**The University of Hull**

# The Impact of Corporate Governance and Ownership Structure on Performance and Financial Decisions of Firms: Evidence from Jordan

being a Thesis submitted for the Degree of Doctor of Philosophy
in the University of Hull

by

Khaldoun Abd Allh Mahmoud Alwshah

Master in Research in Business and Management (MRes)
The University of Hull – UK

Master of Business Administration (MBA)/Finance
The University of Jordan – Jordan

Department of Accounting and Finance
Hull Business School

July, 2009

**Contents**

**List of Tables**

**List of Figures**

# Acknowledgements

I wish to express my sincere gratitude to my supervisor, Professor Aydin Ozkan, for his dedication in the supervision of my thesis, his integrity, vast knowledge on most fields of finance, enthusiasm for research, valuable comments, guidance and encouragement during the preparation of this thesis. From the outset, his confidence in and support for me have been most important. Without his help and the advice he gave me as I encountered problems along the way, this thesis would never have been completed.

I also wish to express my gratitude to Dr. Liang Han, for his sincere help in one way or another, in various stages of my PhD study at HUBS. I have indeed learnt a lot from him and his advice will surely be of great help to me in my academic career.

I am indebted also to the members of the Department of Finance as well as Accounting, especially Professor Mickael Talyes, Professor Peijie Wang, Dr. Yilmaz Guney, and others for their encouragement during my research journey. I appreciate the friendship that I have established with fellow PhD students and the wonderful administrative support I have received from Andrea Delaine and Rebecca Conyers.

I am also indebted to my employer, The Central Bank of Jordan, for providing financial support and continuous encouragement during my study.

I would like to thank all those who have helped me in collecting the data needed for this study. I would like to thank the members of the Jordan Securities Commission, the Amman Stock Exchange, the Securities Depository Centre, the Companies Control Department. Special thanks to Dr. Mahmoud Al-Ababneh, General Controller of Companies at the Ministry of Industry and Trade, Sundos Jamayed, Research & International Relations Department at the Amman Stock Exchange and Yazan Al-Smady, Research Department at the Jordan Securities Commission.

I would like to thank my beloved parents, brothers and sisters, for their ever-loving support, prayers and understanding during the years of my study.

Last but not least, I wish to express my deepest gratitude to my wife, Khadijeh, and our sons, Refaat and Khaled, for their unending patience over the research period.

# Abstract

The objective of this thesis is to investigate the role of corporate governance and agency conflicts in determining corporate performance, foreign investment and corporate financial decisions. For this purpose, it uses firm-level corporate governance and ownership data from Jordan. Jordan is an economy in which the prevailing corporate structures and regulatory mechanisms provide a data set that lends itself particularly well to the examination of these issues.

First, we provide a detailed and timely review of ownership and corporate governance structure characteristics for a unique database which we hand-collected from a sample of 519 firm-year observations of financial and non-financial Jordanian listed firms between 2004 and 2006. This work significantly contributes to the existing body of knowledge, by providing a detailed picture of firm-level corporate governance structures in Jordan as one of the Middle East and North African (MENA) countries.

Second, we investigate the relationship between internal corporate governance structure and firm performance. Our analysis reveals that traditional managerial agency explanations (i.e. conflict between managers and shareholders) do not appear to hold in the Jordanian context. Instead, the main agency concern for Jordanian firms seems to be the one between founding families and minority shareholders. Our findings support the view that CEO duality has an adverse effect on firm performance. However, CEO membership on the board and concentrated ownership tend to have a positive effect on company performance. The presence of strong foreign equity ownership in firms enhances their firm performance and complements the relatively weak monitoring by domestic institutional investors.

Third, we investigate the relationship between corporate governance and foreign investment decisions, by focusing on the influence of founding family ownership and control on foreign equity ownership. We document that founding family ownership and founding family control exert a significant influence on foreign investors' decisions. Our findings suggest that foreign investors are less likely to invest in Jordanian firms with higher founding family ownership and control. Institutional investors and board characteristics have a negative effect on foreign ownership. Additionally, we find that

firms with greater growth potential and large firms seem to be more attractive to foreign investors and they avoid firms that pay high dividends.

Fourth, we analyse the potential links between corporate governance and corporate cash holdings. This work significantly contributes to the existing literature on cash holdings by investigating the impact of founding family ownership and large foreign ownership on corporate cash holdings. We find strong evidence that the levels of founding family ownership exert a significant influence on cash holding decisions of Jordanian firms. We document a non-linear relationship between founding family ownership and cash holdings. In addition, we provide evidence that the presence of large foreign investors leads to lower cash holdings. Finally, we detect that corporate cash holding is positively associated with market-to-book value and dividends and negatively associated with cash flow, leverage, size and tangibility.

# Chapter 1

# Introduction

The need for corporate governance arises from the potential conflicts of interest between those who control the firm and those who supply it with external financing. Berle and Means (1932) argued that the separation of ownership from control leads to conflict of interest mainly between dispersed shareholders (owners) and managers (controllers). When there are asymmetric information problems and imperfect contractual relations between managers and shareholders, managers have incentives to pursue their own objectives at the expense of shareholders. For example, managers might adopt sub-optimal financial and investment strategies and spend more on luxury projects and empire building rather than on value maximizing projects. They may also engage in transfer pricing, whereby they sell assets or output from the company they manage at a lower than market price to a company they own. Managers may also engage in activities that make them indispensable, resist takeover and increase their managerial private benefits through consuming perks[1]. The consequences of these divergences are often referred to as agency costs, which are conventionally defined as the costs of structuring, bonding and monitoring an incentive contract between shareholders (principal) and managers (agent).

Recently, a growing body of literature has shifted attention toward a different agency problem, namely the expropriation of small investors by large controlling shareholders, which seems to be of greater concern in many countries (see Shleifer and Vishny 1997; La Porta et al., 1999; Claessens et al., 2000; and Denis and McConnel, 2003 among others). In countries where ownership is concentrated in the hands of large owners, agency conflicts do not solely occur between managers and other investors but also between large/controlling owners and minority shareholders. Although controlling

[1] See Jensen and Meckling (1976), Jensen (1986), Shleifer and Vishny, (1997) and Tirole (2006) for review of how managers may not act in the firm's best interest.

shareholders have an interest in protecting their wealth by making sure that the company is well managed, the presence of large shareholders is also associated with potential costs as they have incentives to extract private benefits from the firm at the expense of all other stakeholders (Shleifer and Vishny, 1997).

There has been a great deal of empirical work providing evidence that corporate financial decisions and firm performance are affected by the presence of agency conflicts between managers and shareholders (see, among others, Jensen, 1986 for debt financing; Gompers et al., 2003 for accounting and stock price performance; Ozkan and Ozkan, 2004 for cash holdings decisions; Hu and Kumar, 2004 for dividend decisions; and Datta et al., 2005 for capital structure decisions). It is suggested that when the interests of managers and shareholders are not aligned, due to the absence of strong corporate governance[1], managers tend to prefer lower than optimal leverage, hold large amounts of cash, pay lower dividends, over-invest and hence exhibit significant underperformance. Accordingly, several elements of firms' board structure (e.g. board size, proportion of non-executive directors on the board, CEO duality), ownership structure (e.g. managerial ownership, ownership concentration, identity of large owners), corporate financial policies (e.g. leverage, dividend, cash holding) have been suggested as potential mechanisms to control for agency problems arising from dispersed ownership as well as concentrated ownership (see Gillan, 2006 for a survey for recent research).

However, despite the substantial evidence on these issues, prior research has mainly focused on developed countries, in particular on the USA and UK, and hence relatively little is known about corporate governance in emerging countries. In an attempt to

[1] Corporate governance is a board term for a variety of corporate controls and accountability mechanisms intended to protect the interest of shareholders.

provide more insights into these issues, we hence choose an emerging economy, namely Jordan, with corporate governance characteristics which are significantly different.

In Jordan and most of the Arab countries, most firms are family firms where the founder and/or family members usually hold important positions in management and on the board of directors. Controlling family owners are involved in management of the organizations, as chairman of the board or board members and often control senior management positions. Moreover, it is reported that[1], due to family influence, the appointment of managers and directors may be influenced by kinship or friendship, rather than based solely on ability or education. Therefore, one common characteristic here is the alignment between management and controllers/large shareholders[2]. However, it does not mean that these firms are free of agency-costs. The agency problem that seems to prevail is not simply between managers/controllers and outside investors. Rather, the major conflict of interest is between founding families as controlling shareholders and other shareholders. Within the agency framework we consider in this study, the *principal* is the minority shareholders and the *agent* is the founding family ownership, who are normally expected to act in the best interests of all shareholders. Therefore, it is important to consider the consequences/implications of this type of agency problem on firm performance and consequently corporate financial decisions and foreign investment decisions. This is the main objective of this thesis.

The Jordanian setting is a particularly interesting environment in which to conduct our study for a number of reasons. First, given the prevalence of founding family ownership and the presence of founding family members in Jordanian firms, the sample lends itself

[1] See for example: World Bank, Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment (Jordan) (June, 2004) and Corporate Governance in the Morocco, Egypt, Lebanon and Jordan countries of the MENA region: MENA Regional Corporate Governance Working Group (2003).

[2] We use large shareholders and controllers interchangeably throughout the thesis.

well to examining hypothesized relations between founding family ownership and corporate performance, foreign ownership and the corporate financial decisions of Jordanian firms. Second, the Jordanian sample provides a natural laboratory for testing the effects of foreign equity investors on corporate financial decisions and performance. The market liberalization of the Amman Stock Exchange opened the gateway to foreign investment in Jordanian listed firms. Jordanian data are unique because of the high involvement of foreign investors in the Jordanian stock market. In fact, foreign investment in the capital market is one of the highest in the world (OECD, 2006)[1]. Third, banks and other institutional investors have significant business relationships with companies, since most banks are family-controlled[2], individually or through family related group companies. Fourth, there is a great deal of evidence that Jordanian boards of directors are generally characterized as corporate devices that provide a weak disciplinary function, mainly due to lack of independence from controlling shareholders, an absence of rules governing the composition of the board of directors, inadequate guidelines governing the balance of power between executive and non-executive directors, and the lack of awareness of the concept of independent directors. Fifth, following the Asian financial crisis of 1997-1998, financial sector regulation has been strengthened through the Company Law 1997, Jordan Securities Law; 2002, Insurance Law 1999, and the Banking Law 2000. Despite these reforms, however, relatively few works examine in detail the evolution of the ownership and corporate governance structures in Jordan (see e.g., Omet, 2005 and Omar, 2007).

[1] MENA-OECD Investment Programme National Investment Reform Agenda Workshop for the Hashemite Kingdom of Jordan, Monday 19th June, 2006. Available on line: http://www.oecd.org/dataoecd/4/29/38148879.pdf

[2] For example Jordan Bank owned by the Al Kori family, Union Bank owned by the Salfiti family, Jordan Arab Investment Bank by the Al-Qadi family, Jordan National Bank by the Al-Muasher family, and Jordan Commercial Bank by the Al-Sayegh family.

There are five important aspects of our study, which differentiate it from previous research. First of all, distinct from most previous literature, our study addresses an agency problem, the agency problem between managers/controllers (i.e. founding families) and outside investors, which has not been extensively researched in prior research. By doing so, we will extend earlier studies that mainly focused only on the classic agency problem between dispersed shareholders and managers in countries where corporations have a widely dispersed ownership and also between managers and controlling shareholders on the one side and controlling shareholders and minority shareholders on the other, in countries where ownership is concentrated.

Second, we attempt to establish a direct link between founding family ownership and control and corporate governance. In doing so, we investigate whether the presence of founding family ownership leads to better corporate performance. We also examine if the presence of founding family ownership on the board leads to a lower foreign ownership in Jordanian firms. In addition, we are the first to examine the effect of founding family ownership and large foreign investors on corporate cash holdings.

Third, our study contributes towards filling a gap identified in relation to corporate governance in the Arab region. Recent surveys and reports of corporate governance literature in the Arab World (Saidi, 2004; 2005; and Najib, 2007) has suggested shortcomings in the implementation of the Organization for Economic Co-operation and Development (OECD) principles and standards, compared to industrialized countries. Any attempts to initiate corporate governance action plans and corporate sector reforms in these countries, require information and detailed assessment in order to set priorities and inform government. In this respect, there is need for a detailed analysis of corporate governance in the Arab region (Omet, 2005). Whilst this thesis focuses on Jordan, the

analysis will be valuable to other Arab economies in the Middle East, all of which share a common heritage, culture, language and religion and where there are strong similarities in regulatory and institutional environments and in the corporate ownership structure of firms.

Fourth, to conduct our empirical investigation, we employ pooled-OLS and cross-sectional methodologies that help us to control for the endogeneity problem, which can arise in this context for several reasons (e.g. reverse causality, unobserved heterogeneity). In particular, we use pooled-OLS with one year lagged explanatory variables and average cross-sectional regression approaches in an attempt to reduce the potential problem of endogeneity.

Fifth, an important limitation in the existing literature is the limited availability of detailed information on board and ownership structure at the firm level in emerging markets. However, a significant improvement in disclosure in Jordan after important changes in economic and accounting regulations (Omar, 2007) makes it possible to utilize Jordanian companies' firm-level data to conduct our analysis. This is a significant advantage since, given the arguments in the literature that ownership structure can be both a potential cause of agency conflicts and a solution to them (see, Ang et. al. 2000; and Morck et al., 1988 amongst others), there is further need for detailed knowledge of ownership characteristics at the firm level. Taking this motivation as a starting point, in the initial phase of our thesis we hand-collect board and ownership structure data for 519 firm-year observations of financial and non-financial Jordanian listed firms for the years 2004-2006, in order to present this unique database and to provide, through extensive descriptive statistics, a timely review of

ownership and corporate governance structure among publicly listed companies, both financial and non-financial, in Jordan.

Chapter 2 presents a detailed picture of firm-level corporate governance structure in Jordan by focusing on ownership and board structure among publicly listed companies. Although there are several previous studies comparing ownership structure and board composition across countries (see among others, La Porta et al., 1999; Claessens et al., 2002; Hussain and Mallin, 2002; Black et al., 2006; Choi et al., 2007), these studies are confined to summary statistics for overall governance and particular governance measures. Therefore, relatively little information is available concerning the governance choices firms make in practice. Chapter 2 aims to fill this gap in Jordan. Specifically, our analysis will focus on two important questions. First, what are the main corporate governance characteristics in Jordan, as one of the Middle East and North African (MENA)[1] countries? Second, how does governance vary across firms and across sectors?

Chapter 2 presents three important features concerning Jordanian companies. First, most firms, both financial and non-financial, are family firms. The boards and management are frequently dominated by the founding families. Founding family members are involved in the management of the institution, as chairman of the board, board members or senior managers. In particular, our results show that founder chairmen, founder family board members and founder family CEO members all have substantial presence in the management of Jordanian companies and this trend increases over time. The prevalence of founder family control of important positions in management and on the

[1] The MENA region covers the Islamic State of Afghanistan, Algeria, Bahrain, Djibouti, Egypt, the Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, the Syrian Arab Republic, Tunisia, the United Arab Emirates, West Bank and Gaza, and the Republic of Yemen.

board of directors reflects a lack of separation between ownership and control, which may be a source of agency conflict between families and other shareholders in the company, especially minority shareholders. In addition, board size is relatively constant over time, with an average of nine directors, a large proportion of who are non-executives. Furthermore, role duality, whereby the chairman of the board is also the CEO, is still common, although decreasing slightly over time.

Secondly, another important feature of Jordanian companies, despite the fact that CEOs' salaries and compensations are modest, is that in cases of duality, the CEO's mean salary and compensation is above the total sample mean by about 34 per cent and 43 per cent respectively. Similarly, founder and family CEO salary and compensation are significantly higher than average. These findings of high compensation packages for founder, family and dual-role CEOs may reflect use of power in their own interest.

