of Management and Organizations, 32(1), 36–56

Child, J., Rodrigues, S.B., Frynas, J.G., (2009) Psychic Distance, its Impact and Coping Modes: Interpretations of SME Decision Makers. *Management International Review* 49,199-224.

Cho, K. R., and P. Padmanabhan. (2005) Revisiting the role of cultural distance in MNCs foreign ownership mode choice: the moderating effect of experience attributes. *International Business Review* 307-324.

Choi, W.G., Cook, D. (2005). Stock market liquidity and the macroeconomy: evidence from Japan. *IMF Working Paper*, 05/6

Choi, J. J., Lam, K. C. K., Sami, H., Zhou, H., (2013), Foreign ownership and information asymmetry, *Asia-Pacific Journal of Financial Studies* 42, 141-166

Chordia, T., Shivakumar, L., & Subrahmanyam, A. (2004). Liquidity dynamics across small and large firms. *Economic Notes*, 33, 111-143.

Chordia, T., Roll, R. and Subrahmanyam, A. (2000) Commonality in liquidity. *Journal of Financial Economics* 56: 3–28

Chordia, T., Sarkar, A. and Subrahmanyam, A. (2005). An empirical analysis of stock and bond market liquidity. *Review of Financial Studies*, 18(1), 85-129

Chordia, T., Subrahmanyam, A. and Anshuman, V. (2001) Trading activity and expected stock returns. *Journal of Financial Economics* 59: 3–32.

Chowdhury, A., Uddin, M., Anderson, K., (2017), Liquidity and Macroeconomic Management in Emerging Markets, *Emerging Markets Review* 

Chuang, W.I. and Lee, H.C. (2010), "The impact of short-sales constraints on liquidity and the liquidity-return relations", *Pacific-Basin Finance Journal*, Vol. 18 No. 5, pp. 521-535

Chui, Andy C.W., Alison Lloyd, and Chuck C. Y. Kwok, (2002), "The Determination of Capital Structure:Is National Culture a Missing Piece to the Puzzle?" *Journal of International Business Studies* 33,99-127.

Chui, Andy C. W., Sheridan Titman, and K. C. John Wei, (2010), "Individualism and Momentum around the World," *Journal of Finance* 65, 1, 361-392

Chung, H. (2006)"Investor Protection and the Liquidity of Cross-Listed Securities: Evidence from the ADR Market." *Journal of Banking and Finance*, 30, 1485–1505.

Chung K., Elder J., and Kim J. (2010) Corporate governance and liquidity. *Journal of Financial and Quantitative Analysis*, 45:265–291

Chung, K. H., & Zhang, H. (2014). A simple approximation of intraday spreads using daily data. *Journal of Financial Markets*, 17, 94-120.

Coffee, J. C. (1991) "Liquidity versus Control: The Institutional Investor as Corporate Monitor." *Columbia Law Review*, 91, 1277–1368.

Cohen L, Lou D. (2012). Complicated firms. *Journal of Financial Economics*, 104:383–400

Cooper, S. Kerry, Groth, John, Avera, William, (1985). Liquidity, exchange listing, and stock return performance. *J. Econ. Bus.* 37, 19–33

Cooper, I, and Kaplanis E, (1994), Home bias in equity portfolios, inflation hedging and international capital market equilibrium, *Review of Financial Studies* 7, 45-60.

Coppejans, M., Domowitz, I. and Madhavan, A. (2004) Resiliency in an Automated Auction, *Working Paper* 

Corwin, S.A., Schultz, P., (2012). A simple way to estimate bid–ask spreads from daily high and low prices. *Journal of Finance* 67 (2), 719–760.

Coughenour, J.F., Saad, M.M., (2004). Common market makers and commonality in liquidity. *Journal of Financial Economics* 73, 37–69.

Cubillas, E., González, F.,(2014). Financial liberalization and bank risk-taking: international evidence. *J. Financ. Stabil.* 11, 32–48

Dang, T. L., Moshirian, F., & Zhang, B. (2019). Liquidity shocks and institutional investors. North American Journal of Economics and Finance, 47, 184–209

Datar, V.T., Naik, N.Y., Radcliffe, R., (1998). Liquidity and stock returns: an alternative test. J. Financ. Mark. 1 (2), 203–219

Demsetz, H. (1968) The cost of transacting. Quarterly Journal of Economics 82: 33.

DeBruine, L., M., (2002) "Facial Resemblance Enhances Trust," *Proceedings of the Royal* Society of London B, 269, 1307-1312 Dhar, R., Goetzmann, W.N., Shepherd, S., Zhu, N., (2003). The Impact of Clientele Changes: Evidence from Stock Splits, *Working Paper*. Yale University

Diamond, D.W., Verrecchia, R.E., (1987). Constraints on short selling and asset price adjustment to private information. *Journal of Financial Economics* 18, 277–311

Diamond, D. W., Verrecchia, R. E., (1991) Disclosure, liquidity, and the cost of capital. *The Journal of Finance*, 46, 1325-1359.

Dikova, D. (2009). Performance of foreign subsidiaries: Does psychic distance matter? International Business Review, 18(1): 38–49

Ding, M. F., Nilsson, B., and Suardi, S. (2017). Foreign institutional investment, ownership, and liquidity: real and informational frictions. *Financ. Rev.* 52, 101–144.

Dinur, A., Hamilton, R.D. and Inkpen, A.C. (2009). Criticalcontext and international intrafirm best-practice transfers. *Journal of International Management*, 15, pp. 432–446

Dong, J., Kempf, A. and Yadav, P.K. (2007) Resiliency, the Neglected Dimension of Market Liquidity: Empirical Evidence from the New York Stock Exchange, *Working Paper*.

Dow, D. (2000) A note on psychic distance and export market selection. *Journal of International Marketing* 8 51-64.

Dow, D. (2001). The adaptation of host market positioning strategies: Empirical evidence from Australia. *Journal of International Marketing*, 9(3), 41–62.

Dow, D. (2009). Factors influencing perceptions of psychic distance. San Diego, CA: Academy of International Business.

Dow, D. (2014). Distance in international business research: Are we really making any progress? In M. Laaksonen, A. Arslan, & M. Kontkanen (Eds.), Contributions to international business: Essays in honour of Professor Jorma Larimo (pp. 119–140). Vaasa: University of Vaasa

Dow D. (2018), Are we at a Turning Point for Distance Research in International Business Studies?" In Distance in International Business:Concept, Cost and Value. Publicat online.

Dow D. & Ferencikova, S., (2010) "More than just national cultural distance: Testing new distance scales on FDI in Slovakia," *International Business Review*, Elsevier, vol. 19(1), 46-58

Dow, D., & Karunaratna, A. (2006). Developing a multidimensional instrument to measure psychic distance stimuli. *Journal of International Business Studies*, 37(5), 575–577

Dow, D., Larimo, J. (2011) Disentangling the Roles of International Experience and Distance in Establishment Mode Choice. *Management International Review* 51 (3), 321-355.

