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THE IMPACT OF SOCIAL NORMS ON STOCK LIQUIDITY

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Abstract: There is a growing body of research that shows the impact of culture on individual's financial decisions. We aim to investigate how the strength of social norms and the tolerance for deviant behavior influence stock liquidity. Using a panel of 26 developed and 19 emerging countries we show that there is an inverted U-shaped relationship between the measure of cultural tightness-looseness, developed by Gelfand et al. (2011) and stock liquidity. Additionally, our results suggest that financial literacy has a moderating effect on the relationship between social norms and liquidity.

JEL Classification codes: G12, G15, G41

Keywords: social norms, liquidity, trust, information asymmetry, financial literacy.

1. Introduction

The fact that stock market liquidity plays a crucial role in the global economy is a lesson we had to learn the hard way during the 2008 financial crisis. It was then that we realized that a significant shock to the stock market liquidity level could shake even the strongest of economies. Nowadays, due to the ever-reaching globalization and digitalization of capital markets, such a shock can spread in a matter of seconds without regard for borders or territorial limits.

As such, policymakers, practitioners, and academia have been trying to understand and explain the mechanics of liquidity creation and liquidity shock propagation for over a decade. Nonetheless, liquidity is a complex and elusive concept, whereas measuring it and identifying its determinants is a real challenge.

Academic literature that investigates liquidity determinants, highlights many factors that relate to the company and its performance, the mechanics of the stock market, and the macroeconomic conditions. However, it has not been able to explain its anomalies. The issue is that most of those studies chose the premise of a rational investor trading on an efficient market as their starting point and try to explain his/her behavior by maximizing a utility function.

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Citing Nobel laureates Akerlof and Shiller:

"The real problem... is the conventional wisdom that underlies so much of current economic theory. So many members of the macroeconomics and finance profession have gone so far in the direction of 'rational expectations' and 'efficient markets' that they fail to consider the most important dynamics underlying economic crises. Failing to incorporate animal spirits into the model can blind us to the real sources of trouble."

Recently, a new branch of empirical finance has emerged, shifting the focus away from the market and its principles and towards the investor and the factors that motivate his/her decisions. One such factor being analyzed is the role culture plays in investment decisions. Studies by Chui et al. (2010), Eun et al. (2015), and Karolyi (2016) show that the constraints imposed by culture on an individual's behavior, albeit informal, have a significant impact on the trading behavior of institutional and retail investors alike. According to Aggarwal and Goodell (2014), national culture (identity) defines how entities influence social trust and the cost/price of financial transactions. Moreover, it can shape the institutional environment. Consequently, it defines how individuals perceive institutions and contribute to their formation.

In the same paper, authors urge finance researchers to explore the benefits of incorporating culture and its dimensions in empirical models, arguing that the impact culture can have on financial decisions has been shown in multiple management and business administration studies.

Existing literature focuses on investigating the role culture plays in the decision-making process at the individual level (Grinblatt and Keloharju, 2001; Guiso et al., 2008; Chui et al., 2010; Siegel et al., 2011; Eun et al., 2015), company level (Giannetti and Yafeh, 2012; Li et al., 2013; Ahern et al., 2015), or country level (Stulz and Williamson, 2003; Kwok and Tadesse, 2006; Gorodnichenko and Roland, 2011) while focusing on individual values, estimated through cultural dimensions.

We aim to expand the existing theoretical framework by accounting for the constraints imposed by social norms on human behavior, using a novel cultural dimension proposed by Triandis (1989) and operationalized by Gelfand et al. (2011).

2. Literature review

Grinblat and Keloharju (2001) is one of the pioneering studies in financial literature to analyze the impact of culture on investment decisions. Authors show that in the case of the Finnish stock market, investors prefer to own, buy, and sell shares of Finnish companies that are located closer to them and whose CEO is closer in terms of cultural background.

A study by Stulz and Williamson (2003) investigates the role of cultural differences (measured through religion and language) on international investor protection. Their results suggest that a country's dominant religion is better at explaining the cross-country differences in creditor rights protection, as opposed to the commercial openness, language, per capita income or the origins of the legal system. Generally speaking, authors show that Catholic countries have lower levels of creditor rights protection than Protestant countries.

Guiso, Sapienza and Zingales (2008) analyze the "trust" managers from different European countries put in each other. Authors show that the more trust an investor has in the people of the target country, the higher the trading volume,

portfolio investments, and foreign direct investments are in that country. After controlling for different origin and/or country-specific characteristics, their results remain robust. Pari passu, the authors point out that trust levels between two countries are explained to an extent through similarities in terms of religion, genetic or somatic distance, as shown by DeBruine(2002)[1].

Chui et al. (2010) is one of the pioneering studies to have used Hofstede's cultural dimensions to explain trading activity. Authors show that cultural differences (as captured by the individualism index) significantly impact trading volume and securities' volatility. Authors associate individualism with higher levels of overconfidence and self-attribution bias while showing that there are two types of overconfidence: overconfidence in general knowledge and peer-comparison overconfidence. According to them, peer-comparison overconfidence is responsible for the trading activity, leading to the investor overestimating his/her knowledge while underestimating the publicly available information. Furthermore, the authors explain the self-attribution bias using Zuckerman (1979). As such, Zuckerman (1979) defines the self-attribution bias as "people attempt(ing) to enhance or protect their self-esteem by taking credit for success and denying responsibility for failure." The bottom line is Chui et al. (2010) believe that higher trading volumes registered in individualist countries are caused by individual traders betting against the market because they are convinced that the information they posses is superior to that of others.

The cultural dimensions defined by Geert Hofstede (2001) are likely one of the most important contributions toward understanding and measuring cultural differences. The theoretical framework he proposed became the foundation of a vast area of studies in fields such as Management, Marketing, International Business, and Behavioral Finance. Notwithstanding, over the last two decades, more and more studies (Shenkar, 2001; McSweeney, 2002; Ailon, 2008) have criticized the use of these cultural dimensions and that of cultural distance. The authors emphasize that culture is too complex of a concept to be captured by four dimensions. As such, they urge academia to continue and deepen the research in this area.

Those critiques gave rise to new alternative cultural dimensions, developed by researchers such as Shalom Schwartz (1994), Robert House (2002), and Ronald Inglehart (1997). Nonetheless, Hofstede's original dimensions remain to be the most used.