Thirdly, we find that Jordanian firms are characterised by the presence of strong, large shareholders, the three main categories being family shareholders; local financial institutions; and foreign shareholders. We notice that family owners have an important involvement in all sectors, especially as controlling owners may exercise their power by influencing firm policies, decision-making and exercising their voting rights to control managers' actions, in their own interests. Local institutional owners, too, have sufficiently large holdings in Jordanian firms to be in a position to influence company performance by contributing to, monitoring or ratifying the board's decisions, and focusing on projects that add value for shareholders. In addition, for the most part, the evidence suggests that the role of foreign investors in the Jordanian market is highly significant. Foreign board directors constitute a relatively increasing proportion of the

board in every sector, and a significant proportion of shares are owned by large foreign blockholders.

Chapter 3 investigates the relationship between internal corporate governance and corporate performance. While there is a large body of finance and law literature that explores the interactions between corporate governance and firm performance in a number of countries, by using multi-country studies or country case studies[1], these studies have focused largely on either the Anglo-American context or the Asian experience. Moreover, confusion still exists as to whether specific governance mechanisms can adequately protect investors' wealth. The inconsistency of findings as to the governance role of several firm specific characteristics is evident in a number of survey papers on corporate governance (see, for example, Shleifer and Vishny, 1997; Denis, 2001; Denis and McConnel, 2003; and Gillan, 2006). Furthermore, prior studies also ignore important aspects of the board structure, such as CEO's board membership, which could have important effects on the effectiveness of governance.

Chapter 3 aims to address this gap by providing a detailed investigation of the impact of ownership and board structure on corporate performance. The main issues we address in this chapter are as follows. First, we consider whether the classical agency theory of conflict between managers and shareholders holds for Jordanian firms. Second, we examine the impact of various corporate governance mechanisms (board size, composition, duality, CEO board membership, ownership concentration, large domestic institutional investors and large foreign ownership) on firm performance in Jordan. Furthermore, we suggest several policy implications from the findings of this study.

[1] See Shleifer and Vishny 1997; La Porta et al., 1999; Claessens et al., 2000; Faccio and Lang, 2002; Lemmon and Lins, 2003; Klapper and Love, 2004; Florackis, 2005; Haniffa and Hudaib, 2006; Ghosh, 2006; and Black et al., 2006 among others.

The results in Chapter 3 reveal a negative relationship between founding family ownership and corporate performance, suggesting that the main agency concern for Jordanian firms seems to be the one between founding family and other shareholders. This finding is robust and does not change significantly with either board attributes or the presence of other large shareholders. The traditional managerial agency explanations do not seem to hold. Instead, another agency issue, conflict between founding family shareholders and other shareholders, seems to hold in the Jordanian context.

Our analysis fails to detect any significant impact of board size or non-executive directors on firm performance. With regard to the role of the CEOs, the findings support the view that CEO duality has an adverse effect on firm performance. However, CEO membership in the board tends to have a positive effect on company performance. The result suggests that if the CEO is a board member, he or she may facilitate and participate in the decision making process rather than dominate the decisions of the board, as may be the case when he/she is CEO and COB together.

Ownership concentration is shown to be significant and positively related to the performance of Jordanian firms. The inverse relationship found between performance and domestic institutional investors, however, suggests that domestic institutional investors are passive in disciplining management. However, the empirical results show that foreign investors have a significant and positive effect on firm performance. This implies that the monitoring function of foreign investors enhances firm performance and complements the relatively weak monitoring by domestic institutional investors. Further more, we find that corporate performance is positively associated with

dividends; and negatively associated with size. Finally, leverage has no significant impact on performance.

In Chapter 4, we empirically investigate the relationship between corporate governance and other firm characteristics and foreign investment decisions. However, the existing studies have mainly looked at the stock preferences of U.S. investors, or those of foreign investors in single high-income countries with uniformly high investor protection laws and accounting standards. In the case of the latter, none of the previous studies have looked at the relationship between corporate governance and foreign ownership in different regional areas such as the Arab and MENA countries. Furthermore, none of the empirical papers on foreign ownership, that we are aware of, has attempted to combine founding-family ownership and control (i.e. founding family involvement in the board of directors) in investigating the impact on foreign ownership in the emerging markets setting. Finally, very few studies have investigated the impact of board structure on foreign ownership; an exception is Mangena and Tauringana (2007).

In this chapter, we aim to address these issues by examining whether differences in foreign ownership across listed companies in the Jordanian market are related to company differences in corporate governance mechanisms and other firm characteristics. Specifically, our analysis focuses on two important questions. First, how do founding family ownership and control affect the investment decisions of foreign investors in the Jordanian market? Second, how do other potential corporate governance mechanisms (i.e. institutional investors and board characteristics) and firm-specific characteristics (i.e. market-to-book-ratio, size, leverage and dividends) affect investment foreign investors in the Jordanian market?

Our results reveal that founding family ownership and founding family control exerts a significant influence on foreign investors' decisions. More specifically, our finding suggests foreign ownership is likely to be lower in firms in which founding family ownership is high and in family controlled firms (i.e. when founding family members are on the board of directors). The results also suggest that firms with large domestic institutional ownership tend to have lower foreign holdings. Board characteristics (i.e. board size and the proportion of non-executive directors) also have a negative effect on foreign investors, although the impact is significant only for board size. This result suggests that foreign investors perceive large boards as likely to encounter problems of coordination, control, and decision-making. Regarding firm-specific characteristics, we find that firms with higher growth potential (high market-to-book equity ratios) and large firms seem to be more attractive to foreign investors and they avoid firms that pay high dividends. Finally, leverage is not related to the level of foreign investment.

Following the lead of a few influential papers written recently (in particular Opler et al., 1999; Dittmar et al., 2003; Ozkan and Ozkan, 2004; and Guney et al., 2007) Chapter 5 attempts to establish a link between corporate governance and one of the most important corporate governance policy decisions, namely cash holdings. However, there are several important features of our analysis, which, we believe, extend the literature on empirical determinants of cash holdings. Our first major contribution in this chapter is concerned with the empirical investigation of the impact of founding family ownership on corporate cash holdings. Prior researches provide support for the significant influence of managerial ownership on cash holdings decisions (see, e.g., Opler et al., 1999 and Ozkan and Ozkan, 2004). However, to the best of our knowledge, this study is the first to investigate the relationship between founding family equity ownership and cash holdings. Second, to our knowledge, this study is the first to test the

effect of large foreign investors, which is an issue that is neglected in the existing literature examining the determinants of corporate cash holdings. Third, our findings enhance our understanding of corporate cash holdings of firms operating in an emerging market. To our knowledge, this is the first attempt to analyse corporate cash holdings in an emerging equity market, namely Jordan, one of the Middle East and North African (MENA) countries.

The empirical results in Chapter 5 provide strong evidence that the levels of founding family ownership exert a significant influence on cash holdings decisions of Jordanian firms. These results provide support for a non-linear relationship between founding family ownership and cash holdings. More specifically, the estimated coefficients of founding family ownership and founding family ownership squared suggest that founding families move from alignment to entrenchment as their shareholdings in the firm increase. In addition, we provide evidence that the presence of large foreign investors leads to lower cash holdings. Furthermore, our result provides evidence that local institutional investors do not have any significant impact on corporate cash holdings. Jordanian company board characteristics do not have any important impact on corporate cash holdings. Finally, the results suggest that corporate cash holding is positively associated with market-to-book value and dividends; and negatively associated with cash flow, leverage, size and tangibility.

Chapter 6 presents the overall conclusion of this work, and draws together the various themes analysed in this study. In particular, we draw attention to the contributions of the research to understanding of the types and extent of agency conflicts inside the firm, and the impact of these conflicts on company value, foreign ownership and key corporate decisions, such as cash holdings.

# Chapter 2

# The Evolution of Ownership and Governance Structures in the Jordanian Market

## 2.1. Introduction

The objective of this chapter is to provide a detailed picture of firm-level corporate governance structure in an emerging market by focusing on ownership and board structure among publicly listed companies in Jordan. Several previous studies compare ownership structure and board composition across countries (e.g. Roe, 1993; La Porta et al., 1999; Claessens et al., 2000; Dahya et al., 2008). There are also some individual emerging country studies, namely, Hussain and Mallin, (2002), Bahrain; Elsayed, (2007), Egypt; Ghosh (2006), India; Haniffa and Hudaib (2006), Malaysia; Black et al. (2006), Russia, and Choi et al. (2007), Korea, but these typically are confined to summary statistics for overall governance and particular governance measures. Therefore, relatively little information is available concerning the governance choices firms make in practice. In other words, it is not clear what form firm-level governance actually takes in emerging markets[1].

This study is an attempt to fill this gap in an emerging market, specifically, Jordan, as one of the Middle East and North African (MENA) countries. To the best knowledge of the researcher, this study is the first attempt to study in detail the evolution of the ownership and corporate governance structure among publicly listed companies, both financial and non-financial, in Jordan.

An important shortcoming, especially in emerging markets, is limited availability of detailed information on board and ownership structure at the firm level. Taking this motivation as a starting point, in the initial phase of our thesis we hand-collected board and ownership structure data for 519 firm-year observations of financial and non-

[1] There are, to our knowledge, only two studies that examine in detail firm-level governance in emerging markets. These are: a survey of 116 Brazilian firms, which was conducted in 2005 (Black et al, 2008); and one of 370 Indian firms, conducted in the first half of 2006 (Balasubramanian et al., 2008).

financial Jordanian listed firms for the years 2004-2006. The purpose of this chapter is therefore, to present this unique database and to provide, through extensive descriptive statistics, a timely review of ownership and corporate governance structure among publicly listed companies, both financial and non-financial, in Jordan. Specifically, our analysis will focus on two important questions. First, what are the main corporate governance characteristics in Jordan, as one of the Middle East and North African (MENA) countries? Second, how does governance vary across firms and across sectors?

Our detailed analysis of Jordan provides three important features concerning Jordanian companies. First, most firms, both financial and non-financial, are family firms. The boards and management are frequently dominated by the founding families. Founding family members are involved in the management of the institution, as chairman of the board, board members or senior managers. In particular, our results show that founder chairmen, founder family board members and founder family CEO members all have substantial presence in the management of the Jordanian companies and this trend increases over time. The prevalence of founder family control of important positions in management and on the board of directors reflects a lack of separation between ownership and control, which may be a source of agency conflict between families and other shareholders in the company, especially minority shareholders. Furthermore, board size is relatively constant over time, with an average of nine directors, a large proportion of who are non-executives. However, it may be doubted whether this will greatly contribute to independent corporate governance, as these members may owe their positions to a controlling owner. Additionally, role duality, whereby the chairman of the board is also the CEO, is still common, although decreasing slightly over time.

Secondly, another important feature of the Jordanian companies, despite the fact that CEOs' salaries and compensations are modest in Jordanian firms, is that when the same person holds the title of CEO and Chairman (duality), the CEO's mean salary and compensation is above the total sample mean by about 34 per cent and 43 per cent respectively. Similarly both founder CEO salary and compensation are above the sample mean by about 9 per cent and 11 per cent, and those of family CEOs by about 13 per cent and 28 per cent, respectively.

Thirdly, our findings show that in Jordan ownership tends to be concentrated. We find that Jordanian firms are characterised by the presence of strong, large shareholders, the three main categories being family shareholders, local financial institutions and foreign shareholders. We notice that family owners have an important involvement in all sectors. Their holdings may create a source of power for them. Families as controlling owners may exercise their power by influencing firm policies, decision-making and exercising their voting rights to control managers' actions, in their own interests. This could be at the expense of overall firm value and the interest of minority shareholders (Fama and Jensen, 1983; Morck et al., 1988; and Shleifer and Vishny, 1997).

Local institutional owners, too, have sufficiently large holdings in Jordanian firms to be in a position to influence company performance by contributing to, monitoring or ratifying the board's decisions, and focusing on projects that add value for shareholders. In addition, the evidence suggests that the role of foreign investors in the Jordanian market is highly significant. Foreign board directors constitute a relatively increasing proportion of the board in every sector, and significant proportions of shares are owned by large foreign block holders. This raises an important question about the role - and

determinants - of foreign ownership in enhancing corporate governance within Jordanian companies.

The remainder of this chapter is structured as follows. Section 2.2 presents the characteristics of the Jordanian corporate governance system. Section 2.3 presents an overview of the Jordanian Capital Market. Section 2.4 explains the data set and variables used in our analysis. Section 2.5 presents the findings discussed in relation to relevant literature. Finally, Section 2.6 concludes the chapter.

## 2.2. Overview of Jordanian Corporate Governance

The Jordanian legal system and its corporate legal framework are derived from French Civil Law. Accordingly, any obligations, responsibilities or rights must be supported by legislation in order to be enforceable. Corporate governance concepts and rules are contained in many Jordanian laws including, among others, The Company Law (1997), The New Securities Law (2002)[1], The Banking Law (2000) and The Insurance Regulatory Act (1999).

The Company Law (CL) 22 of 1997 (most recently amended in 2002) lies at the centre of Jordan's legislative corporate framework, providing the legal framework for locally registered companies, including public shareholding companies. The important aspects of the CL relevant to the issue of corporate governance are related to shareholder rights. Shareholders in Jordan enjoy considerable rights in terms of access to secure methods of ownership registration, ability to transfer shares, right to obtain relevant information on a timely basis, participate and vote in general shareholders' meetings, and sole authority to elect/dismiss board of director members. The CL is regulated and

[1] The Temporary Securities Law NO. (23) for the Year 1997 and its amendments are replaced by this Law.

implemented by the Controller of Companies, a unit of the Ministry of Industry and Trade.

Closely related is The Securities Law (SL) of 2002, which provides the legislative framework for supervision of the activities of the Jordan Securities Commission (JSC), Amman Stock Exchange (ASE), Securities Depository Centre (SDC), and market intermediaries. Part of its mandate is to protect investors, and to ensure fairness, efficiency and transparency. In fact, JSC has made important progress over the last years toward enhancing corporate governance quality. In 2004, the JSC required companies to comply with Directives of Disclosure and Auditing and Accounting Standards, including International Accounting standards (IASs) and Financial Reporting Standards (IFRs)[1]. In addition, every listed company is required to set up an Audit Committee, independent of company management, as a sub committee of the board of directors; at least three members must be non-executives, to comply with the audit committee requirements[2]. JSC is empowered to suspend trading of securities, de-list issuers and to impose fines[3]. Omar (2007) reports a significant improvement in disclosure in Jordan after important changes in the economic and accounting regulations.

The SL of 2002 strengthened the power not only of the JSC but also contributed in enhancing corporate governance practice in Jordan. The ASE operates an automated order-driven Electronic Trading System. Listing requirements are reviewed and updated. The SDC, a non-profit private body, provides deposit and clearing and

[1] Articles 14 and 16 of JSC Directives of Disclosure, Auditing and Accounting Standards of 2004. Similar articles exist in the Banking and Insurance Laws.
[2] Articles 15 of JSC Directives of Disclosure, Accounting and Auditing Standards of Issuing Companies of 2004. The Banking Law of 2000 (Article 32, 33).
[3] Articles 19 and 22 of SL 76 of 2002.

settlements of securities, transfer of ownership, and registry services for all public shareholding companies[1].