Drienko, J., Smith, T., von Reibnitz, A., (2018). A review of the return-illiquidity relationship. *Crit. Finance Rev.* 8 (1-2), 1

Drogendijk, R., Martin, M.O. (2015) Relevant dimensions and contextual weights of distance in international business decisions: Evidence from Spanish and Chinese outward FDI. *International Business Review* 24 (1), 133-147

Drogendijk, R., Zander, L., (2010) Walking the cultural distance: in search of direction beyond friction. In: Devinney, T.M., Pedersen, T., Tihanyi, L. (Eds.), ThePast, Present and Future of International Business and Management. *Advances in International Management*, vol. 3–4. Emerald Group Publishing, pp.189–212

Dunning, J. (2001). The key literature in IB activities. In: A. Rugman and T. Brewer (ed.), *The Oxford Handbook of International Business*, Oxford

Dvorak, T, Hanley, H. (2010). Financial literacy and the design of retirement plans, *Journal of Socio-Economics*, Vol. 39, pp. 645-652.

Earley, P. C., & Mosakowski, E. (2002). Linking culture and behavior in organizations: Suggestions for theory development and research methodology. In F. Dansereau & F. J. Yammarino (Eds.), Research in multi-level issues: Vol. 1: The many faces of multi-level issues (pp.279–319). San Francisco: Elsevier Science

Easley, D. and O'Hara, M. (1987) Price, trade size, and information in securities markets. *Journal of Financial Economics* 19: 69–90

Easterbrook, F. H. (1984) "Two Agency-Cost Explanations of Dividends." American Economic Review 74 (4): 650–659

Edmans, A., V. W. Fang, and E. Zur (2013) "The Effect of Liquidity on Governance." *Review of Financial Studies* 26 (6): 1443–1482

Eisfeldt, A.L., (2004). Endogenous liquidity in asset markets. *Journal of Finance* 59 (1), 1–30.

Eleswarapu, V.R., (1997) Cost of transacting and expected returns in the Nasdaq market. *Journal of Finance* 52 (5), 2113–2127.

Eleswarapu, V.R., Reinganum, M.R., (1993) The seasonal behaviour of the liquidity premium in asset pricing. *J. Financ. Econ.* 34 (3), 373–386

Eleswarapu, V., and K. Venkataraman. (2006), "The Impact of Legal and Political Institutions on Equity Trading Costs: A Cross-Country Analysis." *Review of Financial Studies*, 19 1081–1111

Ellis, P. D. (2008). Does psychic distance moderate the market size-entry sequence relationship? *Journal of International Business Studies*, 39(3), 351–369

Engle, R. and Lange, J. (1997) Measuring, Forecasting and Explaining Time Varying Liquidity in the Stock Exchange, NBER *Working Paper*, No. 6129

Eriksson, K., Strimling, P., Gelfand, M., Wu, J., Abernathy, J., Akotia, C. S., ... Anum, A. (2021). Perceptions of the appropriate response to norm violation in 57 societies. *Nature Communications*, 12(1).

Errunza, Vihang, and Etienne Losq, (1985), International asset pricing and mild segmentation: Theory and test, *Journal of Finance* 40, 105–124

Eun, C.S., Wang, L., Xiao, S.C., (2015) Culture and R 2. J. Financ. Econ. 115 (2), 283– 303

Evans, J. & F. T. Mavondo. (2002) Psychic Distance and Organizational Performance: An Empirical Examination of International Retailing Operations. *Journal of International Business Studies*, 33(3): 515-32.

Evans, J., F. T. Mavondo, & K. Bridson. (2008) Psychic Distance: Antecedents, Retail Strategy Implications and Performance Outcomes. *Journal of International Marketing*,16(2): 32-63

Fang, V. W., Noe, T. H., & Tice, S. (2009). Stock market liquidity and firm value☆. Journal of Financial Economics, 94(1), 150–169

Fang, V. W., X. Tian, and S. Tice. (2014) "Does Stock Liquidity Enhance or Impede Firm Innovation?" *Journal of Finance* 69 (5): 2085–2125

Ferreira D., Ferreira M., and C. Raposo.(2011) Board structure and price informativeness. Journal of Financial Economics, 99:523–545

Fernández-Amador, O., Gachter, M., Larch, M. and Peter, G. (2013). Does monetary policy determine stock market liquidity? New evidence from the euro zone. *Journal of Empirical Finance*, 21, 54-68

Fernando, Ch. S., Herring, R. J. (2001). Liquidity shocks, systemic risk, and market collapse: theory and application to the market for perps. *Journal of Banking & Finance*, 32, 1625-1635.

Fisher, L., (1959). Determinants of risk premiums on corporate bonds. J. Polit. Econ. 67 (3), 217–237.

Florackis, C., Gregoriou, A. and Kostakis, A. (2011) Trading frequency and asset pricing on the London stock exchange: evidence from a new price impact ratio. *Journal of Banking and Finance* 35: 3335–3350

Fletcher, R., & Bohn, J. (1998). The impact of psychic distance on the internationalisation of the Australian firm. *Journal of Global Marketing*, 12(2), 47–68.

Foucault, T., (1999), Order Flow Composition and Trading Costs in a Dynamic Limit Order Market, *Journal of Financial Markets* 2, 99-134. 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.

Fong, K. Y., Holden, C. W., & Trzcinka, C. A. (2017). What are the best liquidity proxies for global research?. *Review of Finance*, 21(4), 1355-1401.

French, K, and Poterba J, (1991), Investor diversification and international equitymarkets, *American Economic Review* 81, 222-226.

Frieder, L., Martell, R. (2006). On capital structure and the liquidity of a firm's stock. Working Paper, 401

Gabrenya, W. (1999). Psychological anthropology and the "levels of analysis" problem: We married the wrong cousins. In J. C. Lasry, J. Adair,& K. Dion (Eds.), Latest contributions to cross-cultural psychology (pp.333–351). Lisse, the Netherlands: Swets & Zeitlinger

Gabrielsen, A., Marzo, M. and Zagaglia, P. (2011) Measuring market liquidity: an introductory survey. SSRN Electronic Journal

Gao, P., Jiang, X., & Zhang, G. (2019). Firm value and market liquidity around the adoption of common accounting standards. *Journal of Accounting & Economics*,

Gao X. and Ritter. J. R., (2010) The marketing of seasoned equity offerings. *Journal of Financial Economics*, 97:33–52,

Garbade, K., (1982) Securities Markets. McGraw-Hill, New York

Garman, M., (1976), Market Microstructure, Journal of Financial Economics 3, 257-275.

Gelfand, M. J., Nishii, L. H., & Raver, J. L. (2006). On the nature and importance of cultural tightness-looseness. *Journal of Applied Psychology*, 91(6), 1225–1244.

Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C., Yamaguchi, S. (2011). Differences Between Tight and Loose Cultures: A 33-Nation Study. *Science*, 332(6033), 1100–1104.

Giannetti, M., & Yafeh, Y. (2012). Do Cultural Differences Between Contracting Parties Matter? Evidence from Syndicated Bank Loans. *Management Science*, 58(2), 365–383.

Gleditsch, K. S. (2003) 'Modified Polity P4 and P4D Data'

Goldstein, M. A., and Kavajecz, K. A. (2000). Eighths, sixteenths, and market depth: changes in tick size and liquidity provision on the NYSE. *Journal of Financial Economics*, 56(1), 125–149

Gopalan, R., Kadan, O., & Pevzner, M. (2009). Investment decisions, asset liquidity, and stock liquidity. *Working Paper*.

Gorodnichenko Y., and Roland G., (2011) "Which dimensions of Culture matter for longrun growth?". *American Economic Association Papers and Proceedings* 101, 492-498. Gorodnichenko Y. and Roland G. (2017) "Culture, Institutions and the Wealth of Nations" *Review of Economics and Statistics* 99, 402-416

Goyenko, R. Y., Holden, C. W., & Trzcinka, C. A. (2009). Do liquidity measures measure liquidity?. *Journal of Financial Economics*, 92(2), 153-181.

Goyenko, R.Y. and Ukhov, A.D. (2009). Stock and bond market liquidity: a long-run empirical analysis. *Journal of Financial and Quantitative Analysis*, 44(1), 189-212

Gravelle, T., (1999). Liquidity of the government of Canada securities market: stylized facts and some market microstructure comparisons to the United States treasury market. Bank of Canada. *Working Paper*. 11–99

Gregoriou, A. (2013) Earnings announcements and the components of the bid-ask spread: evidence from the London stock exchange. *Journal of Economic Studies* 40: 112–126.

Gregoriou, A. and Nguyen, N. (2010) Stock liquidity and investment opportunities: new evidence from FTSE 100 index deletions. *Journal of International Financial Markets, Institutions and Money* 20: 267–274

Green, R. T. & W. H. Cunningham. (1975) The Determinants of US Foreign Direct Investment: An Empirical Investigation. *Management International Review*, 15(2-3):113-20.

Griffin D.,Guedhami O., Li K., Kwok C. and Shao L. (2018), "National Culture and the Value Implication of Corporate Governance", *Journal of Law, Finance, and Accounting*: Vol. 3: No. 2, pp 333-372

Griffin, J. M., Kelly, P. J., & Nardari, F. (2010). Do Market Efficiency Measures Yield Correct Inferences? A Comparison of Developed and Emerging Markets. *Review of Financial Studies*.

Griffith, D.A. and Dimitrova, B.V. (2014). Business and Cultural Aspects of Psychic Distance and Complementarity of Capabilities in Export Relationships. *Journal of International Marketing*, 22(3): 50–67

Grinblatt, M., Keloharju, M., (2001). What makes investors trade? J. Finance 56 (2), 589–616

Gromb D, Vayanos D. (2010) Limits of arbitrage. Annu. Rev. Financ. Econ. 2:251-75

Grosse, R. & L. G. Goldberg. (1991) Foreign Bank Activities in the United States: An Analysis by Country of Origin. *Journal of Banking and Finance*, 15(6): 1093-112.

Grosse, R. & L. J. Trevino. (1996) Foreign Direct Investment in the United States: AnAnalysis by Country of Origin. *Journal of International Business Studies*, 27(1): 139-55.

Grossman, S.J., Miller, M.H., (1988) Liquidity and market structure. J. Finance 43 (3), 617–633

Gu, Y.(J.), Filatotchev I., Bell G., Rasheed A. (2017), Liability of foreignness in capital markets: Institutional distance and the cost of debt, *J.Corp. Finance* 

Guiso, L. and Jappelli, T. (2008). Financial literacy and protfolio diversification, European University Institute, Department of Economics, *Working Paper* ECO 2008/31, pp. 1-36

Guiso, L., Sapienza, P., & Zingales, L. (2004). The Role of Social Capital in Financial Development. *American Economic Review*, 94(3), 526–556.

Guiso, L., Sapienza, P., Zingales, L., (2008) Does culture affect economic outcomes? *Res.Instit. Econ.* 20 (2), 23–48.

Habib, M. & L. Zurawicki. (2002) Corruption and Foreign Direct Investment. *Journal of International Business Studies*, 33(2): 291-307.

Hachmeister, A., & Schiereck, D. (2007). Informed Traders as Liquidity Providers: Evidence from the German Equity Market.

Hameed, A., Kang, W., Viswanathan, S., (2010) Stock market declines and liquidity. *Journal of Finance* 65, 257–293.

Han, M. Li, Y., Wang N. & Zhang H., (2020): Cultural diversity in ownership and stock liquidity, *Applied Economics Letters*,

Harrington JR, Boski P, Gelfand MJ (2015)Culture and National Well-Being: Should Societies Emphasize Freedom or Constraint? PLoS ONE 10(6):

Harris, L. (1990). Liquidity, Trading Rules, and Electronic Trading Systems. New York University Salomon Center Monograph Series in Finance, *Monograph* # 1990-4.

Harzing, A. W. (2002) Acquisitions Versus Greenfield Investments: International Strategy and Management of Entry Modes. *Strategic Management Journal*, 23(3): 211-27

Harms, R., Groen, A., (2016) Loosen up? Cultural tightness and national entrepreneurial activity, *Technol. Forecast. Soc. Change* 

Hasbrouck, J. (2001). Common factors in prices, order flows, and liquidity. *Journal of Financial Economics*, 59(3)

Hasbrouck, J., (2004) Liquidity in the futures pits: inferring market dynamics from incomplete data. J. Financ. Quant. Anal. 39 (2), 305–326

Hasbrouck, J., (2009) Trading costs and returns for US equities: estimating effective costs from daily data. *J. Financ.* 64 (3), 1445–1477

Hasbrouck, J., Seppi, D.J., (2001) Common factors in prices, order flows, and liquidity. Journal of Financial Economics 59, 383-411

Hasbrouck, J., Schwartz, R.A., (1988). Liquidity and execution costs in equity markets. *J. Portf. Manage.* 14 (3), 10–16.

He, W., Li, D., Shen, J., Zhang, B., (2013), Large foreign ownership and stock price informativeness around the world, *Journal of International Money and Finance* 36, 211-230

Heflin, F., & Shaw, K. (2000). Blockholder ownership and market liquidity. *Journal of Financial and Quantitative Analysis*, 35, 621–633

Heflin, F., Shaw, K. W., & Wild, J. J. (2000). Disclosure quality and market liquidity. *Working Paper* 

Henisz, W. J. (2000) 'The Institutional environment for Economic Growth', *Economics* and Politics 12(1): 1-31.

