Large Shareholder’s Identity With Linguistic World and Stock Price Synchronicity: Evidence From a MENA Market and the Way Languages Affect Them

Tamadur Sulayman Al-Shamileh[a],*

[a]Department of English Language & Literature, Aqaba, University of Jordan, Jordan.
Corresponding author.
Received 30 September 2015; accepted 22 November 2015
Published online 26 December 2015

Abstract
I investigate the association between large shareholder’s identity and stock price synchronicity in a country where investor applying for languages is really lows protection is weak. My results show that stock prices in Jordan have synchronous behavior especially when the firm is large, consistent with previous empirical evidence on stock price behavior in low per capita GDP countries. Most of the public corporations are owned and controlled by families thus language exchanges such as speaking, reading and listening. In most of the family-controlled firms, the controlling family is also involved in firm’s management leading to loose separation between ownership and management. Furthermore, stock prices of family-controlled firms are significantly less synchronous while those of government controlled firms are more synchronous than stock prices of widely held corporations. The pyramid structure is the most widely used indirect control mechanism in languages world and results in little deviations between ownership and control.

Key words: Synchronicity; Ownership structure; Cash flow rights; Voting rights

INTRODUCTION
Concentrated ownership structure by which large shareholders control the firm remains the dominant feature of corporations in both developed and developing countries (see for example, La Porta et al., 1998; LaPorta et al., 1999; Claessens et al., 2000). However, significantly larger concentration of ownership in the hands of blockholders is particularly observed in countries where legal protection of minority shareholders’ rights is weak (La Porta et al., 2002). The quality of investor rights protection from corporate insiders, on the other hand, has been found negatively related to the extent by which stock prices exhibit synchronous behavior (Morck, Yeung, & Yu, 2000). In this paper, we investigate the association between ownership structure and stock price synchronicity on the firm-level in a country characterized by weak protection of investor rights (An & Zhang, 2013). Unlike previous research, this enables us to directly investigate controlling shareholder’s role with less concern about the confounding effects of the quality of commercial laws.

In a poor legal protection environment, the absence of legal deterrence enables large shareholders to easily expropriate minority shareholders’ rights by taking actions that maximize their own private benefits rather than firm value. Thus, large shareholders can choose not only their actions but also the type and time of information they disclose about the firm (Jin & Myers, 2006; Jiang, Kim, & Pang, 2013). The link between firm-specific information and stock price behavior can be traced back to Roll (1988) who finds that only 20% of daily stock price changes in NYSE can be explained by market-wide and industry-specific factors. Morck, Yeung, and Yu (2000) and Campbell, Lettau, Malkiel, and Xu (2001) do similar analyses using more recent data and find that as the U.S market developed, the percentage of stock price changes explained by changes in market conditions (i.e., $R^2$) has dropped significantly over time. This negative correlation
between capital market development and firms’ average $R^2$ is not confined to the U.S. market but rather exists in cross-country data as well. Morck et al. (2000) build on the observation that stock prices in low per capita gross domestic product (GDP) countries move in more synchronous manner, as evidenced by their higher average $R^2$s, than in high per capita GDP countries and show that such differences can be explained by differences in the extent to which a country’s laws protect investor rights. Countries with poor protection of investor rights are expected and found to have more concentrated ownership structures (La Porta et al., 1999).

The way firms are owned and controlled whether directly by owning enough cash flow rights to gain majority voting rights and/or indirectly using shares with superior voting rights (shares with more than one voting right), the pyramid structure, and/or cross-holdings has been investigated in different regions and countries. The evidence is that even in wealthy economies firms are mainly controlled by families or the state unless the country has very good investor protection laws (La Porta, Lopez-De-Silanes, & Shleifer, 1999). Family control is far more pronounced in East Asian corporations where the pyramid structure and cross-holdings are frequently used by investors to gain control over firms (Claessens, Djankov, & Lang, 2000). The use of pyramids is more extensive in majority of Russian corporations which are controlled either by state or by anonymous private owners through not only the use of pyramids but also golden shares (a feature that grants large control rights without cash flow rights) (Chernykh, 2008). This is in contrast to corporations in the Western European countries where most of the financial and large corporations are widely held while non financial and small corporations are mainly controlled by families and the use of pyramids and cross holdings to control firms is only marginal (Faccio & Lang, 2002). As for the Middle East and North African (hence, MENA) region, the region remains largely unexplored in terms of how firms are owned and controlled although its contribution to world economy has been increasing and its countries have been attracting significant foreign direct investment. Along these lines, we provide answers from a country (namely, Jordan) that is representative of the MENA region. We use data from the Jordanian market because it is the least volatile among the MENA countries (Lagoarde-Segot, 2009). Countries of the MENA region differ drastically from developed countries and other emerging markets in many respects including how principal-agent relationships and financial markets are structured and, more importantly, how social norms shaped corporate structure and institutional environment. Studying the stock behavior and corporate governance structure in Jordan will contribute to understanding the workings of corporate governance mechanism and stock price behavior in other MENA countries as well, as these countries have similar regulatory systems and investment environment.