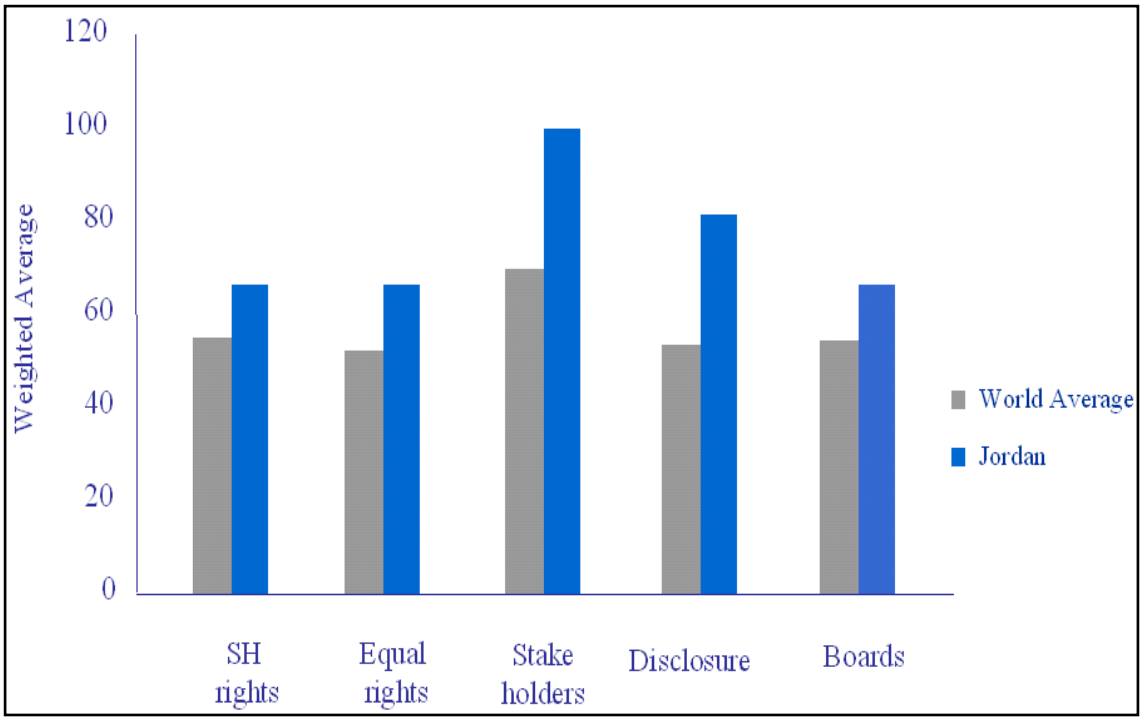
Jordan's 2004 Corporate Governance ROSC (Report on Observance of Standards and Code)[2] provides an assessment of the corporate governance framework in Jordan, benchmarked against the Organization for Economic Co-Operation and Development (OECD) Principles of Corporate Governance (i.e. the rights of the shareholders, equitable treatment of shareholders, the role of stakeholders in corporate governance, timely and accurate disclosure and transparency, and the responsibilities of the board). The report shows (Figure 2.1) that Jordanian compliance compares favourably with the world average.

Jordan generally has a high level of financial development compared to the remaining countries of the Middle-East and the North-African (MENA) region (see Table 2.1). Furthermore, the Jordanian banking sector is described as ‘‘well developed, profitable, and efficient" (Creane et al., 2004). Despite these improvements, however, up to date corporate governance laws or best practices have not been implemented in Jordan, although a draft corporate governance guide is under review.

[1] There are around one million investors registered with the SDC at the end of 2007, of them 947.6 thousand Jordanian investors, 41.2 thousand Arab investors, 3.8 thousand non-Arab investors, according to Samir Jaradat, CEO of Securities Depository Centre. Source*: Al-Raai Newspaper*, Saturday, January 12, 2008, Issue 13612, Vol. 37.

[2] World Bank, Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment (Jordan) (June, 2004). Available on line: http://www.worldbank.org/ifa/jor_rosc_cg.pdf.

**Figure 2.1: Compliance with OECD principles; Jordan and the world**




Source: Amman Stock Exchange Evaluation[1].

Bank governance is regulated not only by the Company Law (1997) and the Securities Law (2002) but also the Central Bank of Jordan (CBJ) Law (1971); and the Banking Law (2000) from which CBJ derives its supervisory powers. Recent measures by the CBJ toward enhancing corporate governance in the Jordanian banking system include the issue in 2004 of the Bank Directors' Handbook on Corporate Governance and a Corporate Governance Code for banks, published in 2007 which draws upon existing international best practice[2].

[1] Tarif, J. (2005). "The Jordanian Experience with Corporate Governance Codes, MENA Regional Corporate Governance Forum: Advancing the Corporate Governance Agenda in MENA, 14-15 September, at: http://www.oecd.org/dataoecd/18/41/35381697.pdf.

[2] In particular the OECD Principles of Corporate Governance and the guidance issued by the Basle Committee on Banking Supervision.

**Table 2.1: MENA countries: financial development index, 2002-2003 (based on qualitative and quantitative data, scale 0-10*)**

| Country | Financial Development Index | Banking Sector | Nonbank Financial Sector | Regulation and Supervision | Monetary Sector and Policy | Financial Openness | Institutional Environment |
|---|---|---|---|---|---|---|---|
| **Jordan** | 6.9 | 7.1 | 6.3 | 8.7 | 6.3 | 8.0 | 5.4 |
| Egypt | 5.4 | 6.0 | 6.3 | 5.3 | 5.6 | 6.0 | 3.2 |
| Saudi Arabia | 6.4 | 7.8 | 3.3 | 8.0 | 6.4 | 8.0 | 4.2 |
| Lebanon | 7.0 | 8.7 | 3.3 | 7.7 | 8.3 | 7.0 | 5.2 |
| Bahrain | 7.7 | 7.3 | 5.0 | 9.3 | 7.8 | 8.0 | 8.9 |
| Morocco | 5.5 | 5.6 | 4.7 | 7.3 | 6.8 | 4.0 | 3.8 |
| Libya | 1.0 | 1.3 | 0.7 | 2.0 | 0.5 | 0.0 | 1.0 |
| MENA Countries (Average) | 5.0 | 5.5 | 3.3 | 5.7 | 5.1 | 5.9 | 4.2 |

* Scale: very low = below 2.5, low = 2.5 - 5.0, medium = 5.0 – 6.0, high = 6.0 – 7.5, very high = above 7.5.
Source: Creane et al., (2004).

The Jordanian Insurance sector is supervised by the Insurance Commission (IC), an independent agency, established in 1999, whose regulatory powers include corporate governance and internal controls. It has powers of de-licensing, rehabilitation or liquidation of companies. Furthermore, in 2006 (coming into effect in 2007)[1], the Insurance Commission issued instructions dealing with corporate governance for insurance companies, based on international best practice as reflected in the International Association of Insurance Supervisors (IAIS) Core Principles.

## 2.3. The Jordanian Capital Market

Amman Financial Market (AFM) was founded in 1976; in the mid-1990s restructuring of the market took place to increase its size and liquidity. Under the new Securities Law (Securities Law No. 23 of 1997), AFM was replaced by three new institutions, the Jordan Securities Commission (JSC), the Amman Stock Exchange (ASE)[2], and the Securities Depository Centre (SDC)[3]. The restructuring separates the supervisory and legislative role from the executive role of the capital market, with the executive role performed by ASE and SDC, while JSC plays the supervisory and legislative role. Emphasis has been placed on enhancing the reliability of information, transparency and disclosure, means of trading, clearing and settlements. The change from traditional to electronic trading has increased the efficiency and the speed of trading.

The number of listed companies on the ASE increased from 66 companies in 1978 to 227 by the end of 2006 (Table 2.2). In the same period, market capitalisation experience

[1] Official Gazette 4804 dated 16/1/2007.
[2] Amman Stock Exchange (ASE) started its operations on March 11, 1999.
[3] Securities Deposit Centre (SDC) was established on May 10, 1999.

grew from just 286.12 Million Jordanian Dinars (JD)[1] in 1978 to JD 26667.10 million by the end of 2005.

**Table 2.2: ASE: Market Development (Selected Indicators), 2000-2006**

| Year | No. of Listed Companies | Market Capitalisation (JD Million) | Capitalization of the Market as a % of GDP | General Weighted Price Index (point)* | Value Traded (JD Million) |
|---|---|---|---|---|---|
| 2000 | 163 | 3,509.60 | 58.4 | 1330.5 | 334.7 |
| 2001 | 161 | 4,476.40 | 71.5 | 1727 | 668.7 |
| 2002 | 158 | 5,029.00 | 80.4 | 1700.2 | 950.3 |
| 2003 | 161 | 7,772,80 | 116.8 | 2614.5 | 1855.2 |
| 2004 | 192 | 13,033.80 | 184.7 | 4245.6 | 3793.2 |
| 2005 | 201 | 26,667.10 | 326.6 | 8191.5 | 16871 |
| 2006 | 227 | 21,078.20 | 233.9 | 5518.1 | 14209.9 |

* At the end of 2006, the ASE developed a new index based on free-float shares. The index is calculated by weighting according to the market capitalization of free-float shares in companies and not the total number of listed shares for each company.
Source: Various ASE Annual Reports.

The ratio of market capitalisation (MCAP) to GDP has grown from 37 per cent in 1978 to 326.6 per cent in 2005; this is one of the highest ratios among emerging markets, indicating both a well established stock market and a relatively high level of securities trading (OECD, 2006)[2]. For example, in 2005, the average market capitalization for emerging Asia was 39.8 per cent of GDP, 54.7 per cent for emerging Europe, and 49.5 per cent for Latin America (Saadi-Sedik and Petri, 2006). Among Arab countries Jordan

[1] The Jordanian Dinar (JD) has been pegged to the U.S. Dollar since 1995 (JD 1 = $ 1.41).
[2] MENA-OECD Investment Programme: Jordan National Investment Reform Agenda Workshop, 2006. Available on line: http://www.oecd.org/dataoecd/4/29/38148879.pdf.

also has the largest market capitalization in terms of per cent to GDP (Arab Monetary Fund, 2005).

As a result of regulatory and supervisory changes in the Jordanian Capital Markets Jordan's image as a safe investment environment protected by a stringent regulatory system has been improved, although Arab and international investors may be able to achieve additional diversification by investing in the ASE (Saadi-Sedik and Petri, 2006). As a result, foreign investors account for almost half the market capitalization of all sectors in 2007 (Table 2.3). Foreign ownership of market capital is one of the highest in the world (OECD, 2006)[1].

**Table 2.3: Percentage of Non-Jordanian Ownership in Listed Companies by Sector as a percentage (%) of Market Capitalization (2002-2006)**

| Year | Financial Sector | Services | Industry | All Market |
|---|---|---|---|---|
| 2001 | 47.43 | 19.67 | 27.87 | 38.51 |
| 2002 | 47.56 | 26.79 | 26.09 | 37.43 |
| 2003 | 46.28 | 24.29 | 30.1 | 38.84 |
| 2004 | 47.44 | 25.59 | 36.79 | 41.26 |
| 2005 | 49.77 | 26.19 | 38.09 | 45.04 |
| 2006 | 47.73 | 36.55 | 43.71 | 45.53 |
| 2007 | 50.73 | 36.15 | 51.88 | 48.95 |

This table reports foreign investor ownership in companies listed at the ASE as of year-end from 2001-2007 as a percentage of total market value. Financial sector includes Banks, Insurance, Diversified Financial Services and Real State sector. Services sector includes Health Care Services, Educational Services, Hotels & Tourism, Transportation, Technology & Communication, Media, Utilities & Energy, and Commercial Services. Industry sector includes Pharmaceutical & Medical Industries, Chemical Industries, Paper & Carton, Printing & Packing, Food & Beverage, Mining & Extracting, Tobacco & Cigarettes, Engineering & Construction., Electrical Industries, Textile, Leather & Clothing, and Glass & Ceramics. Source: Various Amman Stock Exchange Annual Reports.

[1] MENA-OECD Investment Programme: Jordan National Investment Reform Agenda Workshop, 2006. Available on line: http://www.oecd.org/dataoecd/4/29/38148879.pdf.

Nevertheless, there is still scope for further reform of the Jordanian equity market. The availability of investment instruments in ASE is limited, being confined to stocks and bonds, while derivatives and short selling are not used. Furthermore, the volume of trading in the bond market - in which development bonds, treasury bonds and corporate bonds are traded - is small and the market is underdeveloped. For example, in the years 2004, 2005 and 2006 the market value of traded bonds was only JD 6 million, JD 3.2 million and JD 1.9 million (of which JD 1.0 million were treasury bills) respectively. The low level of new issues and bond trading volume suggests that Jordanian companies do not rely heavily on the bond market to finance their business activities and that the stock market is not a major source of new investment finance.

## 2.4. Data Collection and Sampling

In order to collect data on ownership and governance structure of Jordanian firms, initially we use a sample that includes all firms, both financial and non-financial, listed on the Amman Stock Exchange from 2004 to 2006. As of 31 December 2004, 2005 and 2006 the total number of companies listed on the Amman Stock Exchange, including financial and non-financial companies was 192, 201 and 227 respectively (total 620 companies). However, only 519 annual reports covering all sectors could be used, whereas the remainder could not be included in the sample because they were suspended or floated price companies and are excluded due to illiquidity and incomplete data (i.e. missing data) during the period of study. The following table (Table 2.4) illustrates the distribution of the sample across all sectors: Financial, Services and Industry (Manufacturing)[1].

[1] At the end of 2006, the ASE implemented a new sector classification of companies listed. According to this classification, listed companies in ASE are classified into three major sectors, further classified into

**Table 2.4: Sample of Jordanian Companies during the period of Study (2004-2006)**

| Year | Sector | Number of Companies in Each Year (ASE) | Sample (Observations) | Sample (%) |
|---|---|---|---|---|
| ***Panel A. Number of Companies in Each Year*** | | | | |
| 2004 | Financial sector | 70 | 63 | 90.00 |
| | Services sector | 42 | 35 | 83.33 |
| | Industry sector | 80 | 61 | 76.25 |
| | Total | 192 | 159 | 82.81 |
| 2005 | Financial sector | 77 | 68 | 88.31 |
| | Services sector | 43 | 37 | 86.05 |
| | Industry sector | 81 | 63 | 77.78 |
| | Total | 201 | 168 | 83.58 |
| 2006 | Financial sector | 90 | 84 | 93.33 |
| | Services sector | 49 | 44 | 89.80 |
| | Industry sector | 88 | 64 | 72.73 |
| | Total | 227 | 192 | 84.58 |
| Grand Total | | 620 | 519 | 83.71 |
| ***Panel B. Number of Companies in Each Sector*** | | | | |
| All Years | Financial sector | 237 | 215 | 90.72 |
| | Services sector | 134 | 116 | 86.57 |
| | Industry sector | 249 | 188 | 75.50 |
| | Total | 620 | 519 | 83.71 |

This table presents the characteristics of the sample in terms of its proportion in each year and each sector. In Panel A and B the third column shows the total number of firms in each year (sector) as reported in the Amman Stock Exchange (ASE); the fourth column contains the total number of the sample, and the fifth column shows the proportion of our sample with respect to the figures in the ASE.
The Financial sector includes Banks, Insurance, Diversified Financial Services and Real Estate. The Services sector includes Health Care Services, Educational Services, Hotels & Tourism, Transportation, Technology & Communication, Media, Utilities & Energy, and Commercial Services. The Industry sector includes Pharmaceutical & Medical Industries, Chemical Industries, Paper & Carton, Printing & Packing, Food & Beverage, Mining & Extracting, Tobacco & Cigarettes, Engineering & Construction., Electrical Industries, Textiles, Leather & Clothing, and Glass & Ceramics.
Source: Various Amman Stock Exchange Annual Reports.

numerous sub categories: the financial sector includes four-sub sectors, the services sector includes eight sub-sectors, and the industry sector includes eleven-sub sectors.

The rationale for choosing 2004 as the start of the study period is that more corporate governance (i.e. board and ownership information) is found in the annual reports of companies since 1st April 2004, which is when the ASEs' revamped listing requirements came into effect (The issuance of the Directives of Disclosure, Auditing and Accounting Standards)[1]. 2006 was chosen as the end of the study period as it was the latest financial year for which all companies published annual reports, which were available at the time when data collection started[2].