Higgins, E. T. (1996). The "self digest": Self-knowledge serving selfregulatoryfunctions. *Journal of Personality and Social Psychology*, 71,1062–1083

Hillert, A., Maug, E., & Obernberger, S. (2016). Stock repurchases and liquidity. *Journal of Financial Economics*, 119(1), 186–209.

Hilary G, Hui KW. (2009). Does religion matter in corporate decision making in America? *J. Financ. Econ.*93:455–73

Hilghert, M. A., Hogarth, J. M., Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior, *Federal Reserve Bulletin*, Vol. 89, pp. 309-322.

Hirshleifer D. (2001) Investor psychology and asset pricing. J. Finance 64:1533-97

Hmaied, D.M., Grar, A. and Sioud, O.B. (2006) 'Dynamics of market liquidity of Tunisian stocks: an analysis of market resiliency', *Electronic Markets*, Vol. 16, No. 2, pp.140–153.

Hofstede, G. (1980). Cultural consequences: International differences in work related values. Beverly Hills, CA: Sage Publications

Hofstede, G. (2001), Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations, 2nd ed. Sage, Thousand Oaks, CA.

Holden, C.W., (1990) Intertemporal Arbitrage Trading: Theory and Empirical Tests, *Discussion Paper*. Indiana University.

Holden, C.W., (2009) New low-frequency spread measures. J. Financ. Mark. 12 (4), 778–813.

Holden, C.W. and Jacobsen, S. E. and Subrahmanyam, A., (2014). The Empirical Analysis of Liquidity Foundations and Trends in Finance 8, No 4, 263-365, 2015, Kelley School of Business *Research Paper* No. 2014-09.

Holzmuller, H.H., Kasper, H., (1991) On a theory of export performance: personal and organizational determinants of export trade activities observed in small and medium-sized firms. *Management International Review* 31, 45

Hong H, Kacperczyk M. (2009) The price of sin: the effects of social norms on markets. *J. Financ. Econ.* 93:15–36

Hong H, Kostovetsky L. (2012) Red and blue investing: values and finance. J. Financ. Econ. 103:1–19

Hong, G., Warga, A., (2000) An empirical study of bond market transactions. *Financ. Anal.* J. 56 (2), 32–46.

Hou, K., Xue, C., & Zhang, L. (2018). Replicating Anomalies. *The Review of Financial Studies*. doi:10.1093/rfs/hhy131

House, R., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the globe: an introduction to project GLOBE. *Journal of World Business*, 37(1), 3–10.

Hsieh, T. Y., Chuang, S. S., and Lin, C. C. (2008). Impact of tick size reduction on the market liquidity – evidence from the emerging order-driven market. *Review of Pacific-Basin Financial Markets and Policies*, 11(4), 591–616.

Hu Y., Huang W. and Chen Z. (2019): Stock liquidity, agency cost, and dividend payouts, *Applied Economics Letters*,

Huang, M. (2003). Liquidity shocks and equilibrium liquidity premia. *Journal of Economic Theory*, 109(1), 104–129.

Huang, G. C., Liano, K., & Pan, M. S. (2009). The information content of stock splits. *Journal of Empirical Finance*, 16(4), 557–567.

Huang, R.D., Stoll, H.R., (1996) Dealer versus auction markets: a paired comparison of execution costs on NASDAQ and the NYSE. *J. financ. econ.* 41 (3), 313–357

Huang, R. and Stoll, H. (1997) The components of the bid-ask spread: a general approach. *Review of Financial Studies* 10: 995–1034

Huberman, G., Halka, D., (2001) Systematic liquidity. *Journal of Financial Research* 24, 161–178.

Hui, B., and B. Huebel, (1984), "Comparative Liquidity Advantages Among Major U.S. Stock Markets", *DRI Financial Information Group Study Series*.

Hutton I, JiangD,Kumar A.,(2014) Corporate policies of republican managers. J. Financ.Quant. Anal. 49:1279–310

Hvozdyk, L., & Rustanov, S. (2016). The effect of financial transaction tax on market liquidity and volatility: An Italian perspective. *International Review of Financial Analysis*, 45, 62–78.

Håkanson, L., Ambos, B. (2010) The antecedents of psychic distance. *Journal of International Management* 16 (3), 195-210.

Ikenberry, D.L., Ramnath, S., (2002) Underreaction to self-selected news events: the case of stock split. *Review of Financial Studies* 15, 489–526

Ince, O. S., & Porter, R. B. (2006). Individual equity return data from thomson datastream: handle with care! *Journal of Financial Research*, 29(4), 463–479.

Inglehart, R. (1997). Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies. Princeton, NJ: *Princeton University Press*.

Ip, G. W. M., & Bond, M. H. (1995). Culture, values, and the spontaneous self-concept. *Asian Journal of Psychology*, 1, 30–36.

Jain, P. K., (2003) Institutional Design and Liquidity at Stock Exchanges Around the World .

Jain, P. K., Kim, J., & Rezaee, Z. (2005). Trends and determinants of market liquidity in the pre- and post- Sarbanes-Oxley act periods. 14 th Annual Conference on Financial Economics and Accounting

Jahan-Parvar, M.R. and Zikes, F. (2019) When do low-frequency measures really measure transaction costs? *Finance and Economics Discussion Series* 2019.

Jang, J., Kang, J., & Lee, Ch. (2012). Liquidity risk and expected stock returns in Korea: a new approach. *Asia-Pacific Journal of Financial Studies*, 41, 704-738

Jacoby, G., & Zheng, S. X. (2010). Ownership dispersion and market liquidity. *International Review of Financial Analysis*, 19(2), 81–88.

Jayaraman S. and Milbourn T. (2012) The role of stock liquidity in executive compensation. *Accounting Review*, 87:537–563

Jiang, F., Y. Ma, and B. Shi. (2017) "Stock Liquidity and Dividend Payouts." *Journal of Corporate Finance* 42:295–314.

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

Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm: Four Swedish cases. *Journal of Management Studies*, 12(October), 305–322.

Kamara, A., Lou, X., Sadka, R., (2008) The divergence of liquidity commonality in the cross-section of stocks. *Journal of Financial Economics* 89, 444–466

Kang M. and Kim Y., (2013), Stock market liquidity and short-termism-driven CEO turnover. *Working paper*, Nanyang Technological University.

Kang Q. and Q. Liu. (2008), Stock market information production and CEO incentives. *Journal of Corporate Finance*, 14:484–498

Kang, W., Zhang, H., (2014). Measuring liquidity in emerging markets. *Pac. Basin Financ*. J. 27, 49–71

Kang, Jun-Koo, and Rene Stulz, (1997), Why is there a home bias? An analysis of foreign portfolio equity ownership in Japan, *Journal of Financial Economics* 46, 3-28.