Chui et al. (2002) analyzed the impact of culture through the alternative dimensions proposed by Schwartz (1994), showing that companies from countries with a higher score of conservatism and mastery are associated with a lower level of indebtedness, while Shao et al. (2010) show that these dimensions have a significant impact on the dividend policy. Ahern et al. (2012) exploit World Value Survey (a different measure of cultural values based on Inglehart's dimensions) to explain cross-border mergers.

This idea is latter on picked up by Eun et al. (2015). The authors study the impact of culture on stock price synchronicity. They expand the model proposed by Chui et al. (2002) by including a new cultural dimension operationalized by Gelfand et al. (2011). This dimension captures the cultural differences through the concept of

[1] The author suggests that people tend to put more trust in people who "look-like them".

cultural tightness-looseness (CTL[2]). According to Eun et al. (2012) the convergence of the investor behavior in tight cultures can cause positive correlations when it comes to investment decisions and choices. This convergence can in turn lead to higher co-movements in stock returns. Whilst individualism refers to the approach an individual takes when evaluating his/her own actions. The authors believe that individualist investors have more conviction in their own ability to gather and analyze information and are less concerned by the divergent opinions that might arise in the market. Based on this, authors suggest that the herding behavior is less prominent on stock markets from the more individualist countries, and that individualist investors contribute to a better stock price informativeness.

Notwithstanding, just a few studies focus on the impact of culture and investors' characteristics on stock market liquidity. For example, Blau (2017). The author builds upon the results obtained by Guiso, Sapienza and Zingales (2008) and analyses the impact of "social trust" on liquidity of cross-listed securities. Using a sample of 391 American Depositary Receipts, he evaluates how the levels of social trust in the origin country impact the liquidity of the stock listed in the USA. His results align with Guiso et al.'s (2004) hypothesis. Lower trust levels lead to lesser participation; as such, the lower the trust level, the lower the liquidity.

Zadeh (2022) is another example of a study aiming to investigate the effects of social trust of stock liquidity. The author uses the "Social Capital" index, computed and reported by the Northeast Regional Center for Rural Development (NRCRD) to proxy social trust. According to Woolcock (2001) the "Social Capital" index captures "the norms and networks that facilitate collective action." Moreover, Li et al. (2018) highlight that the norms promoted in these regions/states motivate the members of the communities to make their decisions and to act in a decent way in accordance with them. Zadeh's (2022) results show that ethical norms and social networks in regions characterized by a high level of social trust increase the level of transparency and loyalty towards the company, which in turn reduces the concern of shareholders regarding the agency problem. He suggests that trust levels impact the informational environment of the company, increase the credibility, and as such, lead to higher stock liquidity. He also argues that the relationship is stronger for poorly managed companies with low levels of transparency.

Thus, a new direction of research is gradually emerging. It aims to expand the analysis of investor's cultural background beyond the dimensions of traditional values. Until now, most financial studies have focused on individual values (internal constraints), ignoring how social norms (external constraints), and their strength at societal level can affect the behavior of its members.

Recent psychology and anthropology studies have shown that individual behavior is not only influenced by cultural values, but also by social norms and their enforcement. Triandis (1989) suggests that the clarity of social norms and the severity

[2] According to Gelfland (2011): „Tightness-looseness is part of a complex, loosely integrated multilevel system that comprises distal ecological and historical threats (e.g., high population density, resource scarcity, a history of territorial conflict, and disease and environmental threats), broad versus narrow socialization in societal institutions (e.g., autocracy, media regulations), the strength of everyday recurring situations, and micro-level psychological affordances (e.g., prevention self-guides, high regulatory strength, need for structure)".

of the sanctions applied for deviant behavior represent a new dimension of culture. It has a significant impact on the behavior of the individual. This new dimension has been associated with a multitude of economic phenomena, such as entrepreneurial activity (Harms and Groen, 2016), the performance of international mergers and acquisitions (Li and Gelfand, 2022), or the accuracy of financial reporting (Noh and Cho, 2022).

The motivation for our study lies, on the one hand, in the results obtained by Eun et al. (2015) regarding the impact of the tightness-looseness dimension on price synchronicity, and on the other hand in the results obtained by Zadeh (2022) regarding how social capital and trust in institutions influence market liquidity. As such, we decided to investigate whether this new dimension has an impact on the liquidity of the market.

Gelfand et al. (2011) describes tight societies as more inflexible, where social norms play an essential role in social life. The behavior of the members of a tight society is shaped by a multitude of social norms, the obedience to which is carefully monitored by the social institutions and by the other members of the society. In such societies, the rules are clear, while any deviation from them is sanctioned. In general, tight societies are characterized by discipline and order. At the same time, loose societies do not emphasize so much on social norms. Most of the time they are not clearly defined and are transmitted through various unofficial channels. The behavior of members of those societies is much more liberal, not limited by norms and public opinion.

In an earlier study Gelfand et al. (2006) show that the "shaping" of a member's behavior within a society starts from an early age. Parents in tight societies emphasize respecting the rules and conforming to the opinion of the majority in their children's education, monitoring children's behavior and applying stricter socialization tactics, while parents in loose societies encourage their children to explore and make independent decisions. They do not apply severe sanctions, considering mistakes and deviations a part of the learning process. The authors explain these differences through the concepts of "narrow socialization" and "broad socialization". In addition, they argue that the members of tight societies, as characterized by higher sense of responsibility are focused on failure prevention (prevention focus), while members of loose societies focus on achieving desired results (promotion focus). Authors refer to "kiasu" as an example of the prevention focus.[3]

In other words, the fear of failure is higher in tight societies, because members of such societies always feel monitored, whilst their every action is being evaluated and/or criticized, by the family, community or society's institutions from an early age. This fear of failure and of negative public opinion often leads to the underestimation of one's own abilities and leads to a greater risk aversion. We believe that tighter cultures will be associated with lower trading activity due to higher resilience to enter the market as compared to loose societies.

Thus, the first channel through which we consider that the dimension of tightness-loosens affects the liquidity of the capital market is the trading activity, reduced by the risk aversion of members of tight societies and amplified by the over-confidence of members of loose societies.

[3] According to Wu and Dai (2001) in Kiasu "the emphasis is on not losing rather than winning or on reducing risk of failure, rather than striving for success".This is a phenomenon characteristic to Singaporean society.

The second channel through which tightness-loosens can influence liquidity is informational asymmetry. Eun et al. (2015) suggest that, overall, tight societies are characterized by a more opaque informational environment, arguing that the members of a tight society have a more holistic way of thinking, and are less inclined to collect and analyze information independently.