We are not the first to investigate the association between large shareholder’s identity and stock price synchronicity. For example, An and Zhang (2013) find that stock price synchronicity is negatively related to ownership by dedicated institutional investors and Gul, Kim, and Qiu (2010) find that synchronicity is higher when the largest shareholder is government and that foreign ownership is inversely related to synchronicity. However, previous evidence comes either from a developed country or a country with strong investor protection laws. We contribute to this research in two ways: First, we present evidence from a country with extremely weak investor protection laws and therefore, we are able to directly test for the role of the largest shareholder as no minority investor protection is provided by commercial laws. Second, we provide evidence from an emerging market as little research exists on the role of large shareholders in general and on the role of families and the government, in particular, in emerging markets (Claessens & Yurtoglu, 2012). This evidence is relevant because there are huge variations in the firm-level governance in emerging markets (Klapper & Love, 2004).

We find that stock prices in Jordan do have synchronous behavior consistent with Morck et al. (2000) findings for low per capita GDP countries. Furthermore, large firms’ stock prices are more synchronous than those of small firms while family controlled firms’ stock prices are less synchronous than those of widely held firms. Our results are also consistent with La Porta et al. (1998) results that ownership structures of firms in French origin civil-law countries exhibit significant concentration. Like most of the MENA countries, Jordan is a civil law country and most of the Jordanian publicly traded firms are owned and controlled by families directly and/or indirectly using a pyramid structure and/or cross-holdings resulting in varying deviations between ownership and control. In addition, the controlling family is heavily involved in firm’s management, thus, aligning ownership and management. The use of indirect control mechanisms in Jordan is not due to certain limits imposed on ownership stakes by commercial laws because Jordanian commercial laws place “not so restrictive” limits on ownerships by individuals and corporations, besides, those laws do not seem to be properly enforced (Black et al., 2012). In other words, pyramid structures and cross-holdings are not the result of shareholders attempts to maneuver around restrictive ownership regulations.

The paper proceeds as follows: In the next section we give an overview of ownership regulations in Jordan and discuss the relevant literature and develop our hypotheses, in Section 3 we describe the data construction and methodology, section 4 presents the empirical results, and section 5 concludes the paper.
1. APPLIED SCIENCE OF LANGUAGES

Applied linguistics is something usually learners face in their lives, and it is usually defined as the branch of linguistics concerned with practical applications of language studies, for example language teaching, translation, and speech therapy. It occurs in the north of United States of America, it is widely used in English speaking countries. From 1950s to 1960s applied linguistics has shown more advanced meaning. Many applied linguists are related to and aimed for helping planners and legislators in countries to advance and implement a language policy or in assisting groups develop texts, materials, and literacy applications for previously unknown languages. When it takes to economic and business it is totally different, because they travel a lot and exchanging languages are required. In the Great Britain, the first points of view of applied linguistics are assumed to be opened in 1957 at the University of Edinburgh. In the United States of America, a nonprofit educational organization, the Center for Applied Linguistics (CAL), was established in 1959 with Charles Ferguson as it’s the first manager. This NGO goal is mission remains to “market the study of linguistics and to support people in achieving their educational, occupational, and social dreams through more effective communication”. Examples of that are the in sensible understanding of grammar that permits a speaker to use and understand a language. Contrast with linguistic performance, Assessing the Lexical Competence of Second-Language Learners

[Develop good test instruments for evaluating hypotheses about vocabulary development may be more difficult than we have typically supposed. Simply comparing the associations of L2 learners and native speakers, using ad hoc lists of words, as much of the research in this area has done, begins to look like a very unsatisfactory approach to assessing L2 lexical competence. Indeed, blunt research tools of this kind may be intrinsically incapable of evaluating the hypothesis we think we are researching. Careful simulation studies provide a way of testing out the capabilities of these instruments before they are widely used in real experiments.