Karmani, M., Ajina, A. (2012). Market stock liquidity and corporate governance. Paper presented at In Proceedings of the 29th International Conference of the French Finance Association (AFFI)

Karolyi, G. A. (2016). The gravity of culture for finance. *Journal of Corporate Finance*, 41, 610–625. doi:10.1016/j.jcorpfin.2016.07.00

Karolyi, G. A., Lee, K.-H., & van Dijk, M. A. (2012). Understanding commonality in liquidity around the world. *Journal of Financial Economics*, 105(1), 82–112.

Kavajecz, K. and Odders-White, E., (2001), An Examination of Changes in Specialists' Posted Price Schedules, *Review of Financial Studies* 14, 681-704.

Keynes, J. M. (1930). A Treatise on Money, Macmillan, London, First edition, Volume 2.Kempf, A., Mayston, D. and Yadav, P.K. (2009) Resiliency in Limit Order Book Markets:A Dynamic View of Liquidity, *Working Paper*.

Kim, J. and Kim, Y. (2015) Transitory Price, Resiliency, and the Cross-section of Stock Returns, *Working Paper*.

Kim, O. and Verrecchia, R.E. (1994).Market liquidity and volume around earnings announcements. *Journal of Accounting and Economics*, 17(1–2), 41–67.

Kini, O., & Mian, S. (1995). Bid-ask spread and ownership structure. *Journal of Financial Research*, 18, 401–414.

Khediri, K. B.; Daadaa, W. (2011). Stock trading and capital structure in Tunisian stock exchange. *Journal of Business Studies*, 2, 10-24

Koch, A., Ruenzi, S., & Starks, L. (2016). Commonality in Liquidity: A Demand-Side Explanation. *Review of Financial Studies*, 29(8), 1943–1974.

Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3), 411–432.

Kumar A. (2009). Who gambles in the stock market? J. Finance 64:1889-933

Kumar A, Page JK, Oliver G, Spalt OG. (2011) Religious beliefs, gambling attitudes and financial market outcomes. *J. Financ. Econ.* 102:671–708

Kwok, C. C. Y., & Tadesse, S. (2006). National culture and financial systems. *Journal of International Business Studies*, 37(2), 227–247.

Kyle, A.S., (1985). Continuous auctions and insider trading. *Econometrica*, 53, 1315-1335 La Porta, P., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., (1997) Legal determinants of external finance. *Journal of Finance* 52, 1131–1150. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., (1998) Law and finance. *Journal of Political Economy* 106, 1113–1155.

La Porta, R., F. Lopez-de-Silanes, Shleifer A., Vishny R.,. (2000) "Agency Problems and Dividend Policies around the World." *Journal of Finance* 55 (1)1–33

Labidi, M., & Gajewski, J. F. (2019). Does increased disclosure of intangible assets enhance liquidity around new equity offerings? *Research in International Business and Finance*, 48, 426–437.

Lakonishok, J., Lev, B., (1987) Stock splits and stock dividends: why, who, and when. *Journal of Finance* 42, 913–932.

Lam, K. S. K., & Tam, L. H. K. (2011). Liquidity and asset pricing: Evidence from the Hong Kong stock market. *Journal of Banking& Finance*, 35(9), 2217–2230.

Lamont, Owen A.., and Jeremy C. Stein, (2004), "Aggregate Short Interest and Market Valuations," *American Economic Review*, 29-32.

Lamont, Owen A., and Richard H. Thaler, (2003), "Can the Market Add and Subtract? Mispricing in Tech Stock Carve-outs," *Journal of Political Economy*, 111, 227-268

Lang M., Lins K., and Maffett M.. (2012) Transparency, liquidity, and valuation:International evidence on when transparency matters most. *Journal of Accounting Research*, 50:729–774

Lau, ST and TH McInish (1995). Reducing tick size on the Stock Exchange of Singapore. *Pacific-Basin Finance Journal*, 3(4), 485–496.

Le, H., & Gregoriou, A. (2020). How Do You Capture Liquidity? A Review of the Literature on Low-Frequency Stock Liquidity. *Journal of Economic Surveys*, 34, 1170-1186.

Lecce, S., Lepone, A., McKenzie, M.D. and Segara, R. (2012), "The impact of naked short selling on the securities lending and equity market", *Journal of Financial Market*, Vol. 15 No. 1, pp. 81-107.

Lee, C. M.C., (1993). Market integration and price execution for NYSE-listed securities. *J. Finance* 48, 1009–1038.

Lee, C., & Chou, P., (2018). "Financial openness and market liquidity in emerging markets," *Finance Research Letters*, Elsevier, vol. 25(C), pages 124-130.

Lee, J., & Chung, K. H. (2018). Foreign ownership and stock market liquidity. International Review of Economics & Finance, 54, 311–325

Lee, C.M.C., Mucklow, B. and Ready, M.J. (1993) 'Spreads, depths, and the impact of earnings information: an intraday analysis', *Review of Financial Studies*, Vol. 6, No. 2, pp.345–374

Lei, Q.,Lin,B. and Wei M., (2013) "Types of agency cost, corporate governance and liquidity." *Journal of Accounting and Public Policy* 32, 3 : 147-172.

Levine, R., (2005). Finance and growth: theory and evidence. In: Aghion, P., Durlauf, S. (Eds.), *Handbook of Economic Growth. Amsterdam and San Diego*: Elsevier, North Holland, pp. 866–934

Levine, R., Zervos, S., (1996). Stock market development and long-run growth. *World* Bank Econ. Rev. 10 (2), 323–339

Levin, E.J. and Wright, R.E. (1999) 'Explaining the intra-day variation in the bid-ask spread in competitive dealership markets – a research note', *Journal of Financial Markets*, Vol. 2, No. 2, pp.179–191.

Lesmond, D. (2005). Liquidity of emerging markets. *Journal of Financial Economics*, 77(2), 411–452. doi:10.1016/j.jfineco.2004.01.00

Lesmond, D. A., O'Connor, P. F., & Senbet, L. W. (2008). Capital structure and equity liquidity. *Working paper*, Tulane University

Lesmond, D.A., Ogden, J.P., Trzincka, C.A., (1999) A new estimate of transaction costs. *Rev. Financ. Stud.* 12 (5), 1113–1141.

Levi, S., & Zhang, X. J. (2015). Asymmetric decrease in liquidity trading before earnings announcements and the announcement return premium. *Journal of Financial Economics*,

Leung, K., Bond, M. H., & Schwartz, S. H. (1995). How to explain cross-cultural differences: Values, valences, and expectations? *Asian Journal of Psychology*, 1, 70–75

Li, R., Gordon, S., & Gelfand, M. J. (2017). Tightness-looseness: A new framework to understand consumer behavior. *Journal of Consumer Psychology*, 27(3), 377–391. https://doi.org/10.1016/j.jcps.2017.04.001

Li, K., Griffin, D., Yue, H., & Zhao, L. (2013). How does culture influence corporate risktaking? *Journal of Corporate Finance*, 23, 1–22.