Furthermore, in tight societies, there is a much lower probability that a member will use information that contradicts the general opinion, due to their tendency to "conform" to the public opinion. An important premise in this sense is highlighted by Gelfand et al. (2006) who claim that tightness-looseness has an important impact on the preferred way of collecting, processing and evaluating information. The authors suggest that tightness and looseness can also be associated with the decision-making style, which can be "adaptive" or "innovative". The first one refers to adapting an idea or finding a solution through existing procedures and is characteristic of tighter societies, while the second one implied challenging existing paradigms and thinking outside the box, to identify new solutions to existing problems and is more often found in loose societies.

Thus, informational asymmetry in tight societies can be determined by the way in which information is obtained (through official and verified channels only) and by the probability that contradictory information is likely to be made public. Besides these, informational asymmetry in tight countries can be fueled by "narrow socialization"[4].

The third channel through which we believe that tightness-looseness could impact the stock market liquidity is trust. Investments in the capital market essentially represent the entrusting by the investor of a sum of money, to a certain entity (company or institution), with the aim of increasing his/her capital. As such, investor's confidence in the fact that he/she is able to recover his/her money and the associated gains is imperative. This confidence is based on interpersonal trust (i.e., trust in company's management) or trust in institutions (i.e, the conviction that the institutions will enforce the law). Guiso et al. (2004), Guiso et al. (2008), Blau (2017), Zadeh (2022) confirm this relationship, showing that higher levels of trust lead to a higher investor participation and a higher stock liquidity.

A challenge arises from the fact that loose societies are characterized by a higher degree of interpersonal trust, and lower levels of institutional trust, while tight societies have a higher level of institutional trust and lower degrees of interpersonal trust. As such, while for the first two channels the relationship between tightness-looseness appears to be linear (the looser the society, the higher the liquidity), when it comes to the third channel, a higher level of liquidity seems to be associated with more of a moderate level of looseness, which is characterized by a higher level of both, interpersonal and institutional trust.

If we were to look at the extreme tight and loose societies more closely, we can see that none of them are representative of a 'healthy' society. A tighter society, governed by unbendable rules and severe sanctions for any deviant behavior will have high levels of discipline and order (better/stronger institutions, lower crime rates), but will fail to evolve due to its preference to maintain a status quo and the

[4] According to Gelfand et al. (2006) media institutions in tight societies employ "narrow socialization", which assumes that in tight societies the probability that the media will be censored is higher than in loose societies.

societal homogeneity (higher likelihood of autocracy and repressions). A looser society is heterogenous and disorganized (weaker institutions, higher crime rates), does not have a set of clear norms, whilst deviant behavior is accepted and tolerated. Nonetheless, the members of looser societies are more creative and flexible (i.e. can better adapt to innovations and technological advancements) and the free speech is encouraged (civil rights).

As such when it comes to tightness-looseness, the societies that are somewhere in the middle are the ones that benefit the most, as they can reap the advantages of the both types of societies. Harrington, Boski and Gelfand (2014) show that when compared to moderate societies, the tighter and the looser societies tend to have lower happiness and health levels, whilst being characterized by a less developed economy. To conclude, our principal hypothesis is the following:

H_1: There is a curvilinear relationship (inverted U-shape) between tightness-looseness and liquidity, according to which the higher level of liquidity corresponds to an average level of CTL;

At the same time, we consider that the nature of this relationship can be shaped by the investor's financial education, due to the correction effect it has on the investor's perception. In other words, understanding the functioning and mechanics of the stock market gives the investor a better perspective on the existing opportunities, diminishing the effect values or social norms have on his/her decision-making process.

H_2: The level of financial education shapes the way in which the strength of social norms and tolerance of deviant behavior influences stock liquidity.

3. Research design

a. Data

To capture the nature of the relationship between CTL and stock liquidity, we constructed a panel of 26 developed (Australia, Austria, Belgium, Canada, Cyprus, South Korea, Denmark, Switzerland, Finland, France, Germany, Greece, Hong Kong, Israel, Italy, Japan, Great Britain, New Zealand, Norway, Holland, Portugal, Singapore, Spain, Sweden, USA, Taiwan) and 19 emerging (Argentina, South Africa, Bangladesh, Brazil, Chile, China, Egypt, India, Indonesia, Philippines, Malaysia, Mexico, Pakistan, Peru, Poland, Romania, Sri Lanka, Thailand, Turkey) countries.

For each of those countries we've obtained a list of primary major stocks that are traded[5] on the main exchange, with a few exceptions, where two main exchanges were considered (China (Shanghai Stock Exchange and Shenzhen Stock Exchange), South Korea (Korea Exchange and KOSDAQ) and Japan (Japan Stock Exchange and Osaka Stock Exchange) using the Datastream platform. For the USA, only the NYSE exchange was considered, due to specific trading mechanism and a different reporting of trading volumes employed by NASDAQ.

We then filter the data to exclude: closed-end fund, preference shares, depository receipts, Mexican ordinary participation certificates, Peruvian investor shares, cumulative preference shares, stapled securities, rights, units and other

[5] Delisted stocks were not excluded from our sample, to avoid survivorship bias.

securities with special features. Next, following Griffin et al. (2010) a set of additional specific filters were applied for each country (such as removing securities that contain in their names "PNA", "PNB", "RCSA" in the case of Brazil, "1PF", "PFD" in the case of South Korea, or "GENUSSCHEINE", "GSH" for Germany).

For our final sample consisting of 26,512 securities, we gathered daily data regarding total return index, price, volume etc. covering a 23 years span (2000-2022).

As in Karolyi et al (2012), days for which over 90% of the securities listed on an exchange had zero returns were removed. Additionally, based on the warning by Ince and Porter (2006) regarding the frequency of errors in the data provided by Datastream, returns exceeding 200% or returns that were reversed the next day were eliminated.

b. Liquidity

We use Amihud's (2002) illiquidity measure to capture stock liquidity, because it is considered to be one of the best proxies of high frequency measures (Lesmond, 2005; Hasbrouck, 2009; Goyenko, Holden and Trzcinka, 2009). Nevertheless, given the specifics of our data sample and those of Amihud's illiquidity measure, we decided to follow Karolyi et al. (2012) in transforming Amihud's illiquidity to reduce the impact of outliers and facilitate result interpretation. Thus, we compute liquidity (Liq) as follows:

$$Liq_{i,t} = \frac{1}{n}\sum_{i=1}^{n} -log\left(1 + \frac{|R_{i,d}|}{P_{i,d}VO_{i,d}}\right)$$

where $R_{i,d}$ is the return, $P_{i,d}$ is the price in USD, and $VO_{i,d}$ is the trading volume for stock *i* on day *d*.