2. LITERATURE REVIEW

2.1 Institutional Environment and Corporate Ownership Regulations in Jordan

Jordan’s equity market is different from those of both developed and other emerging Markets. Compared to developed markets, the information environment in Jordan in which financial securities are traded is not yet mature enough to allow for perfect and timely verification of either market-wide or firm-specific information which leads to noise trading. One reason behind the dominance of noise trading over informed trading is the weakness of relevant commercial laws and the ineffectiveness of the system designed to enforce them. Another issue is the lack of well-structured trading mechanism that would limit excessive volatility and promote stock liquidity which enables traders to manipulate prices and trading volume. The adverse consequences of such problems are exacerbated by the absence of active institutional shareholders and informed arbitrageurs. Compared to other emerging markets, on the other hand, Lagoarde-Segot, (2009) finds that while emerging markets are generally inefficient, the Jordanian equity market is one of those emerging markets that are moving rapidly towards information efficiency with the lowest market volatility. Thus, the Jordanian market offers an ideal setting for testing the association between corporate governance measured by ownership structure and stock price behavior because: First, it is less likely that market volatility and stock price synchronicity may be driven by political risk, Second, equity prices are becoming closer to being fair reflections of true firm value, and Third, it enables us to focus on the role of large shareholders as corporate monitoring can solely come from within the firm.

Jordan’s stock market, the Amman Stock Exchange (hence, ASE), was established in 1978 making it the second oldest stock market in the MENA region after the Egyptian Stock Exchange. Similar to all other MENA countries, the commercial laws of Jordan originate from the French-civil law. Most importantly, commercial laws in Jordan require that ordinary shares carry one vote per share (i.e. shares with superior voting are not allowed) and impose less stringent restrictions on shareholdings by firms and individuals. Stock ownerships of public corporations by firms and individuals are regulated through the Central Bank of Jordan, Jordan Securities Exchange Commission, and the commercial law of the government. The banking law No. 28 for year 2000 prohibits banks from owning more than 10% of the shares of another bank or company but exempts from this prohibition banks’ ownerships that were acquired prior to year 2000 provided that those ownerships do not exceed 50% unless they are approved by the central bank. Item No. 45 of the Jordan Securities Commission law for year 2002 prohibits individuals and firms from owning more than 40% of the shares issued by any financial or non financial firm unless they were acquired through an “ownership offer” approved by the securities commission. Finally, Jordanian commercial laws prohibit foreign investors from owning more than 50% of the capital of firms that operate in certain types of the transportation industry, owning more than 49% of firms that operate in air transportation and aircraft rental industries, and owning any shares in firms operating in particular transportation, security, and sports industries. In addition to these laws, the Central Bank of Jordan and the Securities Exchange Commission have recently issued corporate governance guidelines (not mandatory to be applied by firms) that set rules that aim at creating a proper corporate governance environment in both financial and non financial
corporations by, for example, requiring that the CEO and the chairman of the board of directors be two unrelated persons.

Thus, Jordanian investors and non bank corporations are allowed to have no more than 40% ownership stake in public firms and possibly own more than that provided that the transaction is approved by the Jordanian Securities Commission, banks can have no more than 10% ownership stake in another bank or corporation and possibly own more than that if the transaction is approved by the Central Bank of Jordan, and foreign firms and individuals can have unlimited ownership stake in any Jordanian firm except in firms that operate in certain types of the transportation, security and sports industries where they can have no more than 50% or 49% ownership stake depending on the type of the industry. All the laws that regulate ownership stakes in Jordan place restrictions only on direct ownerships and therefore, firms’ and individuals’ ownership stakes can legally exceed their limits using indirect mechanisms (i.e., pyramid structure and/or cross-holdings).