Li C., Li D., Chiu C.-Y., Peng S. (2018). Strong brand from consumers' perspective: a cross-cultural study. J. Cross Cult. Psychol. 50 116–129.

Li, B., Sun, Q., Wang, C., (2014) Liquidity, liquidity risk and stock returns: evidence from Japan. *Eur. Financ. Manage.* 20 (1), 126–151

Lin, J. C., Singh, A. K., & Yu, W. (2009). Stock splits, trading continuity, and the cost of equity capital. *Journal of Financial Economics*, 93(3), 474–489.

Lin, W.T., Sun, D.S. and Tsai, S-C. (2012) 'Does trading remove or cause friction?', *Emerging Markets Finance & Trade*, Vol. 48, Supp. 2, pp.33–53.

Lipson, M.L., Mortal, S. (2005). Liquidity and capital structure. *Journal of Financial Markets*, 12, 611-644.

Liu, W., (2006) A liquidity-augmented capital asset pricing model. J. Financ. Econ. 82(3), 631–671

Lo, D.K. and Hall, A.D. (2015) 'Resiliency of the limit order book', *Journal of Economic Dynamics & Control*, Vol. 61, pp.222–244.

Luo, Y., Tanna, S., Vita, G.D., (2016) Financial openness, risk and bank efficiency: crosscountry evidence. *J. Financ. Stabil.* 24, 132–148

Ludlum, Marty, Tilker, Kris, Ritter, David, Cowart, Tammy, Xu, Weichu, Smith, Brittany Christine (2012). Financial literacy and credit cards: A multi campus survey, *International Journal of Business and Social Science*, Vol. 3, No. 7, pp. 25-33

Lusardi, A., Mitchell, O. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education, *Business Economics*, Vol.42, Iss.1, pp.35-44

Mahalanobis, P.C. (1936) On the Generalized Distance in Statistics. *Proceedings of the National Institute of Science of India*, 2, 49-55.

Makower, H., & Marschak, J. (1938). Assets, prices and monetary theory. *Economica*, 5(19), 261–288.

Mancini, L., Ranaldo, A., Wrampelmeyer, J., (2013). Liquidity in the foreign exchange market: measurement, commonality, and risk premiums. *J. Finance* 68 (5),1805–1841.

Maoz, Z., & Henderson, E. (2019). World Religion Project: Global Religion Dataset.

Marsh, T. A., & Rock, K. (1986). Exchange listing and liquidity: A comparison of the American Stock Exchange with the NASDAQ National Market System. American Stock Exchange.

Marsh, I.W. and Payne, R. (2012), "Banning short sales and market quality: the UK's experience", *Journal of Banking and Finance*, Vol. 36 No. 7, pp. 1975-1986.

Marshall, B.R., Nguyen, N.H. and Visaltanachoti, N. (2011) Commodity liquidity measurement and transaction costs. *Review of Financial Studies* 25: 599–638.

Marshall, B. R., Nguyen, N. H., & Visaltanachoti, N. (2013). Liquidity measurement in frontier markets. Journal of International Financial Markets, *Institutions and Money*, 27, 1-12.

Marshall, B.R., Young, M., (2003) Liquidity and stock returns in pure-order-driven markets: evidence from the Australian stock market. *Int. Rev. Financ. Anal.* 12(2), 173–188

Maug, E. (1998) "Large Shareholders as Monitors: Is There a Trade-Off between Liquidity and Control." *Journal of Finance*, 53 65–98.

McGuire ST, OmerTC, Sharp NY. (2012) The impact of religion on financial reporting irregularities. *Account. Rev.* 87:645–73

McSweeney, B. (2002) Hofstede's Model of National Cultural Differences and their Consequences: A Triumph of Faith—A Failure of Analysis. Human Relations, 55, 89-118

Mezias, S.J., Chen, Y.-R., Murphy, P., Biaggio, A., Chuawanlee, W., Hui, H., Okumura, T., Starr, S., (2002) National cultural distance as liability of foreignness: the issue of level of analysis. *J. Int. Manage.* 8, 407–421

Miller, E., (1977) Risk, uncertainty, and divergence of opinion. *Journal of Finance* 32, 1151–1168

Miller, Merton H., and Franco Modigliani (1961), Dividend policy, growth, and the valuation of shares, *Journal of Business* 34, 411-433

Morris, M. W., Podolny, J. M., & Ariel, S. (2000). Missing relations:Incorporating relational constructs into models of culture. In P. C. Earley& H. Singh (Eds.), Innovations in international and cross-cultural management (pp. 52–90). Thousand Oaks, CA: Sage

Mueller, B. (1991) Multinational Advertising: Factors Influencing the Standardised Versus Specialised Approach. *International Marketing Review*, 8(1): 7-18

Muller, S, Weber, M. (2010). Financial literacy and mutual fund investments: Who buys actively managed funds?, *Schmalenbach Business Review*, Vol. 62, pp. 126-153

Naes, R., and Ødegaard, B., (2009)Liquidity and Asset Pricing: Evidence on the Role of Investor Holding Period. EFA 2008 *Athens Meetings Paper*,

Nebus, J., Celo, S. (2020). Cognitive biases in the perceptions of country. Distance. *Journal of International Management*, 26(3).

Ng, L., Wu, F., Yu, J., Zhang, B., (2016), Foreign investor heterogeneity and stock liquidity around the world, *Review of Finance 20*, 1867-1910.

Nguyen, D., Mishra, S., Prakash, A. and Ghosh, D. (2007) Liquidity and asset pricing under three-moment CAPM paradigm. *Journal of Financial Research* 30: 379–398.

Noh, Minyoung & Cho, Moon Kyung, (2022) "Cultural tightness and accounting conservatism," *Journal of Contemporary Accounting and Economics*, Elsevier, vol. 18(1)

Nordström, K.A. (1991) The internationalization process of the firm: searching for newpatterns and explanations. *Doctoral Thesis*. Stockholm School of Economics

North, D.C., (1990) Institutions, Institutional Change, and Economic Performance. Cambridge University Press, Cambridge, UK.

O'Grady, S. & H. W. Lane. (1996) The Psychic Distance Paradox. *Journal of International Business Studies*, 27(2): 309-33

O'Hara, M. (1995). Market Microstructure Theory, Basil Blackwell, Cambridge, MA.

O'Hara, M., (2004), Liquidity and Financial Market Stability, National Bank of Belgium, *Work. Paper* 55.

Olbrys J. and Mursztyn M.,(2019) "Depth, tightness and resiliency as market liquidity dimensions: Evidence from the polish stock market," *Int. J.Comput. Econ. Econometrics*, vol. 9, no. 4, pp. 308–326.