We discard stock-day observations with a daily liquidity in the top and the bottom 0.5% of the cross-sectional distribution within a country.

c. Cultural Tightness-Looseness

The strength of social norms and tolerance towards deviant behavior, or cultural tightness-loosenes (CTL) was estimated using the measure proposed by Gelfand (2011).[6]

The measure was built on the basis of a questionnaire applied between 2000-2003 on a sample of 6,960 respondents from 5 continents. Each of the participants answered a set of 6 questions:

1. There are many social norms that people are supposed to abide by in this country.
2. In this country, there are very clear expectations for how people should act in most situations.
3. People agree upon what behaviors are appropriate versus inappropriate in most situations this country.

[6] Originally computed for 33 nations, and later expanded by Erikson, Gelfand et al. (2021) to cover a sample of 57 nations.

4. People in this country have a great deal of freedom in deciding how they want to behave in most situations.
5. In this country, if someone acts in an inappropriate way, others will strongly disapprove.
6. People in this country almost always comply with social norms.

For each of the six questions, the participants were asked to choose one of the following options: strongly disagree, moderately disagree, slightly disagree, slightly agree, moderately agree, strongly agree.

d. Control Variables

In order to isolate the impact of CTL on stock liquidity, we use the following control variables: macroeconomic indicators such as GDP per capita, GDP growth level, inflation, broad money, stock market development indicators such as the number of listed companies or the ratio between the capitalization of the capital market and the country's GDP, as well as company level indicator (according to various studies such as Chung et al. 2010; Prommin et al. ,2014, Ng et al.2016, Dang et al.2018) we use share price, ROA, Book to Market, financial leverage and market value. The size of the company, estimated by the natural logarithm of the market value, allows us to control for the risk of adverse selection, generated by the increased attention that large companies attract and the significantly larger volume of available information (Diamond and Verrecchia (1991)). To capture possible variation across industries we include 5 separate dummies for Industrial, Utility, Transportation, Bank/Savings&Loan and Insurance companies.

The main source for company-level information is the Datastream (Refinitiv) platform, the macroeconomic variables were downloaded from the World Bank Database.

e. Theoretical model

The main hypothesis tested in this study refers to the impact of the strength of social norms (estimated with the help of the CTL measure) on stock liquidity. We expect an inverted U-shaped relationship between the two. The maximum values of liquidity being associated with an average level of CTL.

To test this hypothesis, a battery of panel regressions was estimated, using the following model:

$$Liq_{i,j,t} = \alpha_0 + \alpha_1 CTL_j + \alpha_2 CTL_j^2 + \beta_1 X_{j,t} + \beta_2 Y_{i,t} + \varepsilon_{i,j,t}$$

Where $Liq_{i,j,t}$ is stock's liquidity, CTL_j is cultural tightness-looseness measure of country j, $X_{j,t}$ is a vector of control variables at the country level, $Y_{i,t}$ is a vector of control variables at the firm level.

The existence of an inverted U-shape relationship would imply that the two coefficients related to the variables CTL and CTL^2 have opposite signs, i.e. $\alpha_1>0$, while $\alpha_2<0$. Our assumption regarding the non-linear relationship between the two variables is rooted in the results of the Harrington, Boski and Gelfand (2015) study.

Harrington et al. (2015) analyze how CTL affects a series of indicators of the nation's well-being. They show that moderate societies as compared to very permissive or very strict societies are characterized by a better general psychological

state (a higher degree of happiness, a lower level of dysthymia and a lower suicide rate), a higher level of life expectancy, better economic and political conditions (low risk of political instability and a higher level of GDP). The authors show that both a high level of CTL, i.e. a social environment with multiple limitations and severe sanctions for any violation thereof, and a low level of it, i.e. a relaxed social environment with a high tolerance for violations, can be harmful to the society, negatively influencing its level of development.

4. Empirical results

f. Main results

To establish a reference point, were run models (1) and (2) from Table 1, using only the control variables. The pooled OLS regressions (model 1-4) and Tobit regressions (5-6) with time fixed effects and errors corrected by the clustering option at the company level were employed. Additionally, we added the industry dummies in models (2), (4) and (6) to control for specific effects.

The results for control variables are consistent with previous studies and confirm our expectations. We can see that bigger companies, companies with higher ROA, Book-to-Market, leverage, and lower stock prices have higher liquidity. Although the positive relationship between financial leverage and stock liquidity may seem counterintuitive, since it suggests that higher indebtedness of the company would lead to higher stock liquidity, Ng et al. (2016) report similar results.

At the same time, the coefficients related to the number of listed companies, GDP per capita, and the level of GDP growth are also significant and positive, suggesting that the liquidity of stocks traded on larger stock exchanges in developed countries with a positive economic evolution is significantly higher.

We add *CTL* and CTL^2 in models (3) and (4) to investigate the nature of the relationship between tightness-loosens and stock liquidity[7]. The signs for CTL and CTL^2 coefficients confirm our first hypothesis (H1), i.e. the existence of an inverted U-shaped relationship.

Table 1. Main results

	(1)	(2)	(3)	(4)	(5)	(6)
CTL			0.0110***	0.0108***	0.0109***	0.0108***
			(26.29)	(25.94)	(26.27)	(25.92)
CTL^2			-0.00069***	-0.00069***	-0.00069***	-0.00069***
			(-24.44)	(-24.12)	(-24.42)	(-24.10)
Market value	0.0045***	0.0046***	0.0038***	0.0039***	0.0038***	0.0039***
	(39.84)	(39.73)	(34.92)	(34.44)	(34.90)	(34.42)
ROA	0.0000***	0.00001***	0.0001***	0.0001***	0.0001***	0.0001***
	(13.28)	(12.89)	(12.29)	(12.06)	(12.21)	(11.98)

[7] Before running the two models, the test proposed by Lind and Mehlum (2010), available in STATA through the utest command, was performed, which confirmed the existence of an inverted U-shaped relationship.