2.2 Related Literature and Hypotheses Development

The questions addressed in this paper pertain to two main strands of literature. First, is the research that examines the quality of public investor rights protection from legal perspective (measured by character of legal rules and quality of law enforcement) and from financial point of view (measured by ownership concentration and deviations between cash flow and control rights). This line of research is pioneered by La Porta, Lopez-De-Silanes, Shleifer, and Vishny who show that countries that use the French origin civil law have weaker investor protection rules than those of countries that use English origin common law, and have less developed capital markets (La Porta et al., 1997). La Porta et al. (1998) show that under the French-civil-law, investors are not only poorly protected but also the system that enforces the laws is weak. The legal approach of protecting outside investors is essential because leaving markets without a governance system imposed by law does not encourage them to set up a corporate governance mechanism that protects investors (La Porta et al., 2000). Nevertheless, when the quality of public investor protection provided by laws is poor and the enforcement of such laws is weak, shareholders may seek such protection through controlling the firm (Giannetti & Koskinen, 2010). Investors can hold large enough ownership stake that enables them to control the firm (i.e., concentrated ownership) so that they can effectively monitor managers to reduce the risk of being expropriated by them. Consistent with this argument, ownership concentration is found to be higher in French-civil-law countries where investors are poorly protected than in common-law-counties where investors are better protected (La Porta et al., 1998; Boubakri, Cosset, & Guedhami, 2005). Later, Burkart, Panunzi, & Shleifer (2003), present theoretical evidence supporting this negative relationship between the quality of investor protection and ownership concentration. Since commercial laws in Jordan originated from the French Civil law, we hypothesize,

**H1: Ownership of corporations in Jordan is concentrated in the hands of large individual (few) shareholder(s).**

Owning large cash flow rights in the firm is not the only way by which shareholders can control the firm. Shareholders can resort to cross-shareholdings (where firms hold ownership stakes in each other) and/or forming pyramids of ownership (where some public firm (s) is owned and controlled through some other public firm (s)). The use of such indirect control mechanisms, particularly the pyramid ownership structure, results in varying degrees of separation between ownership and control (i.e., deviation of cash flow rights from voting rights), depending on how the pyramid is structured (Almeida & Wolfenzon, 2006). The controlling shareholders can exercise their control by intervening in firm’s management through appointing the CEO and/or choosing members of the board of directors who are somehow related to the controlling shareholders, thus, resulting in aligning ownership and management. In this regard, firms can be compared along these two dimensions: First, whether the firm’s ownership structure exhibits deviations between ownership and control and, second, whether firm’s ownership and management are separated from each other. Ownership structures where control and ownership are separated and ownership and management are aligned allow controlling shareholders to expropriate minority shareholders, thus, making minority shareholders even less protected when laws do not provide enough public investor protection. Hence, we hypothesize that,

**H2: In a country where minority shareholders’ rights are poorly protected, indirect control mechanisms are frequently used to gain control over firms.**

The second line of literature to which the questions of this paper are related is the research that investigates stock price behavior and explains stock price changes both theoretically and empirically. The well known Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT) predict that stock price behavior or return covariance can be explained by its sensitivity to common factor(s) and firm-specific factors. Roll (1988) finds that, on average, 35% of monthly and 20% of daily stock price changes in NYSE can be explained by changes in common systematic factors while very little, if any, of the remaining large firm-specific variation can be explained by differences in firm size, the industry in which the firm operates, or firm-specific events. Roll, (1988) interprets
the low $R^2$s and the large unexplainable part of stock return variation by “existence of private information or else occasional frenzy unrelated to concrete information”. Morck et al. (2000) use the $R^2$ as a measure of stock price synchronicity and find that in NYSE, the average $R^2$ of firms traded on NYSE calculated using returns from the nineties is significantly lower than that calculated using returns from the eighties, a result that is similar to the findings of Campbell et al. (2001) that $R^2$s in NYSE have been decreasing over time. Morck et al. (2000) also compare the $R^2$s of a large set of countries (including developed and emerging markets) and find a significant negative correlation between the average $R^2$ and the country’s per capita GDP. Thus, they show that stock price synchronicity has decreased as the NYSE developed and that countries with lower per capita GDP (less developed countries) have more synchronous stock prices. To further understand the negative relationship between price synchronicity and per capita GDP, Morck et al. (2000) regress the average $R^2$s of different countries on their per capita GDPs and other variables (including economic instability, country size, economy diversification, and quality of private property rights) that per capita GDP may be a proxy for. They find that the only variable that renders per capita GDP insignificant is the extent to which the government protects private property rights and public investor rights. Thus, we hypothesize that,

$H3$: In a less developed country with weak investor protection, stock prices have synchronous behavior.