Ozsoylev H, Walden J, Yavuz MD, Bildik R. (2014) Investor networks in the stock market. *Rev. Financ. Stud*.27:1323–66

Padmanabhan, P. & K. R. Cho. (1999) Decision Specific Experience in Foreign Ownership and Establishment Strategies: Evidence from Japanese Firms. *Journal of International Business Studies*, 30(1): 25-43

Palmero, A.J., Durán Herrera, J.J. and de la Fuente Sabaté, J.M. (2013). The role of psychic distancestimuli on the East-West FDI location structure in the EU. Evidence from Spanish MNEs. *Journal for East European Management Studies*, 18(1): 36–65.

Pan, W., Song, F. M., and Tao, L. (2012). The effects of a tick-size reduction on the liquidity in a pure limit order market: evidence from Hong Kong. *Applied Economic Letters*, 19(16), 1639–1642.

Pan, D., Shi, J., Wu, F., & Zhang, B. (2015). Investor heterogeneity and commonality in stock return and liquidity. *Economic Systems*, 39(3), 458–473.

Parlour, C., (1998), Price Dynamics in Limit Order Markets, *Review of Financial Studies* 11,789-816.

Parlour, C. and Seppi, D., (2003), Liquidity-Based Competition for Order Flow, *Review of Financial Studies* 16, 301-343.

Pavabutr, P., & Sirodom, K. (2010). Stock splits in a retail dominant order driven market. *Pacific Basin Finance Journal*, 18(5), 427–441.

Pelto, P. (1968). The difference between "tight" and "loose" societies. *Transaction*, 5, 37–40.

Pereira, J. P., & Zhang, H. H. (2010). Stock Returns and the Volatility of Liquidity. *Journal* of Financial and Quantitative Analysis, 45, 1077-1110.

Peress, J., (2010) Product market competition, insider trading and stock market efficiency. *Journal of Finance* 65,1–43

Peterson, M. and Sirri, E. (2003) 'Evaluation of the biases in execution costs estimation using trades and quotes data', *Journal of Financial Markets*, Vol. 6, No. 3, pp.259–280.

Plerou, V., Gopikrishnan, P., & Stanley, H. E. (2005). Quantifying fluctuations in market liquidity: analysis of the bid-ask spread. *Physical review*, 71, 1-8.

Piwowar, M.S. and Wei, L. (2003) 'The sensitivity of effective spread estimates to tradequote matching algorithms', *Electronic Markets*, Vol. 16, No. 2, pp.112–129 Pothukuchi, V., Damanpour, F., Choi, J., Chen, C.C. and Park, S.H. (2002). National and organizational culture differences and international joint venture performance. Journal of *International Business Studies*, 33, pp. 243–265.

Prommin, P., Jumreornvong, S., & Jiraporn, P. (2014). The effect of corporate governance on stock liquidity: The case of Thailand. *International Review of Economics Finance*, 32, 132– 142.

Puthusserry, P., Child, J., Rodrigues., S.B. (2014) Psychic Distance, its Business Impact and Modes of Coping: A Study of British and Indian Partner SMEs. *Management International Review* 54 (1), 1-29

Ranaldo, A. (2001) 'Intraday market liquidity on the Swiss Stock Exchange', *Swiss Society for Financial Market Research*, Vol. 15, No. 3, pp.309–327

Reus, T.H. and Rottig, D. (2009). Meta-analyses of international joint venture performance determinants: evidence for theory, methodological artifacts and the unique context of China. *Management International Review*, 49, pp.607–640.

Rhee, S. G., Wang, J., (2009), Foreign institutional ownership and stock market liquidity:Evidence from Indonesia. *Journal of Banking and Finance* 33, 1312-1324

Roll, R. (1984). A simple implicit measure of the effective bid-ask spread in an efficient market. *The Journal of Finance*, 39(4), 1127-1139.

Ronen, T and DG Weaver (2001). Teenies anyone? *Journal of Financial Markets*, 4(3), 231–260

Rosu I., (2009) "A Dynamic Model of the Limit Order Book," *Review of Financial Studies,* Society for Financial Studies, vol. 22(11), pages 4601-4641

Rösch, C. G., & Kaserer, C. (2013). Market liquidity in the financial crisis: The role of liquidity commonality and flight-to-quality. *Journal of Banking & Finance*, 37(7), 2284–2302

Rubin, A., (2007), Ownership level, ownership concentration and liquidity, *Journal of Financial Markets* 10, 219-248

Sadka, R. (2006). Momentum and post-earnings-announcement drift anomalies: The role of liquidity risk. *Journal of Financial Economics*, 80(2), 309–349.

Sarala, R.M. and Vaara, E. (2010). Cultural differences, convergence, and crossvergence as explanations of knowledgetransfer in international acquisitions. *Journal of International Business Studies*, 41, pp. 1365 -1390.

Sarr, A. and Lybek, T. (2002). Measuring liquidity in financial markets. IMF Working Paper, WP/02/232,

Schestag, R., Schuster, P., & Uhrig-Homburg, M. (2016). Measuring liquidity in bond markets. *The Review of Financial Studies*, 29(5), 1170-1219.

Schwartz, R.A., (1988) A proposal to stabilize stock prices. J. Portf. Manage. 15 (1), 4-

11.

Schwartz, S. H. (1994). Are there universal aspects in the content and structure of values? *Journal of Social Issues*, 50, 19-45

Schultz, P., (2000) Stock splits, tick size, and sponsorship. *Journal of Finance* 55, 429–450

Serrat, A, (1997), A dynamic equilibrium model of international risk-sharing puzzles, *Working paper*, University of Chicago.

Servon, Lisa J., Kaestner, R. (2008). Consumer financial literacy and the impact of online banking on the financial behavior of lower-income bank customers, *Journal of Consumer Affairs*, Vol. 42, No.2, pp. 271-305

Shao, Liang, Chuck C.Y. Kwok, and Omrane Guedhami, (2010), "National Culture and Dividend Policy," *Journal of International Business Studies*, 41, 1391-1414.

Sharif, S., Anderson, H.D. and Marshall, B.R. (2014), "Against the tide: the commencement of short selling and margin trading in Mainland China", *Accounting and Finance*, Vol. 54 No. 4, pp. 1319-1355.

Shaver, J. M. (1998). Accounting for Endogeneity when Assessing Strategy Performance: Does Entry Mode Choice Affect FDI Survival. *Management Science*, 44(4): 571-85.

Shenkar, O. (2001) Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, 32(3), 519–536

Shieh, S. J., Lin, C. Y., & Ho, P. H. (2012). Large changes in stock prices: Market, liquidity, and momentum effect. *Quarterly Review of Economics and Finance*, 52(2), 183–197.