Information on firm ownership, board, managerial salary scales, bonuses and other benefits, and firm-specific accounting data is hand-collected from secondary sources, primarily the mandatory disclosure reports of these firms to the Jordan Securities Commission. The frequency of all variables is annual, and the values are measured as of the end of December for each year. Table 2.5 provides definitions of variables used in the analysis.

The annual reports of Jordanian public trading companies are prepared in accordance with and are considered consistent with international accounting standards (IAS)[3]. The annual reports supplied by management are also subject to external auditing, to certify that they are prepared in accordance with statutory and professional principles (international auditing standards)[4]. Finally, listed companies have been required since

[1] Recently, the Securities Law No. 76 for 2002 was issued and amended the previous Law. Directives of Disclosure and Auditing and Accounting Standards under this Law came into effect on 1/3/2004, and the Law required companies to comply with them.
[2] Companies are required to submit their audited financial statements to JSE for public release within three months of their financial year-end, Article 4 of the Directives of Disclosure and Auditing and Accounting Standards (2004),
[3] Article 16 of JSC Directives of Disclosure and Auditing and Accounting Standards of 2004 and Article 184 of CL 22 of 1997 mandate internationally accepted standards for listed firms. Similar articles exist in the banking and the insurance laws.
[4] Article 18 of JSC Directives of Disclosure and Auditing and Accounting Standards of 2004.

1997 to form auditing committees from the board of directors, which exercise oversight over the preparation of annual reports[1].

As a further check on reliability, data pertaining to Jordanian public trading companies are also obtained from other sources, such as the Amman Stock Exchange annual company guide, Jordan Securities Commission (JSC)[2], the Amman Stock Exchange (ASE)[3], the Securities Depository Centre (SDC)[4], and the companies' websites. These sources are used to verify the figures and statistics collected from annual reports.

The names of company founding families are derived from the Memorandum of Association of each company under investigation, obtained via the archive held by the Companies Control Department, a unit of the Ministry of Industry and Trade. As a further robustness check, three experts from the financial sector, stock market and Companies Control Department gave their insight in order to correctly identify the founding families. However, it is uncommon in Jordan for two or more families to have the same family name. Furthermore, it is easy to check whether the founding family is still in the firm or not, because the average age of Jordanian firms in our sample is low (i.e. 22 years).

[1] Article 17 of JSC Directives of Disclosure and Auditing and Accounting Standards of 2004. The Banking Law of 2000 (Articles 32, 33) also mandates audit committees, with the same size and composition requirements as those for listed companies.
[2] http://www.jsc.gov.jo/
[3] http://www.exchange.jo/
[4] http://www.sdc.com.jo/english/

**Table 2.5: Definitions of Variables**

| | |
|---|---|
| ***Panel A. Board Variables*** | |
| Board size | The total number of directors on the board |
| Executive directors | The number of executive directors on the board |
| Non-executive directors | Sum of all non-executive directors on the board |
| Non-executive directors ratio | The ratio of the number of non-executive directors to the number of total directors on the board |
| Family board directors | The number of family directors on the board |
| Family board directors ratio | The ratio of the number of family directors to the number of total directors on the board |
| Foreign board directors | The number of foreign directors on the board |
| Foreign board directors ratio | The ratio of the number of foreign directors to the number of total directors on the board |
| Duality | The position of CEO and chairman of board are held by one person |
| Founder CEO dummy | One indicates that the CEO is the founder of the firm; zero otherwise |
| Family CEO dummy | One indicates that the CEO is a member of the founding family; zero otherwise |
| Founder Chairman dummy | One indicates that the Chairman is a member of the founding family; zero otherwise |
| Executive salary | The annual salary paid to executive directors in Jordanian Dinar |
| Total directors' compensations | The annual cash compensation (salary + bonuses + and other benefits) paid to executive directors in Jordanian Dinar |
| ***Panel B. Ownership Variables*** | |
| Board ownership | The percentage of ordinary shareholding by all directors |
| Executive ownership | The percentage of equity ownership held by executive directors and their immediate families |
| Non-executive directors ownership | The percentage of equity ownership held by non- executive directors and their immediate families |
| No. of large shareholders | No. of large shareholders in a company |
| First largest shareholder | The percentage of shares held by the largest shareholder (that is, shareholding of 5 per cent or more) |
| Three largest shareholders | The percentage of shares held by its three largest shareholders (that is, shareholding of 5 per cent or more) |
| Five largest shareholders | The percentage of shares held by its five largest shareholders (that is, shareholding of 5 per cent or more) |
| Sum of largest shareholders | The proportion of ordinary shares owned by the substantial shareholders (that is, shareholding of 5 per cent or more) |

| Table 2.5. Definitions of Variables (continued) | |
|---|---|
| **Identities of the largest Shareholders** | |
| **Local shareholders (Jordanian)** | The percentage of shares owned by Jordanian/local shareholders (that is, shareholding of 5 per cent or more) |
| Individual/Families | Percentage of shares owned by individual/family (that is, shareholding of 5 per cent or more) |
| Banks | Percentage of shares owned by banks (that is, shareholding of 5 per cent or more) |
| Insurance companies | Percentage of shares owned by insurance companies (that is, shareholding of 5 per cent or more) |
| Financial Firms | Percentage of shares owned by Financial Firms (that is, shareholding of 5 per cent or more) |
| Companies (non-Financial) | Percentage of shares owned by Companies (non-Financial) (that is, shareholding of 5 per cent or more) |
| State/State agencies | Percentage of shares owned by Government and its agencies (that is, shareholding of 5 per cent or more) |
| **Foreign ownership** | Percentage of shares owned by non-Jordanian shareholders (that is, shareholding of 5 per cent or more) |
| Individual/Families | Percentage of shares owned by individual/family (that is, shareholding of 5 per cent or more) |
| Banks | The proportion of ordinary shares owned by banks (that is, shareholding of 5 per cent or more) |
| Insurance companies | Percentage of shares owned by insurance companies (that is, shareholding of 5 per cent or more) |
| Financial firms | Percentage of shares owned by Financial Firms (that is, shareholding of 5 per cent or more) |
| Companies (non-Financial) | Percentage of shares owned by Companies (non-Financial) (that is, shareholding of 5 per cent or more) |
| Governments | Percentage of shares owned by Governments (that is, shareholding of 5 per cent or more) |
| Float | Percentage of shares held under the disclosure threshold |
| ***Panel C. Financial variables*** | |
| Market-to-book ratio | The ratio of the book value of total assets minus the book value of equity, plus the market value of equity to the book value of assets. |
| Size | The natural logarithm of total market capitalization |
| Firm Age | Age of incorporation (years) |

The sample consists of 519 firms for the period from 2004-2006. All variables are measured at the end of each year.
Sources: The Amman Stock Exchange, the Jordan Securities Commission, the Securities Depository Center, the Companies Control Department, the Central Bank of Jordan, the Insurance Commission and the Jordan Insurance Federation.

Table 2.6 presents some preliminary insights about Jordanian companies. We compared descriptive statistics for a number of variables (Market-to-book ratio, Size and Age) for all sectors and by sector. Market-to-book ratio for all Jordanian listed firms (financial and non-financial) averages 1.57 per cent and ranges from 0.73 per cent to 6.19 per cent. The mean Size measured by the log of market capitalization for all companies is 7.35 (i.e. about US$ 163.10 million). The age of all firms, measured by years, varies greatly – from 1 year to 77 years and the mean is 21.79 years.

Among sectors, it appears that the Services sector is performing better than other sectors in our sample. Our data shows that (not reported in the table), among services sub-sectors, the highest Market-to-book ratio is found in the Media sector (2.26) and the lowest is found in Utilities & Energy (1.29). Among all sub-sectors (Financial, Services and Industry), the highest Market-to-book ratio is in the Media sector (2.26) and the lowest is in the Glass & Ceramic Industries sector (0.89).

Size measured by the log of market capitalization for companies is higher in the financial sector than in other sectors and this average appears to be driven by the average size of banks (8.41)[1]. However, among the sub-sectors (not reported in the table), the highest average size is found in the Technology & Communications sector (8.55), whereas the lowest is found in the Chemical Industries sector (6.82).

Companies in the Industrial sector are older (22.58 years). The industrial companies are well settled companies in the Jordanian economy. Within the industrial sector, Mining & Extraction Industries are the oldest (29.54 years), on average, whilst Printing & Packaging are, on average, the youngest (12.17 years). However, among sub-sectors, the older companies seem to be in the Utilities & Energy sector (56.67 years), on

[1] Arab Bank plc alone accounts for 36.1 percent of total market capitalization in 2006.

average, and the younger ones in the Diversified Financial Services sector (11.08 years).

**Table 2.6: Primary Descriptive Statistics for all Sectors**

| | Mean | Median | 25% | 75% | Observations |
|---|---|---|---|---|---|
| ***Panel A. All Sectors*** | | | | | |
| Market-to-book ratio | 1.57 | 1.36 | 1.11 | 1.84 | 519 |
| Size | 7.35 | 7.22 | 6.88 | 7.74 | 519 |
| Age | 21.79 | 15 | 12 | 31 | 519 |
| ***Panel B. By Sectors (2004-2006)*** | | | | | |
| **Market-to-book ratio** | | | | | |
| Financial sector | 1.58 | 1.32 | 1.15 | 1.82 | 215 |
| Services sector | 1.62 | 1.43 | 1.11 | 1.97 | 116 |
| Industry sector | 1.54 | 1.35 | 1.05 | 1.81 | 188 |
| **Size** | | | | | |
| Financial sector | 7.48 | 7.3 | 6.94 | 8 | 215 |
| Services sector | 7.38 | 7.42 | 7 | 7.71 | 116 |
| Industry sector | 7.18 | 7.05 | 6.79 | 7.45 | 188 |
| **Age** | | | | | |
| Financial sector | 21.31 | 17 | 11 | 30 | 215 |
| Services sector | 21.40 | 14 | 12 | 31 | 116 |
| Industry sector | 22.58 | 15 | 13 | 31.5 | 188 |

This table reports some primary descriptive statistics for the whole sample. Market-to-book ratio is the ratio of the book value of total assets minus the book value of equity, plus the market value of equity to the book value of assets. Size is the natural log of the market capitalizations of firms in Jordanian Dinar. Age is the age of firms (years).

## 2.5. Related Literature and Findings

Corporate governance literature, mainly, deals with the agency problem that arises from the conflict of interest between managers and shareholders (Jensen and Meckling, 1976). The literature suggests several elements related to the ownership and corporate governance structure of companies (internal governance mechanisms) may help to reduce the agency conflicts between managers and shareholders, and hence have an impact on firm performance. The main governance mechanisms in this respect are ownership structure (e.g. managerial ownership, ownership concentration, largest shareholders and largest identity) and board structure (e.g. board size and composition, CEO duality) of companies[1].

### 2.5.1. Board Structure

The board of directors plays a pivotal role in ensuring that managers act in the best interests of shareholders, most of the management decisions are delegated to managers, and the board of directors retains ultimate control by ratifying and monitoring major managerial decisions (Fama and Jensen, 1983). Therefore, the board of directors is viewed as an essential mechanism in corporate governance, to monitor top management discretionary behaviour and ratify major decisions (Fama, 1980; Hart, 1995; and Denis, 2001). Taking these arguments as a starting point, in this section, therefore, we will present, through extensive descriptive statistics, facts on board structures in Jordanian listed firms.

[1] See Gillan (2006) for a survey of recent research.

#### 2.5.1.1. Board Size and Composition

The board, as the agent of the shareholders, is an internal governance body established to monitor management behaviours on behalf of shareholders and to protect them from managers who may pursue their personal interests or otherwise act in a manner contrary to the best interests of shareholders (Jensen and Meckling, 1976).

Board size is widely believed to be an important factor in determining the effectiveness of corporate governance (Pearce and Zahra, 1992; Jensen, 1993). However, existing studies disagree as to the effect of board size. Some researchers claim that large boards reduce value because, as board size increases, difficulties of coordination, communication and process outweigh the advantages of having more people to draw on (Yermack, 1996; Eisenberg et al., 1998; and Florackis et al, 2009). Raheja (2005), too, claims that larger board size results in a less effective monitoring role, because of free-riding problems. Others argue that larger boards are more effective because they can offer a wider perspective and better guidance as the strategic options of the firm (e.g. Pearce and Zahra, 1991). Kiel and Nicholson (2003) find a positive relationship between board size and corporate performance, leading to the inference that large boards are effective in representing shareholders' interest.

In addition to board size, board independence is thought to have an impact on firm value. Boards dominated by non-executive directors are said to provide more independent monitoring and to be more likely to be independent of the CEO (Jensen, 1993; Agrawal and Knoeber, 1996). Non-executive directors may also contribute positively to the quality of directors' deliberations and decisions and provide strategic direction leading to enhanced performance (Pearce and Zahra 1992). Harris and Raviv (2008) note the potential of non-executive directors, provided they have the requisite

knowledge, incentives, and abilities, to monitor, discipline, and advise managers, thereby contributing in alleviating conflicts of interest between insiders and shareholders. Conversely, there are studies that argue that non-executive directors often lack information about the firm, are too busy to contribute effectively, do not bring the requisite skills to the job, and may owe their position to management, giving them an incentive to accept management decisions to safeguard their positions in future (Hermalin and Weisbach, 1991; Franks et al., 2001; Hart, 1995). Raheja (2005) hence argues that the inclusion of insiders is needed because they are an important source of firm-specific information which can enhance decision-making, although she warns of the potential for distorted objectives due to private benefits and lack of independence from the CEO.

The Company Law in Jordan sets the basic requirements for board structure, liabilities and responsibilities. Boards in Jordanian companies have a one-tier board structure in which both executive and non-executive directors sit on the same board. The board of directors is elected by the Company's General Assembly by means of a secret ballot for a four-year term. The board size ranges from three to thirteen members. Jordan has no legal requirements for board independence. However, according to the JSE, at least three members must be non-executive, to comply with the audit committee requirements. We follow the definition of the JSE to determine the non-executive directors. This specifies that "Any member of the Board of Directors shall be considered as non-executive, if the member is neither an employee of the Company nor receiving a salary there from"[1]. Furthermore, the CL makes no stipulation as to board members' skills, independence, possible committee functions, and board performance

[1] Article 15-b of JSC Directives of Disclosure, Accounting and Auditing Standards of Issuing Companies of 2004. The Banking Law of 2000 (Article 32, 33).

evaluation. Nor does it require the separation of the Chief Executive Officer and the Chairman of the Board positions, or that the CEO must be a member of board. A person may be a voting member of a board of directors and also serve as the company's CEO.

In practice, most firms have relatively modest boards. Table 2.7 shows the breakdown. About two-thirds of our sample firms have boards with 3-9 members (i.e. 359 firms out of 519 firms), with an overall mean of 8.63 members. Only 160 firms (31 per cent) have more than 10 directors.

**Table 2.7: Size of the Board of Directors**

| No. of directors | No. of firms | Percentage | Cumulative percentage |
|---|---|---|---|
| 3 | 11 | 2% | 2% |
| 4 | 2 | 1% | 3% |
| 5 | 45 | 9% | 12% |
| 6 | 18 | 3% | 15% |
| 7 | 110 | 21% | 36% |
| 8 | 21 | 4% | 40% |
| 9 | 152 | 28% | 68% |
| 10 | 29 | 6% | 74% |
| 11 | 87 | 17% | 91% |
| 12 | 19 | 4% | 95% |
| 13 | 25 | 5% | 100% |

This table shows the frequency and percentage of Board size of 519 (both financial and non-financial) firms for the period from 2004 to 2006. Board size is the total number of directors on the board.

As far as board structure is concerned, Table 2.8 reports detailed information on board size and composition.