	(1)	(2)	(3)	(4)	(5)	(6)
Book to Market	0.0005*** (3.50)	0.0005*** (3.68)	0.0003*** (2.40)	0.0004** (2.51)	0.004** (2.44)	0.0004** (2.55)
Leverage	2.19e-06 *** (4.59)	2.16e-06 **** (4.53)	0.00001 *** (19.25)	0.00001 *** (19.28)	0.00001 *** (19.20)	0.00001 *** (19.23)
Price	-9.48e-07 *** (-2.73)	-8.83e-07 ** (-2.52)	-6.19e-07* (-1.78)	-6.00e-07* (-1.72)	-6.23e-07* (-1.80)	-6.03e-07* (-1.74)
# listed companies	0.0033*** (17.60)	0.0032*** (17.08)	0.0014*** (7.23)	0.0014*** (7.12)	0.0014*** (7.24)	0.0014*** (7.13)
GDP per capita	0.0040*** (19.37)	0.0039*** (19.11)	0.0024*** (7.92)	0.0024*** (7.85)	0.0024*** (7.93)	0.0024*** (7.85)
GDP growth	0.0008*** (15.00)	0.0008*** (14.68)	0.0005*** (8.03)	0.0005*** (7.92)	0.0006*** (8.05)	0.0005*** (7.93)
Const	-0.1292*** (-33.60)	-0.1320*** (-32.95)	-0.1313*** (-23.49)	-0.1329*** (-23.59)	-0.1313*** (-23.48)	-0.1328*** (-23.58)
Industry effects	NO	YES	NO	YES	NO	YES
Year effects	YES	YES	YES	YES	YES	YES
Adj-R^2	0.1199	0.1209	0.1290	0.1293		
F-stat	97.47	83.13	86.25	74.48	86.17	74.41
N	282,593	282,593	245,488	245,488	245,345	245,345
Log likelihood					523577.4	523633.43
VIF-mean	2.28	2.33	2.34	2.39		

Note: This table presents panel regressions between stock liquidity and cultural tightness-looseness CTL. t-statistics, based on standard errors clustered at the firm level, are reported in parentheses. Statistical significance is denoted by *, **, and *** at the 10%, 5%, and 1% levels, respectively.

However, taking into account the fact that the maximum value that the liquidity measure can take is 0 and that we may be dealing with a certain number of censored observations, in models (5) and (6) we use Tobit regressions.[8] The results suggest that the number of censored observations is quite small, and does not significantly affect the relationship between the dependent variable and the explanatory variables.

Table 2. Sub-sample results

	(1) Developed countries	(2) Emerging countries	(3) Big companies	(4) Small companies
CTL	0.0112*** (12.20)	0.0083*** (8.94)	0.0005*** (6.17)	0.0092*** (12.73)
CTL^2	-0.0007*** (-11.55)	-0.0004*** (-9.06)	-0.00003*** (-6.25)	-0.0006*** (-12.72)
Market Value	0.0033*** (26.43)	0.0067*** (25.04)	0.0001*** (12.02)	0.0156*** (34.98)

[8] In cases where the dependent variables are limited/truncated, the use of the Tobit model is recommended.

	(1) Developed countries	(2) Emerging countries	(3) Big companies	(4) Small companies
ROA	0.0001*** (10.94)	0.0001*** (5.93)	0.00001*** (4.33)	0.00008*** (7.19)
Book to Market	0.0004** (2.59)	-0.00004 (-0.12)	0.00004*** (2.74)	0.0009*** (5.36)
Leverage	0.00001*** (11.25)	-0.00008 (-1.20)	9.95e-07*** (4.58)	0.00002*** (15.29)
Price	5.77e-07** (2.12)	1.22e-06 (0.55)	1.65e-07*** (5.19)	3.74e-06*** (4.44)
# listed companies	0.0029*** (13.40)	-0.0019*** (5.52)	0.0002*** (9.06)	0.0042*** (9.53)
GDP per capita	-0.0034** (-2.42)	-0.0004 (-0.43)	0.0001** (2.28)	0.0035*** (7.76)
GDP growth	0.0011*** (9.56)	0.0004*** (5.21)	0.00006*** (4.52)	0.0009*** (7.83)
Const	-0.0735*** (-4.08)	-0.1133*** (-9.62)	-0.0088*** (-7.14)	-0.2827*** (-27.59)
Industry effects	YES	YES	YES	YES
Year effects	YES	YES	YES	YES
Adj-R^2	0.1222	0.1674	0.0169	0.2012
F-stat	59.63	36.54	18.44	81.46
N	171,484	74,004	130,697	114,791

Note: This table presents the results of the panel regressions of stock liquidity and CTL using pooled OLS; t-statistics, based on standard errors clustered at the firm level, are reported in parentheses. Statistical significance is denoted by *, **, and *** at the 10%, 5%, and 1% levels, respectively.

An important aspect when analyzing a relationship described by a quadratic function is the maximum/minimum point, which can be easily calculated using the first derivative, that resumes to -b/2a, or in our case $-\alpha_1/2\alpha_2$. Computing the maximum point helps us understand where the relationship between CTL and liquidity reverse.

Applying this formula to the coefficients from model (4) we get a 7.82 value for CTL, that corresponds to a maximum liquidity level. As CTL values vary between 3.1 (Israel) and 12.3 (Pakistan) we can see that the maximum level for liquidity corresponds to a moderate level of tightness.

Overall, our findings suggest that CTL plays an important role in explaining cross-country differences in stock market liquidity, and that our first hypothesis is valid. However, it would be interesting to see to what extent our results are remain significant if we consider only companies from developed countries or emerging countries. It is possible that the effect of CTL on liquidity is different depending on the level of development of the economy. In this sense, following the classification proposed by Amihud (2015), our sample was divided into developed countries and emerging countries. We re-ran the basic models on the two sub-samples.

The results, presented in Table 2, show us that the nature of the relationship between CTL and liquidity is the same, i.e. inverted U-shaped. The coefficients remain significant for both developed and emerging countries.

Models (3) and (4) reported in Table 2, analyze if the effect of CTL on small companies is different from its effect on large companies. We divided the sample according to the market value in two sub-samples (below and above the sample mean). We note that for both small and large cap companies the results obtained in the basic models are preserved, with small differences in control variables.

g. Robustness check

In this section we present the results for the robustness tests. To ensure that previously obtained results are not biased, we re-run the basic models using random effects[9] regressions. We also look for additional control variables to reduce the likelihood of omitted variable bias.