Shleifer A. (2000). Inefficient Markets: An Introduction to Behavioral Finance. Oxford: Oxf. Univ. Press

Siikanen, M., Kanniainen, J., & Valli, J. (2017). Limit order books and liquidity around scheduled and non-scheduled announcements: Empirical evidence from NASDAQ Nordic. *Finance Research Letters*, 21, 264–271.

Siegel, J. I., Licht, A. N., & Schwartz, S. H. (2011). Egalitarianism and international investment. *Journal of Financial Economics*, 102(3), 621–642. doi:10.1016/j.jfineco.2011.05.010

Smith, M., Dowling, P., Rose, E. (2011). Psychic distance revisited: A proposed conceptual framework and research agenda. *Journal of Management & Organization*. 17.

Smith, H, Finke, M., and Huston, S. (2011). The impact of financial sophistication on adjustable rate mortgage ownership, *Journal of Financial Counseling and Planning*, Vol. 22, Iss. 2, pp.3-15

So, E. C., & Wang, S. (2014). News-driven return reversals: Liquidity provision ahead of earnings announcements. *Journal of Financial Economics*,

Sousa, C. M. P., & Bradley, F. (2006). Cultural distance and psychic distance: Two peas in a pod? *Journal of International Marketing*, 14(1), 49–70.

Sousa, C. M. P. & F. Bradley. (2005) Global Markets: Does Psychic Distance Matter? *Journal of Strategic Marketing*, 13(1): 43-59.

Sousa, C.M.P., Lages, L.F. (2011) The PD scale: a measure of psychic distance and its impact on international marketing strategy. *International Marketing Review* 28 (2), 201-222.

Statman, M. (2014). Behavioral finance: Finance with normal people. *Borsa Istanbul Review*, 14(2), 65–73.

Sterenczak, 'S., Zaremba, A., Umar, Z., (2020) Is there an illiquidity premium in frontier markets? *Emerg. Mark. Rev.* 42, 100673.

Stoll, H. (1978) The supply of dealer services in securities markets. *Journal of Finance* 33: 1133–1151.

Stoll, H.R., (1989). Inferring the components of the bid-ask spread: theory and empirical tests. *J. Finance* 44 (1), 115–134

Stöttinger, B., & Schlegelmilch, B. B. (1998). Explaining export development through psychic distance: Enlightening or elusive? *International Marketing Review*, 15(5), 357–372.

Stulz, R, (1981), On the effect of barriers to international investment, *Journal of Finance* 36,923-934

Stultz, R., (1999) Globalization, corporate finance and the cost of capital.*J.Appl. Corpor. Finance* 12(3), 8-25

Stulz R. M., Vagias D, and van Dijk. M. A. (2013) Do firms issue more equity when markets are more liquid? *Working paper*, The Ohio State University and Erasmus University.

Stulz, R. M., & Williamson, R. (2003). Culture, openness, and finance. *Journal of Financial Economics*, 70(3), 313–349.

Terpstra, V., & Yu, C. M. (1988). Determinants of foreign investment of U.S. advertising agencies. *Journal of International Business Studies*, 19(1), 33–46.

Tesar, L, and Werner I, (1995), Home bias and high turnover, *Journal of International Money and Finance* 14, 467-492.

Thaler, R. (1985). Mental Accounting and Consumer Choice. *Marketing Science*, 4(3), 199–214.

Theissen, E., (2002), Floor versus Screen Trading: Evidence from the German Stock Market, *Journal of Institutional and Theoretical Economics* 158, 32-54.

Tihanyi, L., D. A. Griffith, & C. J. Russell. (2005). The Effect of Cultural Distance on EntryMode Choice, International Diversification, and MNE Performance: A Meta-Analysis. *Journal of International Business Studies*, 36(3): 270-83.

Tinsley, C. (1998). Models of conflict resolution in Japanese, German, and American cultures. *Journal of Applied Psychology*, 83, 316–323.

Todea, A., 2018. Financial Literacy and Stock Price Informativeness: a Cross-CountryStudy. Studia Universitatis Babes-Bolyai Oeconomica, 63(1), pag. 63-72.

Todea, A. și Buglea, A., 2017. Individualism and stock price reaction to market-wide information. Economics Letters, Volume 160, pag. 4-6.

Todea, A., & Petrescu, D. F. (2021). Is stock price informativeness shaped by our genes? *Economic Modelling*, 103, 105596.

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 96(3), 506–520. https://doi.org/10.1037/0033-295X.96.3.506

Vahlne, J.-E., & Wiedersheim-Paul, F. (1977). Psychic distance: An inhibiting factor in international trade. *Working paper* No. 2, Centre for International Business Studies, Department of Business Administration, Uppsala University.

Van Rooij, M., Lusardi, A., Alessi, R. (2011). Financial literacy and stock market participation, *Journal of Financial Economics*, Vol. 101, pp. 449-472

Vayanos, D. (1998). Transaction Costs and Asset Prices: A Dynamic Equilibrium Model. *Review of Financial Studies*, 11, 1-58.

Venkataraman, K., (2001), Automated Versus Floor Trading: an Analysis of Execution Costs on the Paris and New York Exchanges, *Journal of Finance* 56, 1445-1485..

Viswanathan, S., & Wang, J. J. D. (2002). Market architecture: limit-order books versus dealership markets. *Journal of Financial Markets*, 5(2), 127–167.

von Wyss, R. (2004) Measuring and Predicting Liquidity in the Stock Market, *Dissertation* No. 2899, University of St. Gallen

Voss, H. (2011). The Determinants of Chinese Outward Direct Investment. Cheltenham: Edward Elgar. New Horizons in International Business series

Walti, S., (2005) The macroeconomic determinants of stock market synchronization. J. Int.Bank Law 11 (10), 436–441

Wiedersheim-Paul, F., H. C. Olson, & L. S. Welch. (1978). Pre-Export Activity: The First Step in Internationalization. *Journal of International Business Studies*, 9(1): 47-58

Wong, J. and Fung, L. (2002) 'Liquidity of the Hong Kong Stock Market since the Asian financial crisis', *Proceedings of the Third Joint Central Bank Research Conference, Bank for International Settlements*, Basel, Switzerland pp.180–211.

Wu, W., & Dai, S. (2001). A comparative study of crisis management planning in Singapore and Hong Kong. *Manuscript in preparation*, Faculty of Business Administration, National University of Singapore

Xu, D., Pan, Y., & Beamish, P. (2004). The effect of regulative and normative distances on MNE ownership and expatriate strategies. *Management International Review*, 44(3), 285–307.

Zadeh, M. H., (2023) "Stock liquidity and societal trust," *Journal of Behavioral and Experimental Finance*, Elsevier, vol. 37(C).

Zuckerman, M. (1979). Attribution of success and failure revisited: or The motivational bias is alive and well in attribution theory. *Journal of Personality*, 47(2), 245–286