**Table 2.8: Board Size and Board Composition**

| | 2004 | 2005 | 2006 | All Years (2004-2006) |
|---|---|---|---|---|
| Total board size | 8.71 | 8.70 | 8.50 | 8.63 |
| Executive directors | 1.15 | 1.01 | 0.96 | 1.04 |
| Non-executive directors | 7.56 | 7.69 | 7.54 | 7.60 |
| Non-executive directors ratio | 85.91 | 87.64 | 88.03 | 87.26 |
| Founding family board directors | 1.87 | 1.85 | 1.95 | 1.89 |
| Founding family board directors ratio | 22.14 | 22.68 | 23.01 | 22.62 |
| Foreign board directors | 0.97 | 0.96 | 1.05 | 1 |
| Foreign board directors ratio | 11.13 | 11.09 | 11.92 | 11.41 |
| CEO and board members | 68.55 | 67.86 | 67.19 | 67.82 |
| No. of observations | 159 | 168 | 192 | 519 |

This table reports the average numbers of the Board of Directors, number and percentage of executive directors, number and percentage of founding family board members, number and percentage of foreign board members and, finally, the percentage of CEO who are also board members to total boards. The sample consists of 519 (both financial and non-financial) firms for the period from 2004 to 2006. All variables are measured at the end of each year. Definitions for all the variables are provided in Table 2.5.

In 2004 the Jordanian boards appear to be composed, on average, of about nine individuals, and this number is stable over time. This finding shows that firms in Jordan have relatively moderate board size, ranging between three as the smallest and 13 as the largest number. These figures confirm that publicly listed firms in Jordan, on average, meet the requirement of the Company Law (1997)[1]. Moreover, average board size is in line with recommendations on good practice and beneficial impact on firm performance

[1] Article 132a of CL of 1997 states that "The management of a public shareholding company is entrusted to a Board of Directors whose members shall not be less than three and not more than thirteen".

proposed by, inter alia, Jensen (1993) and Lipton and Lorsch (1992), who discuss the effect of board sizes on firm performance and recommend boards of fewer than 10 directors, and preferably eight or nine. They contend, moreover, that the involvement of more people slows the decision-making process.

In terms of board composition, the mean percentages of non-executive directors on the boards for all the years are above 85 per cent, suggesting that non-executive directors remain in the majority of Jordanian boards. In 2004, the average firm's board consisted of 1.15 executives and 7.56 non-executives and this value remained relatively constant over time. Therefore, on average, firms tend to have at least seven non-executive directors. Thus, it can be seen that the existing non-executive directors fulfilled the requirements by the international standards[1,2]. Previous studies such as Weisbach (1988), Byrd & Hickman (1992), and Brickley et al. (1994) show that when there are more external board members, performance of the firm tends to be better, since outside directors support the beneficial monitoring and advisory functions to firm shareholders. However, other researchers such as Agrawal & Knoeber (1996) suggest that boards expanded for political reasons (politicians, environmental activists, etc.) often result in too many outsiders on the board, which does not help performance.

Founding family board members represent 23 per cent (2 members) of the board size, and this value is relatively constant over time. The proportion of non-Jordanian members (foreign members) in company boards has increased over time as shown in Table 2.8.

[1] The Cadbury report (1992) recommends that there should be at least three non-executives on the board and the subsequent Hampel Report (1998) recommends that at least 33 per cent of the board should be composed of non-executive members.

[2] This also fulfils the requirements of the Insurance Commission instructions of corporate governance for insurance companies, 2006. Article 4b.1 indicates that non-executive directors should be at least one-third of the board of an insurance company.

The results show that about 68 per cent of the CEO's are also members of the board; although Jordanian Company Law (1997) does not require that the CEO must be a member of the board.

The following, Table 2.9, provides comparison between Jordan and other countries in terms of board size and proportion of non-executive directors.

**Table 2.9: Board Size and Proportion of Non-executive Directors (Comparison)**

| Country | No. of observations | Board size | Proportion of non-executive directors | Source |
|---|---|---|---|---|
| USA | 452 firms, 1981 to 1991 | 12.25 | 0.54 | Yermark, 1996 |
| UK | 587 firm-year, 1999 to 2005 | 7.37 | 0.5 | Florackis and Ozkan, 2009 |
| Malaysia | 347 firms, 1996 to 2000 | 8 | 0.5 | Haniffa and Hudaib, 2006 |
| India | 198 firms, 2003 | 10.48 | 0.67 | Ghosh, 2006 |
| Korea | 457-464 firm, 1999 to 2000 | 6.75 | 0.32 | Choi et al., 2007 |
| Bahrain | 21 firms, 2001 | 10.5 | 0.82 | Hussain and Mallin, 2002 |
| Egypt | 92 firms, 2000 to 2004 | 8 | N/A | Elsayed, 2007 |
| **Jordan** | 519 firms, 2004-2006 | 8.63 | 0.87 | Our own calculations |

This table shows a comparison between Jordan and other countries with regard to board size and proportion of non-executive directors.

The above table shows that the board size of the Jordanian companies is similar to those in other countries such as Egypt and Malaysia, but smaller than boards in the USA, India and Bahrain. On the other hand, the proportion of non-executive directors in the Jordanian boards is higher than in any of the countries listed, the closest being another Middle Eastern country, Bahrain. The two western countries, USA and UK, together

with Malaysia, all have proportions of around 50 per cent, that is, an even balance between executive and non-executive directors, while in Korea, non-executive directors are a distinct minority at just over 30 per cent.

We have so far investigated the overall board composition. In the following, we will look at board composition in more detail within each sub-sector. Table 2.10 provides details of board size and composition by sector.

It can be noticed from Table 2.10, panel B, that the board size in the financial sector (8.67) is bigger than in the non financial sectors (8.61). Companies in the financial sector tend to have, in general, large board size. As Hayes et al. (2005) also document, financial firms have on average larger boards than manufacturing firms. Among sub-sectors, the Utilities and Energy sector reports the highest board size, with an average of 11.33, followed by Banks (10.29), Hotels & Tourism (9.87), Educational Services (9.59), and Pharmaceutical & Medical Industries (9.25). The lowest board size reported is for Real Estate (6.77).

Non-executive directors have on average seven seats on the board of financial and non-financial firms (88 per cent and 87 per cent respectively). The financial sector has the highest proportion with about 88 per cent, whereas the services sector has the lowest proportion with about 86 per cent. Among sub-sectors, the lowest proportion can be found in the Media Sector with 77.97 per cent, whereas the highest proportion is in the Glass & Ceramic Industries with 95.71 per cent.

**Table 2.10: Board Compositions by Sectors**

| | N | Board size | Total exec | Total nonexc | Ratio | Total family | Ratio family | Total foreign | Ratio foreign |
|---|---|---|---|---|---|---|---|---|---|
| **Panel A. Board Composition by Sector** | | | | | | | | | |
| Banks | 45 | 10.29 | 1.09 | 9.20 | 88.88% | 1.87 | 17.24% | 2.78 | 27.14% |
| Insurance | 75 | 9.01 | 0.81 | 8.20 | 90.87% | 1.84 | 18.50% | 1.12 | 18.98% |
| Diversified Financial Services | 39 | 8.85 | 1.41 | 7.44 | 82.66% | 1.36 | 17.20% | 0.87 | 10.48% |
| Real Estate | 56 | 6.77 | 0.73 | 4.04 | 87.08% | 1.57 | 26.14% | 0.25 | 3.21% |
| **Total Financial Sector** | 215 | 8.67 | 0.73 | 6.04 | 87.98% | 1.66 | 19.45% | 1.20 | 13.35% |
| Health care Services | 7 | 8.57 | 1.71 | 6.86 | 79.90% | 0.71 | 9.04% | 0.57 | 6.80% |
| Educational Services | 17 | 9.59 | 2 | 7.59 | 80.88% | 3.4 | 34.53% | 0.94 | 8.97% |
| Hotels & Tourism | 30 | 9.87 | 0.9 | 8.97 | 90.36% | 2.87 | 29.46% | 1.2 | 10.35% |
| Transportation | 18 | 8.11 | 1 | 7.11 | 86.56% | 1.28 | 17.87% | 0.94 | 11.69% |
| Technology & Communication | 3 | 7 | 1 | 6 | 85.71% | 0.00 | 0.00% | 3 | 42.86% |
| Media | 6 | 9.17 | 2 | 7.17 | 77.97% | 2 | 21.85% | 0 | 0.00% |
| Utilities & Energy | 9 | 11.33 | 0.67 | 10.66 | 93.94% | 0 | 0.00% | 0.67 | 5.58% |
| Commercial Services | 26 | 7.35 | 0.96 | 6.39 | 86.64% | 1.88 | 26.84% | 0.73 | 9.56% |
| **Total Services Sector** | 116 | 8.91 | 1.19 | 7.72 | 86.32% | 2.01 | 23.15% | 0.92 | 9.90% |
| Pharmaceutical & Medical Ind. | 16 | 9.25 | 1.57 | 7.68 | 82.85% | 1.38 | 15.61% | 1.25 | 12.32% |
| Chemical Industries | 28 | 7.75 | 1.18 | 6.57 | 84.73% | 2.04 | 23.96% | 0.43 | 7.91% |
| Paper & Cartoon | 9 | 6.56 | 0.67 | 5.89 | 89.26% | 1.22 | 23.33% | 0.56 | 5.93% |
| Printing & Packing | 6 | 8.83 | 0.5 | 8.33 | 94.45% | 3.17 | 35.65% | 0.5 | 5.56% |
| Food & Beverage | 34 | 7.18 | 0.71 | 6.47 | 89.53% | 2.03 | 26.94% | 0.91 | 15.25% |
| Mining & Extracting | 33 | 9.15 | 1.06 | 8.09 | 88.10% | 1.61 | 18.26% | 1.67 | 16.92% |
| Tobacco & Cigarettes | 6 | 10 | 1.67 | 8.33 | 83.50% | 3.5 | 34.85% | 0 | 0.00% |
| Engineering & Constr. | 20 | 8.45 | 1.05 | 7.4 | 86.05% | 2.5 | 33.60% | 0.5 | 5.54% |
| Electrical Industries | 12 | 8.17 | 1.09 | 7.08 | 80.90% | 1.75 | 25.66% | 0.67 | 7.41% |
| Textile, Leather & Clothing | 18 | 10 | 1.06 | 8.94 | 89.09% | 2.83 | 28.55% | 0.39 | 3.79% |
| Glass & Ceramic | 6 | 9 | 0.5 | 8.5 | 95.71% | 2.33 | 31.87% | 0.67 | 8.59% |
| **Total Industry Sectors** | 188 | 8.42 | 1.03 | 7.39 | 87.01 | 2.06 | 25.30% | 0.81 | 10.11% |

| Table 2.10: Board Composition by Sector (continued) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Panel B. Board Composition by Financial and Non-Financial Sectors** | | | | | | | | | |
| Total Financial Sector | 215 | 8.67 | 0.73 | 6.04 | 87.98% | 1.66 | 19.45% | 1.20 | 13.35% |
| Total Non-Financial (Services and Industry) Sectors | 304 | 8.61 | 1.09 | 7.52 | 86.75% | 2.04 | 24.48% | 0.86 | 10.03% |
| Total All Sectors | 519 | 8.63 | 1.04 | 7.59 | 87.26% | 1.89 | 22.62% | 1 | 11.41% |

This table reports mean values for board size, composition, family and foreign board members by sectors (Panel A.) and by Financial and Non-financial sectors (Panel B.). *Board size* is the sum of all executive and non-executive directors. *Total exec* is the sum of all executive directors; *Total non-exec* is equal to the sum of all non-executive directors; *Ratio* is defined as the proportion of non-executive directors on total board. *Total family* is the sum of all founding family directors; *Total foreign* is equal to the sum of all foreign directors; *Ratio family* is defined as the proportion of founding family directors on total board; *Ratio foreign* is defined as the proportion of foreign directors on total board.

Founding family members represent a good proportion in all sectors with, on average, two seats on the board in financial and non-financial sectors, as shown in Panel B (Table 2.10). The highest percentage is in the industrial sector with about 25 per cent, and the lowest is the financial sector with 19 per cent. Within the non-financial sub-sectors (i.e. Services and Industry), it is noticeable that around 4 out of 10 seats on the board in Tobacco & Cigarettes are held by families, and a similar number in printing and packing, representing around 35 per cent of the total board, followed by Educational Services with 3 out of 9 seats (35 per cent). In the same vein, within the financial sector, Real Estate has the largest family representation with about 2 seats out of 7 (26 per cent), followed by Insurance with about 2 seats out of 9 seats (19 per cent).

Regarding foreign directors, the Financial sector reports the highest proportion with about 13 per cent, about 2 seats out of 9, followed by Industry, with about 10 per cent, 1 seat out of 8 and last, Services, with about 10 per cent, 1 seat out of 9. Within the non-financial sub-sectors, the Technology & Communication sector reports the highest proportion with about 42.86 per cent of the total board, about 3 seats out of 7, followed by Mining and Extraction Industries, with about 2 seats out of 9 (17 per cent) occupied by foreign members. Within the Financial sector, it is noticeable that the proportion of foreign directors is highest in the Banks sector with about 3 seats out of 10 (27 per cent), followed by Insurance with about 1 seat out of 9 occupied by a foreign director.

The findings, generally, suggest that firms in Jordan have relatively moderate board size. They tend to be dominated by non-executive directors. Our findings also show that in almost every sector (Technology and Communication and Utilities and Energy being the only exceptions), a significant presence of founding families is observable, amounting to anything from 9 per cent to more than 35 per cent of board membership.

Ratios of foreign membership are more widely distributed, ranging from just 3 per cent to as high as 42 per cent, with only two sectors, media and Tobacco and Cigarettes having no foreign board members. Generally, it appears that where the family ratio is high, the foreign ratio is relatively low, and vice versa, although there are a few sub-sectors, such as the majority of the financial sub-sector, where the two are more evenly balanced. Despite the difference between individual sectors and sub-sectors, however, it can be said that the corporate sector in Jordan is to a substantial degree owned and controlled by founding families or groups of families or foreign owners.

#### 2.5.1.2. Are the CEO and Chairman the Same Person?

Another important corporate governance variable is the influence on the board's effectiveness of the Chief Executive Officer's (CEO) duality. Fama and Jensen (1983) argue that the positions of board chairman (COB) and CEO should be separated, to mitigate the agency problem. Similarly, the Cadbury (1992) report on corporate governance of UK firms warns of the high probability of a opportunistic behaviour on the part of insiders in the absence of a separation of the two positions. However, there is no consensus in the literature, as to whether the separation of the two positions increases efficiency. Fosberg and Nelson (1999), studying a change of leadership structure in an effort to control agency problems, find that corporate performance improved significantly in the three years following the change to a separate leadership structure. On the other hand, other studies find a negative relationship; for example, Rahman and Haniffa (2005) from a study on Malaysian corporations find that accounting performance of companies with CEO's with role duality perform worse than companies with separate roles. This result is similar to the findings of Dahya et al. (1996) from a study in the UK, that accounting performance of companies declines with

role duality. Moreover, some studies find no relationship between duality and corporate performance (Brickley et al. 1997; Hudaib and Haniffa, 2006).

In the light of the discussion above, with regard to the separation of the two leading roles of Chairman and Chief Executive Officer, Table 2.11 reports detailed information about Non-dual, Dual, Founder CEO and Family-member CEO and Founder Chairman.

Table 2.11 shows that 78.23 per cent of the companies have non-dual leadership (firms have split the roles of Chairman and CEO), and only 21.77 per cent across all sectors (Financial, Services and Industry sectors) practice dual leadership for the entire three-year period. These results suggest that it is still common in Jordan for the chairman of the board to be also the CEO of the company. However, the number of companies with role duality decreases slightly from about 23 per cent in 2004 to 21 per cent in 2006. This figure is close to that reported in previous work. For example the corresponding figure reported by Haniffa and Hudaib (2006) for Malaysian firms is 25.70 per cent, and that for the Ghana Stock Exchange 17 per cent (Coleman and Biekpe, 2006); 14 per cent in Bahrain (Hussain and Mallin, 2002), and 13 per cent in the UK (Florackis et al., 2009).