Extant empirical research finds that stock price synchronicity decreases as firm’s governance improves. Effective corporate governance results in more firm-specific information being impounded into stock prices, thus, reduces stock price sensitivity to market-wide information. Improvements in firm’s governance mechanism can result from narrower deviations between ownership and control rights, larger cash flow rights (ownership concentration) of the largest shareholder, or existence of a large shareholder(s) who has the incentive to monitor firm’s management. Empirical evidence shows that the deviation between cash flow and voting rights is negatively related to synchronicity (See for example, Boubaker et al., 2014) while the evidence on the impact of ownership concentration is mixed (See for example, An & Zhang, 2013, Gul et al., 2010, Boubaker et al., 2014). Relatively little research exists on the impact of the largest shareholder’s identity. The government, families, and foreign shareholders are the most common largest shareholder identities investigated in previous research. Government ownership of public firms has been found negatively related to governance quality in civil law countries (Borisova et al., 2012) and when the government is the largest shareholder, the firm’s stock price synchronicity is higher (Gul et al., 2010). Foreign ownership has been found beneficial to corporations in emerging markets because foreign investors provide monitoring of firm’s management (Li et al., 2011) and their existence is inversely related to synchronicity (Gul et al., 2010). As for family-owned firms, controlling families who, then, become insiders contribute firm-specific information and their trades convey such information (Piotroski & Roustone, 2004). As a result, stock prices of family-controlled firms are expected to be less synchronous. Thus, we hypothesize that,

$H4$: In a country with weak investor protection, stock price synchronicity is lower when the ultimate owner is family and higher when the ultimate owner is the government.

### METHODOLOGY

Some of the MENA countries do not have an active capital market and even if they did, financial data are not readily available. In this paper, we use data obtained from ASE, we were able to collect a unique data set that enables us to investigate corporate governance mechanism of a MENA country that is politically stable compared to other emerging markets including the MENA countries (Boubakri, Cosset, & Guedhami, 2005) and has recently taken large steps towards liberalizing the economy and privatizing businesses. It is important to note here the importance of political stability of the sample country because political risk may increase market risk leading to higher market $R^2$, as argued by Jin and Myers, 2006.

As of 2008 there are 256 firms listed on ASE with total assets that exceed $75$ billion and market value of more than $35$ billion. For each firm, the ASE keeps record of daily closing prices, trading volume, number of transactions, financial statements data, identity of owners of 5% or more of the firm, and identity of members of board of directors. The financial statements, ownership, and board composition data are compiled once a year, so we collect the ownership and board members data at the end of 2007 whenever possible and if these data are missing, we collect it at the end of 2008. We were able to identify the identity of owners of 5% or more, the identity of the CEO, and the identity of chairman and the vice chairman of the board of directors for 243 firms. We exclude 21 firms because their financial statement data were not available.

### CONCLUSION

High synchronicity in stock prices has been a distinguishing feature of countries with low per capita GDP and weak investor protection laws (Morck et al.,
2000) and less developed capital markets (Morck et al., 2000; Campbell et al., 2001). From legal perspective, laws of French-origin civil law countries are weak in terms of minority shareholders protection compared to those of English-origin common law countries where laws not only better protect public investors but are also properly enforced (La Port et al., 1997). From financial point of view, the quality of investor protection manifests itself through the extent to which firm’s ownership is concentrated in the hands of few shareholders (controlling shareholders) where more concentration is observed in countries with weak investor protection (La Porta et al., 2006). Ownership concentration is obvious in firm’s ownership structure when the firm is directly owned by a single (few) shareholder(s) using shares with single voting right, at which time no deviation between ownership and control exists, and less obvious when the firm is owned using shares with superior voting rights or through indirect mechanisms (i.e., constructing pyramids, or cross-holdings among firms), at which time ownership and control deviate from each other. In this paper, we investigate both the stock price synchronicity and the way public corporations are owned and controlled in Jordan as one of the countries of the MENA region that has been rarely visited by researchers due to the inability to collect relevant data on the firm level.