Financial literature suggests including in the model variables such as inflation, broad money, the ratio between market capitalization and the country's GDP or the quality of institutions. In addition, two company-level control variables were included: return and the tangibility of the company's assets.

The regressions results are presented in Table 3. CTL remains a significant determinant of liquidity regardless of the added control variable. All five added control variables have significant coefficients, confirming their importance to liquidity providers.

Coefficient signs for most of the control variables used are in accordance with our expectations. Higher stock liquidity is characteristic to countries with higher institutional quality, more developed stock markets and broader money supply.

Nevertheless, the sign for tangibility ratio suggests that companies with less tangible assets are more liquid, although, in theory, tangible assets are more easily tracked which should offer investors additional safety with regards to the company's future evolution. Results could vary across industries (i.e. companies from the IT & financials sectors having, generally less tangible assets, than for example, Industrials).

Table 3. Results of random effects regressions

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
CTL	0.0087*** (15.78)	0.0081*** (15.16)	0.0082*** (13.48)	0.0093*** (13.97)	0.0084*** (16.54)	0.0098*** (17.96)
CTL²	-0.0005*** (-12.92)	-0.0004*** (-12.20)	-0.0004*** (-10.63)	-0.0005*** (-13.16)	-0.0004*** (-13.41)	-0.0005*** (-15.52)
Return	0.0013*** (8.60)					
Tangibility		-0.0051*** (-5.37)				
MV/GDP			2.70e-06*** (6.00)			
Broad money				0.00001*** (5.50)		

[9] The results of the Breusch-Pagan test confirm the existence of significant random effects.

	(1)	(2)	(3)	(4)	(5)	(6)
Inflation					0.00007** (1.99)	
Institutional quality						0.0086*** (13.55)
Market value	0.0061*** (29.05)	0.0062*** (29.94)	0.0064*** (29.78)	0.0054*** (33.78)	0.0063*** (29.95)	0.0064*** (29.66)
ROA	0.00007** (7.02)	0.00007** (7.66)	0.00007*** (7.49)	0.00008** (8.08)	0.0007** (7.86)	0.0007*** (7.72)
Book to Market	0.0005** (2.45)	0.0005*** (2.62)	0.0005** (2.62)	0.00005 (0.34)	0.0005*** (2.62)	0.0006*** (3.01)
Leverage	0.00001*** (16.04)	0.00001*** (14.10)	0.00001*** (13.09)	0.00001*** (13.91)	0.00001*** (13.79)	0.00001*** (14.90)
Price	-3.25e-06*** (-6.45)	-3.05e-06*** (-6.62)	-3.23e-06*** (-6.84)	-2.70-06*** (--5.08)	-3.08e-06*** (-6.73)	-3.12e-06*** (-6.56)
# listed companies	0.0009*** (3.79)	0.0008*** (3.48)	0.0010*** (4.12)	-0.0011 (-4.36)	0.0008*** (3.39)	0.0006*** (2.67)
GDP per capita	0.0037*** (12.09)	0.0037*** (12.36)	0.0042*** (12.41)	0.0017*** (8.09)	0.0039*** (12.12)	-0.0014*** (-5.00)
GDP growth	0.0008*** (13.62)	0.0008*** (13.96)	0.0009*** (13.98)	0.0004*** (10.78)	0.0008*** (13.79)	0.0009*** (14.39)
Const	-0.1640*** (-26.55)	-0.1617*** (-27.09)	-0.1742*** (-25.50)	-0.1210*** (-29.39)	-0.1659*** (-26.02)	-0.1256*** (-29.92)
Industry effects	YES	YES	YES	YES	YES	YES
Year effects	YES	YES	YES	YES	YES	YES
Overall-R^2	0.1253	0.1226	0.1199	0.1227	0.1221	0.1219
χ^2	2566.21	2582.10	2547.19	2471.59	2593.53	2723.64
N	234,793	244,688	242,084	221,426	245,488	237,817

Note: This table presents the results of the panel regressions of stock liquidity and CTL using random effects; t-statistics, based on standard errors clustered at the firm level, are reported in parentheses. Statistical significance is denoted by *, **, and *** at the 10%, 5%, and 1% levels, respectively.

h. The moderator effect of financial literacy

Financial education is yet another important factor that could have a significant effect both directly, on stock market liquidity and indirectly, on the way social norms influence investment decisions.

Defined by Servon and Kaestner (2008) as "the person's ability to understand and apply financial concepts". Financial literacy plays an important role both at the individual level and at the macroeconomic level.

In financial literature, there are numerous studies that analyzed the effect of financial literacy on various financial decisions (Bayer et al. 1996; Hilgert et al. 2003; Lusardi and Mitchell, 2007; Guiso and Jappelli, 2008; Muller and Weber, 2010; Dvorak and Hanley, 2010; Van Rooij et al. 2011; Smith et al., 2011; Ludlum et al.,

2012)[10], showing that most people have a low level of financial education, which can be associated with under-diversification of portfolios, a low level of stock market investments, and a lack of savings for retirement, frequent changes regarding the allocation of accumulated capital, questionable financial decisions and irresponsible financial behavior (exaggerated use of credit cards, over-indebtedness and others).

The importance of financial education is highlighted by Akerlof and Schiller (2010) in their book "Spiritus Animalis", suggesting that it could diminish the role of culture on financial decisions. Mainly, however, the authors focus on the problem of savings, showing that most people do not save enough.

Aren and Aydemir (2015) show that financial literacy has a moderating effect on the relationship between risk aversion and the intention to invest in risky assets. Furthermore, the authors investigate the effect that financial literacy has on the "locus of control". The concept of "locus of control" taken from psychology refers to the extent to which people believe they have control over the situations and experiences that affect their lives. According to this concept, people who consider that everything that happens in their life (good or bad) is the result of their own actions, have what the psychologic literature calls "internal locus of control", while people who consider that everything that happens to them is determined by "external forces" such as the chance, luck or destiny, have what the literature calls "external locus of control".

This characteristic of "locus of control" is considered by numerous studies in psychology and management to be an underlying factor in financial decisions. Our assumption is that one of the alternative channels through which social norms could affect investment decisions is the "locus of control". Members of a tight society, theoretically, are more likely to have an "external locus of control" because their whole life is "directed" by social norms and institutions. Thus, we could speculate that the greater aversion to risk in tight societies is caused by the perception of the lack of control that the members of such a society have over their own lives.