Founder CEOs are found in 36.80 per cent of the companies during the sample period where the proportion of companies with a founder CEO in 2004 is 37 per cent and this value is relatively stable over time. However, the number of family-member CEOs is 10.21 per cent for the entire period. The proportion of companies with a family-member CEO increases from 6.92 per cent in 2004 to 13.54 per cent in 2006. Another important finding of our study is that founder Chairman also appears in about 65 per cent of the companies in the Services sector, Industry sector and Real Estate sector. Founder Chairman increases from about 64 per cent in 2004 to 67 per cent in 2006.

**Table 2.11: Duality for all Sectors (Financial and Non-Financial).**

| Year | 2004 | | 2005 | | 2006 | | All Years (2004-2006) | |
|---|---|---|---|---|---|---|---|---|
| | Freq. | Per cent | Freq. | Per cent | Freq. | Per cent | Freq. | Per cent |
| Non-dual | 123 | 77.36% | 132 | 78.57% | 151 | 78.65% | 406 | 78.23% |
| Dual | 36 | 22.64% | 36 | 21.43% | 41 | 21.35% | 113 | 21.77% |
| Founder CEO | 59 | 37.11% | 62 | 36.90% | 70 | 36.46% | 191 | 36.80% |
| Family CEO | 11 | 6.92% | 16 | 9.50% | 26 | 13.54% | 53 | 10.21% |
| Founder Chairman* | 70 | 64.22% | 75 | 64.10% | 90 | 67.16% | 235 | 65.25% |
| No. of observations | 159 | | 168 | | 192 | | 519 | |

This table reports the frequencies and the percentage of Dual and Non-dual, Founder CEO, Family-member CEO and Founder Chairman for all sectors (Financial and Non-Financial). Non-dual is where the CEO and board chair positions are separate, Dual where CEO is also chairman of the board, Founder CEO when the CEO is the founder of the firm, Family-member CEO when the CEO is a member of the founding family and Founder Chairman when the Chairman of Board is a member of the founding family.

* This figure is related to the Services sector, Industry sectors and Real Estate sector only (360 Companies for three years 2004-2006).

To investigate these issues further, Table 2.12 provides detailed information about Duality, Founder COE and Family-member CEO by sectors.

**Table 2.12: Duality by Sectors.**

| | **2004** | **2005** | **2006** | **All Years (2004-2006)** |
|---|---|---|---|---|
| **Financial sector** | | | | |
| Dual (%) | 19.05 | 19.12 | 20.24 | 19.53 |
| Founder CEO (%) | 28.57 | 29.41 | 32.14 | 30.23 |
| Family CEO (%) | 11.11 | 14.71 | 17.86 | 14.88 |
| No. of observations | 63 | 68 | 84 | 215 |
| **Non-Financial sectors** | | | | |
| Dual (%) | 25.00 | 23.00 | 20.9 | 22.22 |
| Founder CEO (%) | 42.71 | 42.00 | 38.06 | 39.81 |
| Family CEO (%) | 4.17 | 6.00 | 11.19 | 10.19 |
| No. of observations | 96 | 100 | 108 | 304 |

This table reports the percentage of Dual, Founder CEO, and Family-member CEO for Financial and Non-Financial sectors. Dual where CEO is also chairman of the board, Founder CEO when the CEO is the founder of the firm and Family-member CEO when the CEO is a member of the founding family.

It is shown that, surprisingly, the number of companies with role duality in the financial sector increases from 19.05 per cent in 2004 to 20.24 per cent in 2006, and the mean for the entire three-year period is 19.53 per cent. One possible explanation for this is the increment in the number of listed companies at the ASE in 2005 and 2006 where the

same person holds the title of CEO and Chairperson[1]. Contrary to that, in the non-financial sectors, the number of companies with role duality decreases from 25 per cent in 2004 to 21 per cent in 2006, and the mean for the entire three-year period is 22 per cent.

In the financial sectors, the results show that the proportion of Founder CEOs increases from 29 per cent in 2004 to 32 per cent in 2006, and the mean for the entire period is 30 per cent. In the same line the proportion of Family CEOs increases from 11 per cent in 2004 to about 18 per cent in 2006, and the mean for the entire period is 15 per cent.

For non-financial sectors, it can be seen that the role of Founder CEO's is slightly weakened in favour of Family members. The proportion of positions held by Founder CEOs decreases from 43 per cent in 2004 to 38 per cent in 2006. On the contrary, the positions held by Family CEOs increase quite significantly during the period of study, from 4 per cent in 2004 to 11 per cent in 2006.

Our findings so far give an indication of the influential role of families in the Jordanian equity market. We find that founder family members hold important positions in management and on the board of directors. This also shows us that, in the Jordanian experience, there is no separation between ownership and control, which may increase the agency conflict between the founding families and other shareholders in the company, especially minority shareholders. Such a view may be supported by the theoretical arguments and empirical evidence offered by Fama and Jensen (1983) and Morck et al. (1988), to the effect that agency conflicts are increased where ownership and control are combined.

[1] The companies listed at ASE increased by the end of 2006 to 227, compared with 201 by the end of 2005 and 192 by the end of 2004 (ASE annual reports, 2005 and 2006).

### 2.5.2. How Much are CEOs Compensated?

It is widely acknowledged that management compensation provides an important corporate governance tool for reducing agency conflicts and improving the performance of the company (Dong and Ozkan, 2008). Using pay-for-performance rewards to managers can play an important role in aligning the interests of owners and managers.

There is extensive empirical research on the relationship between executive compensation and firm performance. For example, Jensen and Murphy (1990), based on a large sample of US firms, find that a US$ 1000 increase in shareholder wealth leads to a US$ 3.25 increase in CEO pay. Hall and Liebman (1998), also for a US sample, find a positive association between CEO compensation and the financial performance of the firm. In contrast, the evidence from the UK does not lead to clear-cut conclusions. For example, Gregg et al. (2005) provide evidence for a weak relationship in large UK firms. Recently, Ozkan (2007) finds that performance has a positive but insignificant impact on director pay for a sample of large UK firms. Finally, Dong and Ozkan (2008) find that institutional investors, as a whole, make no appreciable difference in the determination of director pay level and pay–performance relationship. However, after they divide institutions into “dedicated” and “transient” groups, they find that dedicated institutions restrain the level of director pay and strengthen the pay–performance link.

In Jordan, companies have to disclose board compensation, including that of the CEO. Article 4-b-18 of JSC Directives of Disclosure, Accounting and Auditing Standards of the Year 2004 stated that the Board of Directors’ report shall include "The benefits and remunerations of the Chairman, members of the Board of Directors, and Senior Executive Management, during the fiscal year, including payments received by any of them such as fees, salaries, bonuses**,** and otherwise, and their travel and transport

expenses within the Kingdom and abroad". Stock options or additional stock awards are non-existent in Jordan. Our results show that not all companies disclosed the compensation of the CEO. In the sample, about 71 per cent of companies have disclosed these items.

Table 2.13 provides information about CEO salary and compensation in Jordanian Dinars (JD) during 2004-2006 for the all sectors (financial and non-financial).

**Table 2.13: CEO Compensation in thousands Jordanian Dinars (JD[1]) for the entire period (2004-2006)**

| | Observations | Mean | Min | Max |
|---|---|---|---|---|
| CEO salary | 373 | 62,296.0 | 11,050.0 | 419,000.0 |
| CEO compensation | 373 | 80,146.0 | 11,050.0 | 539,620.0 |
| CEO=Chairman salary (Duality) | 90 | 83,325.0 | 16,000.0 | 281,666.0 |
| CEO=Chairman compensation (Duality) | 90 | 114,225.0 | 21,000.0 | 539,620.0 |
| Founder CEO salary | 140 | 67,982.0 | 11,200.0 | 281,666.0 |
| Founder CEO compensation | 140 | 89,186.0 | 12,845.0 | 372,814.0 |
| Family CEO salary | 45 | 70,416.0 | 12,000.0 | 268,000.0 |
| Family CEO compensation | 45 | 102,721.0 | 14,400.0 | 539,620.0 |

This table reports mean values of salary and total compensation of CEOs. Salary is defined as the annual salary paid to CEO and CEO compensation defined as the annual compensation (salary + bonuses + and other benefits) paid to CEO.

[1] The Jordanian Dinar (JD) has been pegged since 1995 to the U.S. Dollar (JD 1 = $ 1.41).

The mean salary is JD 62,296.00 (i.e. about US$ 87,837.00) and the mean compensation (salary and bonus) is JD 80,146.00 (i.e. about US$ 113,006.00) during the study period for all sectors (2004-2006). In addition, some CEOs in Jordan receive other benefits which can not be quantified, such as a car, accommodation, driver and cellular phone. Our sample results show that about 31 per cent of CEOs have company cars, 6 per cent have a driver, and 1.5 per cent has received accommodation.

The figures in this table illustrate one important feature of the Jordanian firms: when the same person holds the title of CEO and Chairperson (Duality), the CEO's mean salary and compensation is above the total sample mean, an increase of about 34 per cent and about 43 per cent respectively. Similarly, Founder CEO mean salaries and compensation are above the sample mean by about 9 per cent and 11 per cent, those of Family CEOs by about 13 per cent and 28 per cent, respectively.

According to our sample results, there are large variations in salary and total compensation. Cash salary varies from JD 11,050.00 to JD 419,000.00, while total compensation varies from JD 11,050.00 to JD 539,620.00. Therefore, more insight into the nature of the rates in different sectors is provided in Table 2.14.

Table 2.14 presents descriptive statistics for CEOs salaries and compensation by sectors (Financial and Non-financial sectors) in Jordanian Dinars (JD) during the sample period (2004-2006).

The statistics show that the level of salary and total cash compensation paid to the CEOs increases by 24 per cent and 33 per cent respectively during the sample period. This trend is in line with what is reported by other researchers in other countries, such as Florackis and Ozkan (2009) in the UK, who find that the level of salary and total

cash compensation paid to executive directors increased by 34 per cent and 43 per cent respectively between 1999 and 2005.

**Table 2.14: CEO Compensation in thousands Jordanian Dinar (JD) by Years and Sectors**

***Panel A. All Sectors***

| | **2004** | **2005** | **2006** | **All Years (2004-2006)** |
|---|---|---|---|---|
| | Mean | Mean | Mean | Mean |
| CEO salary | 54,645.0 | 61,164.0 | 67,842.0 | 62,296.0 |
| CEO compensation | 65,296.0 | 83,420.0 | 86,629.0 | 80,146.0 |
| No. of observations | 95 | 122 | 156 | 373 |

***Panel B. By Sectors (2004-2006)***

| | Mean | Min | Max |
|---|---|---|---|
| **Financial sector** | | | |
| CEO salary | 77,942.0 | 11,475.0 | 419,000.0 |
| CEO compensation | 109,632.0 | 11,475.0 | 539,620.0 |
| No. of observations | 129 | 129 | 129 |
| **Non-Financial sectors** | | | |
| CEO salary | 54,026.0 | 11,050.00 | 281,666.00 |
| CEO compensation | 64,557.0 | 11,050.00 | 290,266.00 |
| No. of observations | 244 | 244 | 244 |

Panel A reports mean values of salary and total compensation of CEOs for the sample period. Panel B reports mean values of salary and total compensation of CEOs for Financial and Non-Financial sectors. Salary is defined as the annual salary paid to CEO and CEO compensation defined as the annual compensation (salary + bonuses + and other benefits) paid to CEO

Our results also show that the mean salary for CEOs in the financial sector is JD 77,942.0 and the mean compensation is JD 109,632.0 during the sample period. Within the financial sector there is large variation in salaries and compensation. Reported cash

salary varied from JD 11,475.00 in the Real Estate sub-sector to JD 419,000.00 in the Banks sub-sector. Similarly, total compensation varies from JD 11,475.00 for the Real Estate sub-sector to JD 539,620.00 for Banks.

Banks report the highest mean salary for CEOs in the Financial sector, followed by Insurance, Diversified Financial and Real Estate, with JD 212,659.00, JD 83,030.00, JD 60,236.00 and JD 46,061.00 respectively. The highest CEO compensation is reported in Banks, followed by the Diversified Financial, Insurance and Real Estate sub-sectors, with JD 297,500.00, JD 120,329.00, JD 97,229.00 and JD 54,672.00 respectively.

The mean salary for CEOs in the Non-financial sectors is JD 54,026.0 and the mean compensation is JD 64,557.0 during the entire period (2004-2006). Within the Non-financial sectors there is large variation in salaries and compensation. Cash salary varies from JD 11,050.00 in the Chemical Industries sector to JD 281,666.00 in the Tobacco & Cigarettes sector. Similarly, total compensation varies from JD 11,050.00, in the Chemical Industries sector to JD 290,266 in the Tobacco & Cigarettes sector.

The Industry sector reports the highest mean salary and compensation for CEOs in the Non-financial sectors, followed by Services with JD 54,605.00 and JD 53,033.00 respectively for salary and JD 66,400.00 and JD 61,404.00 for CEO compensation respectively.

To summarize, CEO salary and compensation are substantially higher than the average when the CEO is a founder or family member. The most marked difference, however, is in the case of duality, when CEO salary and compensation are almost a third higher than the average. Both salary and compensation are higher in the financial than non-financial sectors; while the minimum rates observed are similar in the two sectors, the maximum rates in the financial sectors are almost twice those in the non-financial sectors.

### 2.5.3. Evolution of Ownership

The relationship between ownership structure and firm performance is the subject of an important and ongoing debate in the literature. A number of researchers view the ownership structure of the firm as a potential source of agency conflict or a potential solution for it and find an association between ownership structure and corporate value (see, Ang et. al. 2000; and Morck et al., 1988 amongst others).

It is useful to examine in detail the ownership characteristics of Jordanian firms at the firm level as an indicator of the expected agency cost. The following sections therefore report extensive descriptive statistics for board ownership both executive and non-executive directors, largest shareholders (shareholders with more than 5 per cent ownership)[1], the average shareholders by typology, and finally, foreign ownership.

#### 2.5.3.1. Managerial Ownership

The level of managerial equity ownership can be important in determining the extent of agency problems a corporation faces. Managerial ownership has been suggested as a potential incentive mechanism, which serves to align interests of managers with those of shareholders since it provides directors incentives towards firm value maximization (Jensen and Meckling, 1976). The greater their share of direct ownership, the greater share of the cost of undertaking non-value maximizing actions is borne by managers. A positive relationship between the level of managerial ownership and performance is therefore expected (see for example, Jensen and Meckling, 1976; Morck et al., 1988; Mehran, 1995; Florackis et al., 2009). However, another strand of literature indicates

[1] The Instructions of Issuing Companies Disclosure, Accounting and Auditing Standards instructions for the Year 2004, which came into effect as of 1 March 2004, required Jordanian listed companies to disclose "The names of the Company's large shareholders and the number of shares owned by each of them where such constitutes (5 per cent) or more in comparison with the previous year" (Article 4-b-4).

that the relationship between managerial ownership and agency costs (the alignment effect) may not be linear (see for example, McConnell and Servaes, 1990; Short and Keasey, 1999; Florackis, 2005 and Davies et al, 2005 among others). In particular, the association between the level of executive ownership and firm performance is observed only up to a point; thereafter there is a decline in firm performance. This is what is called the entrenchment hypothesis. It is argued that either low or high levels of ownership increase alignment of interest and have a positive relation with firm value. In contrast, intermediate levels of ownership increase entrenchment and enable managers to exercise more controlling power, for example to allocate firm resources for their own interests, possibly to the detriment of other shareholders. This is why the relationship with firm value becomes negative.

Jordanian quoted companies[1] are required to disclose in their financial statements the names of all the board members, the number of securities issued by the Company which are owned by any member of its Board of Directors, any member of its Senior Executive Management or any of their relatives[2]. According to the Company Law of 1997 directors must be shareholders; each company, in its Memorandum of Association, must specify the number of shares which must be held by each member to qualify for nomination as a member of the board of directors[3].