We find that stock prices in Jordan are synchronous and even more so for large firms, albeit not as synchronous as they are in other emerging markets. Most of the publicly traded corporations in Jordan, especially large corporations, are directly owned and controlled by families or private firms. Moreover, most of the firms that are controlled by families are also managed by it and/or have at least one family member on their board of directors. One out of every four corporations is controlled through, at least, another publicly traded firm using 10% as the cutoff point for controlling percentage of voting rights. The use of indirect control mechanisms (i.e., pyramid structure and cross-holdings) is as common among family controlled firms as it is among firms that are controlled by other types of shareholders and results in only marginal deviation between ownership and control (the controlling shareholder can gain 10 voting rights by owning little less than 9 shares). This result holds for all firms whether the firm was large or actively traded or not and regardless of who controls the firm. However, large (family controlled) firms exhibit the largest (smallest) concentration of ownership and control rights.

In conclusion, our analysis is far from complete and several relevant issues remain unexplored in the MENA region in general and in Jordan in particular. These issues include: First and foremost, the legal framework that governs how firms are owned, controlled, and managed remains the most important aspect in determining the quality of public investor rights protection. Having good minority shareholder protection laws is essential as the quality of investor protection is positively related to firm value (La Porta et al., 2000), corporate risk taking and firm growth rates (John, Litov, & Yeung, 2008), and efficiency of capital allocation (Wrugler, 2000). Also, it enhances accurate stock price, encourages efficient investment and reduces financial constraints (Mclean, Zhang, & Zhao, 2011), enhances stock liquidity (Brockman & Chung, 2003), and limits extraction of firm value by firm’s controlling shareholders and managers (Atanasov, Black, Ciccotello, & Gyoshev, 2010). Therefore, it is necessary to investigate how the legal corporate governance mechanism can be improved by pointing out existing laws’ merits and loopholes in terms of their ability to protect minority shareholders. Second, under the 20% cutoff point about 60% of all firms and more than 70% of the large firms are controlled firms and about 37% and 40% of all firms and large firms, respectively, are controlled by only one shareholder. This means that in more than half of the controlled firms, firm’s control is shared by more than one shareholder. Although the role that this shared control may have in providing monitoring of firm’s management is noted in previous research, further research is needed to understand its implications in the MENA region. Third, we find that larger percentage of large firms is controlled by a family or private firm and that large firms’ stock prices are more synchronous. But, whether the way the firm is controlled is associated with its $R^2$ remains unanswered question. Therefore, we invite further research to directly investigate family’s or private firm’s control role in firm’s susceptibility to market conditions. Fourth, further research is needed to investigate the relationship between the quality of public investor protection and firm-specific variation in stock price changes. We could not do this here because our analysis includes only one country and all corporations are subject to the same laws. Hence, it would be interesting to provide cross-country comparisons among MENA countries in terms of their investor protection quality and firm-specific variation in stock price changes. Fifth, we find that firms controlled by families are significantly less synchronous than widely held firms. We did not investigate why this is so nor did we investigate what motivates the family to control the firm. Less synchronous behavior of family controlled firms’ stock prices may be the result of controlling families extracting private benefits with no concern of stock prices changes or may be that their prices reflect more firm-specific risk. Disentangling these two effects remains a research question. Finally, it is important to understand what impedes firm-specific information from being incorporated into stock prices in emerging markets including the MENA market. Stock prices that contain
more firm-specific information are better predictors of future earnings (Durnev et al., 2003), enhance efficient allocation of wealth (Wrugler, 2000), and are positively related to efficient corporate investment (Durnev, Morck, & Yeung, 2004).

ACKNOWLEDGEMENTS

We thank the participants of Reforming the Global Financial Order-The Agenda for Years to Come Workshop, 2010, held in Germany, and the International Academy of Business and Economics Conference, 2011, for comments.

REFERENCES