Van Roij et al. (2011) using the data obtained by De Nederlandsche Bank's Household Survey regarding the demographic and economic characteristics of a sample of 2,000 households in the Netherlands, construct a measure of the level of financial literacy, with the help of which they show that the lack of basic economic and financial knowledge represents one of the main reasons why most households do not invest in the capital market.

As such, in the second part of our empirical study, we decided to investigate to what extent financial education can moderate the effect of CTL on market liquidity. A better level of knowledge of financial concepts and the way capital markets work, could reduce the reluctance that investors have towards trading activity. Although, in addition to the actual level of financial knowledge, preconditions such as personal experience, trust in the financial system or the extent to which investments in the capital market are practiced by the family, friends or acquaintances or any other subjective reasons, have an important role. However, a person who really understands the mechanics of the market, will get over them more easily.

The level of financial literacy in this study was estimated through the answers to 5 questions related to risk diversification, inflation, interest and compound interest, obtained by the Standard & Poor's Ratings Services Global Financial Literacy Survey.

[10] See Aren and Aydemir (2014) for an extended literature review.

The survey was applied to a sample of 150,000 adults from 140 countries. According to the results obtained, only 1 out of 3 adults at the global level answered correctly on 3 out of the 4 subjects, the fewest correct answers being recorded for the question regarding portfolio diversification.

In order to capture the moderating effect of financial education on the relationship between CTL and stock liquidity, the following model was used:

$$Liq_{i,j,t} = \alpha_0 + \alpha_1 CTL_j + \alpha_2 CTL_j^2 + \alpha_3 Fin\_Lit + \alpha_4 CTL_j \times Fin\_Lit_j + \alpha_5 CTL_j^2 \times Fin\_Lit_j + \beta_1 X_{j,t} + \beta_2 Y_{i,t} + \varepsilon_{i,j,t}$$

where $Liq_{i,j,t}$ is liquidity of stock *i* from country *j* in year *t*, CTL_j is measure of cultural tightness-looseness of *j* country, Fin_Lit_j is level of financial literacy in country *j* , $X_{j,t}$ is a vector of control variables at the country level, and $Y_{i,t}$ is a vector of control variables at the company level, $CTL_j \times Fin\_Lit_j$ and $CTL_j^2 \times Fin\_Lit_j$ represents interaction terms between CTL and financial literacy.

In the new model we are looking at two aspects: (1) the significance of the interaction terms coefficients α_4 and α_5, that show us whether the analyzed variable has any moderating effect, and (2) the signs of the coefficients which suggests the nature of the effect. In theory, the moderation effect is possible only when $Fin\_Lit \neq 0$. A U-shaped relationship between CTL and liquidity exists when $\alpha_1+\alpha_4 Fin\_Lit<0$ and $\alpha_2+ \alpha_5 Fin\_Lit>0$, and an inverted U-shaped relationship exists when $\alpha_1+\alpha_4 Fin\_Lit>0$ and $\alpha_2+\alpha_5 Fin\_Lit<0$.

Table 4. Moderating effect of financial literacy

	(1) All countries	(2) Developed countries	(3) Emerging countries	(4) All countries	(5) Developed countries	(6) Emerging countries
CTL	0.0318*** (14.59)	0.0713*** (11.48)	0.3115*** (10.79)	0.0310*** (11.58)	0.0722*** (12.65)	0.2927*** (8.66)
CTL²	-0.0017*** (-12.55)	-0.0039*** (-11.16)	-0.0172*** (-10.56)	-0.0016*** (-9.22)	-0.0040*** (-12.48)	-0.0162*** (-8.58)
Fin_Lit	0.0015** (10.69)	0.0039*** (10.99)	0.0388*** (10.70)	0.0015*** (8.98)	0.0040*** (11.72)	0.0362*** (8.40)
CTL*Fin_Lit	-0.0038*** (-9.90)	-0.0009** (-10.46)	-0.0091*** (-10.65)	-0.0004*** (-7.92)	-0.0010*** (-11.76)	-0.0085*** (-8.44)
CTL²*Fin_Lit	0.0001*** (6.31)	0.0004*** (9.48)	0.0005*** (10.41)	0.0002*** (5.43)	0.00005*** (11.13)	0.0004*** (8.33)
Market value	0.0036*** (31.25)	0.0033*** (28.08)	0.0063*** (18.62)	0.0057*** (26.46)	0.0055*** (23.94)	0.0072*** (17.29)
ROA	0.0001*** (12.41)	0.0001*** (12.01)	0.0001*** (4.48)	0.00007*** (7.57)	0.00007*** (6.95)	0.00008*** (3.83)
Book to Market	0.0004*** (2.95)	0.0005*** (2.95)	0.0003 (0.88)	0.0007*** (3.81)	0.0007*** (6.95)	0.0005* (1.69)
Leverage	7.96e-06*** (8.14)	5.25e-06*** (7.85)	-0.00003 (-0.88)	7.53e-06 *** (10.54)	4.36e-06 *** (6.75)	-6.24e-06 (-0.10)

	(1) All countries	(2) Developed countries	(3) Emerging countries	(4) All countries	(5) Developed countries	(6) Emerging countries
Price	6.44e-08*** (0.20)	6.44e-07* (1.74)	-1.42e-06 (-0.55)	-2.48e-06*** (-6.54)	-2.11e-06*** (-5.68)	-5.58e-06*** (-2.45)
# listed companies	0.0004*** (2.62)	0.0006** (2.57)	-0.0014*** (-3.11)	0.0001 (0.78)	0.0012*** (4.65)	-0.0027*** (-3.77)
GDP per capita	0.0064*** (14.15)	0.0036** (2.13)	-0.0037** (-2.96)	0.0069*** (14.67)	0.0091*** (3.29)	0.0004 (0.32)
GDP growth	0.0006*** (7.63)	0.0011*** (9.99)	0.0009*** (8.48)	0.0010*** (13.62)	0.0014*** (13.35)	0.0008*** (8.29)
Const	-0.2435*** (-18.58)	-0.3842*** (-9.46)	-1.3914*** (-11.54)	0.2712*** (-19.12)	-0.4647*** (-9.95)	-1.3455*** (-9.30)
Industry effects	YES	YES	YES	YES	YES	YES
Year effects	YES	YES	YES	YES	YES	YES
Adj-R^2/Overall-R^2	0.1413	0.1482	0.1960	0.1337	0.1387	0.1940
F-stat/ χ^2	67.75	60.35	26.74	2697.47	2407.46	974.55
N	228,458	171,484	56,974	228,458	171,484	56,974

Note: This table presents the results of the panel regressions of stock liquidity and CTL using pooled OLS (model 1-3),and random effects (model 4-6); t-statistics, based on standard errors clustered at the firm level, are reported in parentheses. Statistical significance is denoted by *, **, and *** at the 10%, 5%, and 1% levels, respectively.