Table 2.15 provides information on the evolution of board ownership during the study period (2004-2006) for all sectors (financial and non-financial). We report data on average ownership by board. Board Ownership is divided into its respective sub-categories of executive and non-executive directors.

[1] Article 4-b-17 of JSC Directives of Disclosure, Accounting and Auditing Standards of Issuing Companies of 2004.
[2] Relatives are Husband, Wife and Minor Children.
[3] Article 133a of CL of 1997.

**Table 2.15: Average Percentage of Ordinary Shares Held by Insiders**

| | 2004 | 2005 | 2006 | All Years (2004-2006) |
|---|---|---|---|---|
| Board ownership | 50.03 | 47.30 | 47.84 | 48.34 |
| Executive ownership | 6.72 | 5.58 | 4.83 | 5.65 |
| Non-executive ownership | 43.31 | 41.72 | 43.01 | 42.69 |
| No. of observations | 159 | 168 | 192 | 519 |

This table reports mean values of shareholding by insider ownership. Board ownership is defined as the total percentage of ordinary shareholdings by all directors; Executive ownership represents the percentage of ordinary shareholdings by Executive directors; Non-executive ownership is the total percentage of shares owned by Non-executive directors.

The findings in this table illustrate one important feature of Jordanian firms; approximately half the market is held by the board of directors, around 48 per cent. Board ownership shows a decreasing pattern, the average ordinary shareholding decreased by approximately 2 per cent over the three years.

Among the board of directors, executive ownership shows a decreasing tendency; the total ordinary shares held by executive directors decreased from 6.72 per cent in 2004 to 4.83 per cent in 2006, an average decrease of 2 per cent in three years. This is not the case for non-executive directors, whose average level of ownership seems to be stable over time.

The findings, overall, show that approximately half of the market is held by the board of directors. The results suggest that, according to our sample, the reduction in managerial ownership seems to involve mainly executive directors. Conversely, non-executive ownership shows a stable pattern over time.

To investigate these issues more, Table 2.16 provides, by sector, detailed information about Board, Executive, and Non-Executive Ownerships.

**Table 2.16: Average Percentage of Ordinary Shares held by Insiders by Sectors for Entire Period (2004-2006)**

| | Financial sector | Non-Financial sectors | All sectors |
|---|---|---|---|
| Board ownership | 48.19 | 48.45 | 48.34 |
| Executive ownership | 6.64 | 4.95 | 5.65 |
| Non-executive ownership | 41.55 | 43.5 | 42.69 |
| No. of observations | 215 | 304 | 519 |

This table reports mean values of shareholding by insiders by sectors (Financial and Non-Financial sectors). Board Ownership is defined as the total percentage of ordinary shareholdings by all directors; Executive ownership represents the percentage of ordinary shareholdings by Executive directors. Non-executive ownership represents the percentage of ordinary shareholdings by Non-executive directors.

The findings, generally, suggest that firms in Jordan are dominated by board ownership in both the financial and non-financial sectors. Almost half the market for all sectors is held by the board of directors. Executive ownership in the financial sectors is higher than in the non-financial sectors by about 2 per cent. On the other hand, non-executive director ownership represents a large portion in all sectors, although it is greater in the non-financial sectors by almost 2 per cent.

The highest board ownership is reported in the Services sector with around 54 per cent, (not reported in the table) followed by the Financial sector with 48.19 percent and finally, the Industry sector with about 45 per cent.

Within sub-sectors the highest board ownership is found in Technology & Communications, about 94 per cent, followed by Hotels & Tourism with 71 per cent

and the lowest board ownership is found in Glass & Ceramic Industries with approximately 25 per cent. On the other hand, the highest executive ownership is found in the Paper & Carton Industry with about 18 per cent, while the lowest executive ownership is reported for Utilities & Energy.

#### 2.5.3.2. Ownership and Identities of Large Shareholders

When ownership is dispersed, individual shareholders do not have incentives to monitor the behaviour of managers. They can act as 'free-riders' and are more likely to rely on others to govern the management (La Porate et al., 1999). In contrast, in the situation of concentration of ownership among large shareholders (i.e. individuals/families, financial, non-financial, and other largest )[1], there may be greater incentives to be involved in the control process than small ones, due to their greater capability to bear the expense of collecting information on management behaviour, to the benefit of corporate performance (Stiglitz, 1985). However, the presence of a large shareholder may lead to higher agency costs inside the firm, since large shareholders may have incentives and power to expropriate minority shareholders and to divert corporate resources (Sheifer and Vishny, 1997, La Porta et al., 1999 and Holderness, 2003).

Several empirical papers investigate the relationship between large shareholders and corporate performance, and generally find mixed results. For example, McConnel and Servaes (1990) find a positive correlation between shareholdings of large investors and corporate performance based on market-to-book ratio. Leech and Leahy (1991) find a positive relationship between external shareholders and performance for the UK companies. Seifert et al. (2005) find a positive relationship between ownership of institutional investors and market-to-book ratio in Germany. Haniffa and Hudaib (2006)

[1] We use large shareholders and blockholders interchangeably throughout the chapter.

find a positive relationship between the five largest shareholders and corporate performance of Malaysian listed companies.

On the other hand, a study by Demsetz and Lehn (1985) finds an insignificant relationship between stockholding by 5 and 20 largest shareholders on firms' performance by using ROE as a performance measure. Holderness and Sheehan (1988) find no difference in the performance of various firms, whether shareholding in their corporation is concentrated or dispersed. Moreover, recent findings by Davies et al. (2005) and Mura (2007) indicate a strong negative correlation between blockholders and corporate value for UK companies**.**

#### 2.5.3.3. Foreign Ownership

Monitoring may also be performed by foreign investors, in the view of Khanna and Palepu (1999), as emerging markets integrate with the global economy. Several studies on international business suggest a likelihood that foreign investors will have more positive performance effects on local firms than domestic institutions, especially in emerging market economies. For example, Hanousek et al. (2004) show that foreign ownership has a positive effect on corporate performance, attributed to a better monitoring ability. Mitton (2002) and Lins (2003) both find that firm performance is positively related to outside ownership in emerging markets. Moreover, recent findings in Turkey (Aydin et al, 2007) show that foreign equity investors have significant and positive effects on firm performance. This supports the view that foreign investors complement domestic institutions as external governance agents. Following the market liberalization of the Amman Stock Exchange in 1995 foreign investors are increasingly investing in Jordanian listed firms and in the view of Shleifer and Vishny (1986), such

involvement can provide incentives for shareholders to monitor managerial performance and act in a manner that enhances firm value. In an Indian context, Khanna and Palepu (1999) find that as emerging markets become integrated into the world economy, foreign investors exercise a valuable monitoring role.

Listed companies in Jordan are required, by law, to disclose the names of the company's large shareholders (that is, those with shareholdings of 5 per cent or more) and the number of shares owned by each of them[1].

Table 2.17 presents detailed descriptive statistics about ownership concentration and largest shareholders in Jordanian firms.

Our results show that the total average number of blockholders (shareholders of 5 per cent and more) in the sample companies is 3.53 and this number ranges from 1 to 8 largest shareholders. The average number of local (Jordanian) blockholders is 2.86 and this number ranges from zero to 7. Finally, the average number of foreign blockholders is 0.67 and this number ranges from zero to 4.

The figures in the table show an important feature of the Jordanian companies, according to our sample, that more than 46 per cent of the market is held below the disclosure threshold (5 per cent).

The figures in Table 2.17 also show that, on average, the sum of stakes of all investors that hold equity greater than 5 per cent is 53.55 per cent of shares during the sample period and it seems stable over time. In fact, this proportion is larger than is found in Continental Europe and USA and UK, 49.6 per cent and 10.9 per cent respectively, but

[1] JSC Instructions of Issuing Companies Disclosure, Accounting and Auditing Standards 2004, Article 4b4.

within the range of those in France and Germany, 52.4 per cent and 58.1 per cent respectively (Thomsen et al, 2006).

**Table 2.17: Largest Shareholders***

| | 2004 | 2005 | 2006 | All Years (2004-2006) |
|---|---|---|---|---|
| Number of large local shareholders | 2.93 | 2.83 | 2.84 | 2.86 |
| Number of large foreign shareholders | 0.62 | 0.70 | 0.67 | 0.67 |
| Total number of larges shareholders | 3.55 | 3.53 | 3.51 | 3.53 |
| Largest shareholder | 28.93 | 29.80 | 30.03 | 29.29 |
| Three largest shareholders | 46.91 | 46.47 | 47.79 | 47.09 |
| Five largest shareholders | 52.57 | 51.78 | 53.16 | 52.53 |
| Sum of all shareholders with ownership greater than 5 % | 53.64 | 52.87 | 54.05 | 53.55 |
| Float | 46.36 | 47.13 | 45.95 | 46.45 |
| No. of observations | 159 | 168 | 192 | 519 |

* Reported disclosure rule is 5 per cent.

This table shows the number and the percentage of shares by the largest shareholder in the firms. Largest is equal to the percentage of outstanding equity held by its largest shareholder; Three largest shareholders is the percentage of outstanding equity held by its three largest shareholders; five largest shareholders is the percentage of outstanding equity held by its five largest shareholders. Sum of all shareholders is equal to the sum of all largest shareholder above the disclosure threshold (5 per cent). Float is equal to the total percentage of ordinary shareholding held below the disclosure threshold.

Among the largest shareholders, the largest shareholder owns, according to our sample, 29.29 per cent, the three largest own 47.09 per cent and the five largest own 52.53 per cent and these figures seem stable over time. Moreover the largest shareholder owns one-third of the stocks in all listed companies. Therefore, we can conclude that the

Jordanian system is characterised by the presence of strong blockholders. Thus, the main agency in the Jordanian market problem seems to be between largest shareholders and minority shareholders. If this is the case, more policies need to be in place to protect minority rights.

Table 2.18 shows, for all listed firms, the distribution of the major blockholders in the entire period (2004-2006). Blockholders are divided into four ownership categories for both local ownership and foreign ownership. To delve deeper into this issue and provide further evidence to the existing literature, this study makes a distinction between the two most important categories of foreign shareholders, namely, foreign financial institutions and foreign industrial corporations (i.e. companies). Since the nature of these two different classes of investors and their motivations are fundamentally different, the aggregation of them into one common class of shareholders masks certain important results which can only be determined if they are analysed separately.

Controlling block owners as a group own, on average, 53.55 per cent, with 40.80 per cent for local (Jordanian) ownership and 12.75 per cent for foreign (non-Jordanian) ownership.

Among large local shareholders, 16.92 per cent of shares are held directly by large individuals/families. Our result is in line with what is reported in previous studies (see, La Porta et al., 1999; Claessens et al., 2002; Anderson and Reeb, 2003; Villalonga and Amit 2006, among others) who find that in many countries around the world, including Western Europe, South and East Asia, Latin America, Africa and the Middle East, the vast majority of publicly traded firms are family controlled. This finding also confirms our earlier findings on the influential role of families in the Jordanian equity market. This also shows us that, in the Jordanian experience, there is no separation between

ownership and control, which may increase the agency conflict between families and other shareholders in the company especially minority shareholders.

Large financial institutional holders, such as banks, insurance companies, financial and brokerage firms), account for approximately 14 per cent. This low proportion of ownership can be explained by underdevelopment of investment, mutual, and pension funds. Another reason may be that the investment instruments are still limited to stocks and bonds, derivatives and short selling are not used in the Jordanian equity market. Large institutional shareholders as a group appear to be interested in Insurance, Financial and Real Estate (17.70 per cent) and in Services (16.35 per cent). Their weakest participation is in the Banking sector (2.31 per cent).

Companies (non-financial) as blockholders are interested more in Services (6.85 per cent), Manufacturing (5.83 per cent), Insurance, Financial and Real Estate (3.03 per cent), and finally, Banking (1.98 per cent).

State/State agencies[1] as large shareholders held on average 5.01 per cent and the vast majority of this proportion is owned by The Social Security Corporation[2].

This low proportion of government ownership observed in the Jordanian market is in contrast to what is reported in other countries. For instance, the State ownership of large publicly traded companies in Singapore, New Zealand, Norway, and Spain is 45, 25, 35, and 30 per cent respectively (La Porta et al.1999).

[1] The government (state) shares are either shares owned by government through the Jordan Investment Corporation or by a government agency such as the Social Security Corporation.

[2] The Social Security Corporation is a government-owned and managed entity whose main objective is to provide pensions to all insured persons after retirement or in case of disability or to their heirs after death and to insure them against Work Injuries and Occupational Diseases. The Social Security Corporation has an investment unit called "The Investment Unit", which was established in 2003 for investing the funds of the Social Security Corporation.
The stock portfolio of the Social Security Corporation is considered as the biggest portfolio in the ASE, at 3 billion JD and is well diversified (Al Fanik, 2006).

**Table 2.18: Structure of Capital and Largest Shareholders Identity in Jordanian Listed Firms for the entire period (2004-2006)***

| | Banks | Insurance, Financial and Real Estate | Services | Manufacturing | All Listed Firms |
|---|---|---|---|---|---|
| **Local ownership** | | | | | |
| Individual/Families | 13.40 | 19.03 | 13.97 | 17.66 | 16.92 |
| Institutional Investors | 2.31 | 17.70 | 16.35 | 12.17 | 14.06 |
| Companies (Non-financial) | 1.98 | 3.03 | 6.85 | 5.83 | 4.81 |
| State/State Agencies | 8.25 | 0.80 | 9.97 | 5.00 | 5.01 |
| Sum of local shareholders with ownership greater than 5% | 25.94 | 40.56 | 47.14 | 40.66 | 40.80 |
| **Foreign ownership** | | | | | |
| Individual/Families | 2.77 | 0.94 | 3.18 | 2.69 | 2.23 |
| Institutional Investors | 23.80 | 7.64 | 5.76 | 2.61 | 6.80 |
| Companies (Non-financial) | 2.25 | 0.79 | 2.36 | 6.88 | 3.47 |
| Governments | 1.66 | 0.00 | 0.22 | 0.15 | 0.25 |
| Sum of foreign shareholders with ownership greater than 5% | 30.39 | 9.37 | 11.52 | 12.33 | 12.75 |
| Sum of all shareholders with ownership greater than 5% | 56.33 | 49.93 | 58.66 | 52.99 | 53.55 |
| Float | 43.67 | 50.07 | 41.34 | 47.01 | 46.45 |
| No. of observations | 45 | 170 | 116 | 188 | 519 |

* Reported disclosure rule is 5 per cent.

This table reports mean values of shareholding by large shareholders (local and foreigners). *Individual/Families* is defined as the total percentage of ordinary shareholdings by individual/families; *Institutional Investors* represents the percentage of ordinary shareholding by banks, insurance, financial and brokerage firms; *Companies'* ownership is the total percentage of shares owned by non-financial companies; and *State or its agencies'* ownership is the total percentage of shares owned by the government or its agencies. *Governments'* ownership is the total percentage of shares owned by the foreign government. *Sum of local (foreign) shareholders* is equal to the sum of local (foreign) large shareholders above the disclosure threshold (5 per cent). *Sum of all shareholders* is equal to the sum of all large shareholder above the disclosure threshold (5 per cent). *Float* is equal to the total percentage of ordinary shareholding held below the disclosure threshold (i.e. 5 per cent).

An explanation for the low proportion of government ownership in Jordan is the privatization programme that Jordan launched in 1996, as a part of its wider economic reform programme. So far, 66 transactions in the privatization programme have been completed. More than US$ 1300 million and over US$ 1 billion have been attracted in investments associated with privatization, particularly in telecom, water, transport and other privatized sectors. The first major step towards privatization was that of the Telecommunication Corporation, which was transformed into a public shareholding company in 2000. The privatization programme in Jordan ranks as one of the most successful programmes in the Middle East Region (The World Bank Group)[1]. The percentage of capital owned by the state as a blockholder is important for almost all sectors except Insurance, Financial and Real Estate.