If $\alpha_1 + \alpha_4 Fin\_Lit$ is equal to $\alpha_2 + \alpha_5 Fin\_Lit$ we obtain the *Fin_Lit* threshold that transforms an inverted U-shaped relationship into a U-shaped relationship. The turning point of the function can be estimated using the following formula:

$$CTL = -(\alpha_1 + \alpha_4 Fin\_Lit)/2 \times (\alpha_2 + \alpha_5 Fin\_Lit)$$

The results of the regressions run both on the whole sample (models 1 and 4) and separately on developed and emerging countries, presented in Table 4, show us that all the coefficients of the interaction terms are significant at 1%. The sign of the coefficients suggests the existence of an inverted U-shaped relationship between CTL and liquidity in countries with a low level of financial education and a U-shaped relationship in countries with a high level of financial education.

Thus, the calculated turning point for model (1) is 9.29, and the Fin_Lit threshold at which the inversion of the function occurs is equal to 84.27. That is, theoretically countries with a level of financial education above 84.27 manage to reverse the form of the relationship between CTL and the liquidity of the securities, but we emphasize that this is a theoretical threshold, because none of the countries in our sample have such a high level of financial literacy. However, we consider that the results are in line with our expectations, validating the second hypothesis, according to which the way in which social norms influence the stock liquidity is shaped by the level of financial literacy.

One of the main practical implications of these results comes from the fact that culture, or in our case the strength of social norms, is not a variable decision-makers or regulatory authorities could influence. Even if they were to succeed in influencing it, this would have taken several generations. It is quite difficult to change an adult's perspective. The level of financial literacy, on the other hand, can be improved over a relatively short timeframe, the results being visible after a few years. Thus, we consider that one of the most effective ways in which decision-makers could positively impact the liquidity of the capital markets in the long term is through measures aimed at increasing the level of financial literacy.

5. Conclusions

Liquidity, analyzed through the lens of classical theories, is a relatively simple concept, behind which are the basic mechanisms of the market influenced by supply and demand. However, as the last financial crisis showed us, liquidity is a much more complex phenomenon, which captures, in addition to demand and supply, the interactions between the investor, the market and the global economy. Although these interactions do not always lead to a transaction, they shape the state of tomorrow's economy. Hence the importance of the phenomenon of liquidity and the factors that influence it.

Most financial empirical studies that analyzed the phenomenon of stock liquidity focused on factors related to the company, the capital market, or the economy in general. Among the few examples of studies that tried to capture the impact of subjective factors, such as social trust are Blau (2017) and Zadeh (2022). Both show there is a strong connection between the investor's level of trust and his/her willingness to trade on the stock market.

In this study, we tried to analyze the stock market liquidity through the lens of cognitive biases, determined by the strictness/permissiveness of social norms. The role and impact of social norms on an individual's behavior have been increasingly highlighted in psychology and anthropology studies. In addition, rather recently Gelfand et al. (2010) and Uz (2014) proposed some measures to capture the strength of social norms and tolerance towards deviant behavior.

As such, we propose to extend the analyses performed by Chui et al. (2010), Eun et al. (2015), and Tang et al. (2019) in which authors studied the impact of culture on trading activity, by incorporating into the model a new cultural dimension called tightness-looseness (CTL). Our results confirm the existence of a significant relationship between CTL and liquidity regardless the estimation method used or the control variables included in the model. This relationship follows an inverted U-shape. As such, a high/low level of CTL corresponds to low levels of liquidity, while a moderate level of CTL corresponds to a high level of liquidity.

We believe that CTL influences liquidity through several main channels: risk aversion, information asymmetry, and (interpersonal & institutional) trust. Members of tight societies have greater levels of risk aversion, because, since childhood, they were taught to answer for their own actions, and got used to the idea that any violation of the rules will be strictly punished. This is why members of tight societies are more focused on preventing negative events (prevention focus). In regards to the stock markets, this prevention focus manifests through the hesitation to carry out a transaction, unless the probability of a gain is very high.

In loose societies, the focus is on results (promotion focus). Members of such societies are more inclined to assume a much greater risk, even if the probability of profit is relatively small. Children in such societies are encouraged to explore and express their opinions freely. Both approaches taken to the extreme can be harmful. The overestimation of risks (tight societies) leads to a reluctance towards everything new, which implies stagnation and missed opportunities, such as those existing on the stock market. Underestimating risks (loose societies) and overconfidence in one's own abilities implies unjustified exposure to risks and a higher probability of failure.

At the same time, the hierarchical structure of tight societies (a greater distance from power) determines higher levels of informational asymmetry, due to the way and the means through which information is transmitted (limited access to information, censored media institutions and the practice of narrow socialization),while loose societies are characterized by a greater degree of freedom, easier access to information, but also greater volumes of false information, fraud and mass manipulation.

Generally, our results confirm the assumption regarding the fact that very tight societies, are too dependent on "social approval" not independent enough to take initiative and go against the trend, for example by purchasing a stock whose price is decreasing due to mass selling.

One of the factors that could counterbalance the effect of culture and social norms on investor behavior is financial literacy. The results from the second part our empirical study confirm that financial literacy can shape the nature of the relationship between CTL and liquidity, reversing its direction. The higher the level of financial education of the investor, the easier will he/she overcome the cognitive bias, making the correct (rational) financial decision.

The moderating effect of financial literacy on the relationship between CTL and liquidity has some important implications for decision-makers and financial market regulatory authorities. First of all, our results show that increasing the level of financial literacy can reduce the effect of culture on market liquidity. As such authorities from countries with lower levels of stock market liquidity, should take measures aimed at increasing the level of financial literacy in order to improve the stock market liquidity. Secondly, our results confirm the assumption regarding the fact that the level of development of a stock market is influenced by the extent to which the society managed to find a balance between free will and obedience. A "healthy" stock market cannot be built in a conservative and over-regulated environment, because innovation is one of the main engines of development, but at the same time, the lack of clear rules and adequate control mechanisms leads to chaos and lack of confidence in stock markets.

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