Table 2.18 also presents, for all listed firms, the percentage of shares owned by foreigners. Foreign investors as large shareholders held on average 12.75 per cent. One important finding from our study is that, as we can notice, large foreign investors have an important involvement in all sectors, especially the Banking sector. Foreigners as large shareholders hold 30.39 per cent in the banking sector, which is higher than total local holdings (i.e. 25.94 per cent). One possible explanation is that the Jordanian banking sector has been developing rapidly. Creane et al. (2004) indicate that the banking sector of Jordan is ‘‘well developed, profitable, and efficient". Furthermore, foreign investors in Jordan enjoy complete freedom of capital movement and no taxes on capital gains or cash dividends, in an attractive investment structure and open economy. In fact, the foreign investors' contribution in the Jordanian capital market is

[1] For more details, please see: The Executive Privatization Commission: http://www.epc.gov.jo.

one of the highest in the world (OECD, 2006); for example, foreign investors' account for almost half the market capitalization of all sectors in 2007.

As for the identity of the shareholders, we notice that individual/family investors as large owners have an important involvement in all sectors. They account for the highest percentages of first, second and third largest owners, as shown in Table 2.19.

**Table 2.19: Large Shareholders' Identity in Jordanian Listed Firms***

| | **First Largest** | | **Second Largest** | | **Third Largest** | |
|---|---|---|---|---|---|---|
| | Freq. | Percent | Freq. | Percent | Freq. | Percent |
| **Identity of Large Local** | | | | | | |
| Individual/Families | 190 | 36.82 | 155 | 33.26 | 121 | 33.06 |
| Financial Investors | 121 | 23.45 | 128 | 27.47 | 103 | 28.14 |
| Non-financial Investors | 118 | 22.87 | 90 | 19.31 | 61 | 16.67 |
| Total | 429 | 83.14 | 373 | 80.04 | 285 | 77.87 |
| **Identity of Large Foreign** | | | | | | |
| Individual/Families | 16 | 3.10 | 6 | 1.29 | 21 | 5.74 |
| Financial Investors | 46 | 8.91 | 57 | 12.23 | 45 | 12.30 |
| Non-financial Investors | 25 | 4.84 | 30 | 6.44 | 15 | 4.10 |
| Total | 87 | 16.86 | 93 | 19.96 | 81 | 22.14 |
| Grand Total | 516 | 100 | 466 | 100 | 366 | 100 |
| No Large owners | 3 | | 53 | | 153 | |
| No. of observations | 519 | | 519 | | 519 | |

* Reported disclosure rule is 5 per cent.

This table reports the identity of the first, second and third largest shareholders (local and foreigners). *Individual/Families* is equal to the percentage of the large shareholders when they are individual/family; *Institutional Investors* is equal to the percentage large shareholders when they are banks, Insurance, Pension fund, Financial and Brokerage Firms; *Non-Financial Investors* is equal to percentage of large shareholders when they are non-financial companies; State or its agencies' and Municipalities. No Large owners' means the company do not have a largest owner.

As large shareholders, their holdings may create a source of power for them. They may seek to satisfy their own family interests. Families as controlling owners may exercise their power by influencing firm policies, decision-making and exercising their voting rights to control managers' actions. This may result in suboptimal investment decisions, excessive compensation and substantial influence in selecting managers and directors, which can impede the efforts of more capable third parties in managing firms (Anderson and Reeb, 2003). Among local investors financial investors constitutes the second percentage and non-financial investors came third.

In contrast, for foreign investors, financial investors show the highest percentage for first, second, and third foreign block owners, followed by non-financial investors and individual/family investors constituted the lowest percentage.

To summarize, we have shown that Jordanian firms are, to a significant degree, subject to the influence of blockholders, with the largest shareholder holding on average close to a third of the shares in any firm, while overall, more than half of ownership is in the hands of small numbers of large shareholders (with more than 5 per cent). These large shareholders are predominantly local and, specifically, families. Nevertheless, foreign owners also have substantial influence, with large foreign blockholders accounting for at least 10 per cent or more of share ownership in most sectors, and 30 per cent in banking, where they outweigh local investors. Sectoral differences notwithstanding, therefore, it is clear that family members and foreign investors both have a significant ability to influence decision-making in Jordanian listed companies via using their substantial shareholding power.

## 2.6. Conclusion

In this chapter we provided a detailed picture of firm-level corporate governance structure of Jordanian listed companies, both financial and non-financial. We presented descriptive statistics on the board and ownership structure of a sample of financial and non-financial firms based on 519 companies for the years 2004 to 2006. A key motivating factor for this work is that it is the first study on evaluation of ownership and board structure in Jordan. It contributes to fill a gap in the literature related to emerging markets and, more specifically, the Middle East and North Africa (MENA) countries.

Our detailed investigation of Jordanian firms shows three important features concerning Jordanian companies. First, most firms, both financial and non-financial, are family firms. The boards and management are frequently dominated by the founding families. In particular, our results show that founder chairman and founder family directors constitute a relatively increasing proportion of the board, although founding family CEOs members represent a large proportion of the management of the Jordanian companies and show an increasing pattern over time. Our findings give an indication of the influential role of families in the Jordanian equity market. This is evidence that, in the Jordanian experience, there is no separation between ownership and control, which may be a source of agency conflict between the founding families and other shareholders in the company, especially minority shareholders.

Board size is relatively constant over time, and we find that, with an average of 9 directors, an increasingly high proportion whom are non-executives. It is still common to see in Jordan that the chairman of the board is also the CEO. However, the number of companies with role duality decreases over time.

Secondly, although CEOs' salaries and compensation are generally modest, when the same person holds the title of CEO and Chairman (Duality), the CEO's mean salary and compensation is above the total sample mean by approximately 34 per cent and 43 per cent respectively. Similarly both founder CEO salary and compensation are above the sample mean by approximately 9 per cent and 11 per cent, and those of family CEOs by about 13 per cent and 28 per cent, respectively.

Thirdly, our findings show that in Jordan ownership is characterised by the presence of strong, large shareholders, notably, family shareholders, local financial institutions and foreign shareholders. Family owners have an important involvement in all sectors. Their holdings may create a source of power for them. As a result, they are in a position to act in their own interests and may pursue private benefits rather than increase overall firm value or the rates of return to minority shareholders. Local institutional owners also hold large holdings in Jordanian firms. They may therefore influence company performance by contributing to, monitoring or ratifying the board's decisions, and focusing on projects that add value for shareholders. In addition, the findings show increasing numbers of foreign directors on the board, moreover, in every sector, significant and increasing proportions of shares are owned by large foreign blockholders; this raises an important question about the role - and determinants - of foreign ownership in enhancing corporate governance within Jordanian companies.

# Chapter 3

# Corporate Governance, Founding Family Ownership and Performance of Jordanian Listed Companies

## 3.1. Introduction

The relationship between corporate governance and firm value is the subject of an important and continuous debate in the corporate finance literature. There is a large body of finance and law literature that explores the interactions between corporate governance and firm performance in a number of countries, using either multi-country studies or country case studies (see Shleifer and Vishny 1997; La Porta et al., 1999; Claessens et al., 2000; Faccio and Lang, 2002; Lemmon and Lins, 2003; Klapper and Love, 2004; Florackis, 2005; Haniffa and Hudaib, 2006; Ghosh, 2006; and Black et al., 2006 among others). However, these studies have focused largely on either the Anglo-American context or the Asian experience. Considering that differences in legal and institutional environment, as well as firm-specific factors, induce cross-country differences in corporate governance[1], a more thorough understanding of the relationship between corporate governance, as well as firm specific-characteristics, and corporate performance is needed in other contexts. This is especially so as, despite the substantial research evidence on the effect of corporate governance mechanisms on corporate performance, these studies provide inconsistent findings. Consequently, confusion still exists as to whether specific governance mechanisms can adequately protect investors' wealth. The inconsistency of findings as to the governance role of several firm specific characteristics is evident in a number of survey papers on corporate governance (see, for example, Shleifer and Vishny, 1997; Denis, 2001; Denis and McConnel, 2003; and Gillan, 2006). There is no consensus, for example, on the type of relationship between managerial ownership, founding family ownership, board structure, large institutional

[1] See for example, La Porta et al., 1999; and Shleifer and Vishny 1997.

investors and large foreign investors and firm value[1]. Furthermore, prior studies also ignore important aspects of the board structure, such as CEO board membership, which could have an important effect on the effectiveness of governance. Finally, recent studies investigating the interaction between governance and value suggest that corporate governance can influence market values. If this is so, this should give firms an incentive to improve their governance. In practice, however, similar firms often have very different governance choices. For these reasons, there is an urgent need for greater understanding of corporate governance, particularly in the Arab region (Saidi, 2004; 2005; Omet, 2005 and Najib, 2007), where particular conditions apply, that may have an impact on corporate governance. In most Arab countries, most of the firms are family firms, and it is common for the founder and/or family members to hold significant influence in management, whether through chairmanship or membership of the board, and through the control of senior management positions (OECD, 2003)[2]. Such concentrated ownership in the hands of families is likely to lead to conflicts of interest between the controlling family and other (minority) shareholders.

In this chapter, we aim to address these issues in the literature by providing a detailed investigation of the impact of ownership and board structure on corporate performance using firm-level data from Jordanian companies.

---

[1] It has been argued, for example, that there is a positive relationship between family ownership and performance (e.g. Morck et al, 1988; Anderson and Reeb, 2003; Villalonga and Amit, 2006; Choi et al., 2007). On the other hand, another strand of literature shows contrary empirical findings (e.g. Morck et al, 2000; Faccio et al, 2001; Claessens et al. 2002; Barth et al., 2005; Bertrand et al., 2008). Furthermore, it may be suggested that, for example, managerial ownership can help ensure the interests of managers are aligned with those of shareholders, by constraining the consumption of perquisites and the pursuit of sub-optimal investment polices (incentive-alignment effect). On the other hand, managers may tend to be dilatory, accumulate private benefits and entrench themselves at higher levels of managerial ownership, in which case a negative relationship between managerial ownership and performance (entrenchment effect) would be expected (Florackis et al., 2009).

[2] Corporate Governance in the Morocco, Egypt, Lebanon and Jordan countries of the MENA region: MENA Regional Corporate Governance Working Group (2003)

There are several important features of our analysis, which, we believe, contribute to the literature on agency theory and corporate governance in several ways. First, it will contribute to the understanding of the role of agency issues in a developing country context in line with Shleifer and Vishny's (1997) call for more international studies on corporate finance. In particular, the research contributes to filling a gap identified in relation to corporate governance in the Arab region. Recent surveys and reports of corporate governance literature in the Arab World (Saidi, 2004; 2005; and Najib, 2007) has suggested shortcomings in the implementation of the Organization for Economic Co-Operation and Development (OECD) principles and standards, compared to industrialized countries. Any attempts to initiate corporate governance action plans and corporate sector reforms in these countries, require information and detailed assessment in order to set priorities and inform government. In this respect, there is need to embark on a substantial analysis of corporate governance in the Arab region. Whilst this study focuses on Jordan, it will be valuable to other Arab economies in the Middle East, all of which share a common heritage, culture, language and religion and where there are strong similarities in regulatory and institutional environments and in the corporate ownership structure of firms.

Second, this study extends previous research on corporate governance (see, among others, Yermack, 1996; Eisenberg et al., 1998; Haniffa and Hudaib, 2006; and Ghosh, 2006) by considering the impact of an important board characteristic (i.e. when the CEO is a member of the board) on firm performance which can potentially work as an important governance devices.

The main issues we address in this chapter are as follows. First, we consider whether the classical agency theory of conflict between managers and shareholders holds for

Jordanian firms. In the existing performance-governance literature, the main corporate governance/agency issue is the one between managers and shareholders. Consequently, prior research on the subject puts more emphasis on the interactions between managerial ownership, incentives, entrenchment and performance. There is relatively little work addressing agency issues that may be dominant in different countries, so our study is important to fill this gap. Second, we examine the impact of various corporate governance mechanisms (board size, composition, duality, CEO board membership, ownership concentration, large domestic institutional investors and large foreign ownership) on firm performance in Jordan. Furthermore, we suggest several policy implications from the findings of this study.

To conduct our investigation, we use a unique and reliable hand-collected firm-level data set that includes, among others, detailed information on the ownership structure, board structure and founding family ownership for a sample of 360 firm-year observations for Jordanian non-financial firms listed on the Amman Stock Exchange during 2004-2006. To conduct our empirical investigation, we employ pooled-OLS that help us to control for the endogeneity problem, which can arise in this context for several reasons (e.g. reserve causality, unobserved heterogeneity). In particular, we use pooled-OLS with one year lagged explanatory variables in an attempt to reduce the potential problem of endogeneity.

Our results present some important findings, especially with respect to the effect of founding family ownership on firm performance. We find a negative relationship between founding family ownership and corporate performance. The findings provide strong support for the view that the type of agency problem prevalent in the Jordanian context seems to be between founding family and other shareholders. The finding as to

the effect of founding family ownership on corporate performance is robust and does not change significantly with either board attributes or the presence of other lager shareholders. Managerial ownership does not play any role in the corporate governance of Jordanian firms, whereas family ownership aims to protect and preserve family wealth. This seems to be replacing managerial agency arguments. In other words, the traditional managerial agency explanations do not seem to hold. Instead, there is another agency issue, namely, conflict between founding family shareholders and other shareholders seems to hold in the Jordanian context.

Our analysis fails to detect any significant impact of board size or non-executive directors on firm performance. The fact that board size shows no impact on firm performance suggests that boards in Jordan do not seem to be important / significant in determining performance. Although we find Jordanian boards to be dominated by non-executive directors, the fact that they appear to have no impact on firm performance suggests that they may have been appointed less for their experience and knowledge than for other reasons such as political or because of connections with controlling shareholders such as families, who have the power to choose all the board members.

With regard to the role of the CEOs, the findings support the view that CEO duality has an adverse effect on firm performance. However, CEO membership in the board tends to have a positive effect on company performance. This suggests that the CEO can additionally exert a positive effect on firm performance by holding board membership. These findings suggest that if the CEO is a board member, he or she may facilitate and participate in the decision making process rather than dominate the decisions of the board, as may be the case when he/she is CEO and COB together.

With regard to ownership, the results show that ownership concentration is significant and positively related to the performance of Jordanian firms. The inverse relationship found between performance and large domestic institutional investors, however, suggests that domestic institutional investors are insufficiently oriented toward, or equipped for, the task of monitoring management and are thus unlikely to exercise effective governance. However, the empirical results show that large foreign investors have a significant and positive effect on firm performance. They imply that the monitoring function of foreign investors enhances firm performance and complements the relatively weak monitoring by domestic institutional investors. Our results suggest that foreign investors are a source of not only financing but also scarce monitoring skills in an emerging market such as Jordan. Finally, we find that corporate performance is positively associated with dividends; and negatively associated with size. Also, leverage has no significant impact on performance.

The rest of this chapter is organized as follows. In section 3.2 we review the related literature and establish our empirical hypotheses. Section 3.3 describes the data, variables and the methodology used in our analysis. Section 3.4 presents our empirical results. Section 3.5 contains policy implications from the findings of the study. Finally, section 3.6 offers our conclusions.

## 3.2. Related Literature and Hypotheses

The following discussion examines the potential relationships between internal corporate governance mechanisms and corporate performance with specific focus on executive ownership (managerial ownership), founding family ownership, board size and composition, duality, CEO board membership, ownership concentration, large local

institutional investors and large foreign ownership. In this section, we discuss several corporate governance measures and other explanatory variables that may be related to corporate performance.

### 3.2.1. Managerial Ownership

Managerial ownership has been suggested as a potential incentive mechanism that serves to align the interests of managers with those of shareholders, since it provides directors with incentives towards firm value maximization (Jensen and Meckling, 1976). As their managerial ownership increases, managers are less likely to divert resources away from value maximization as they bear a large proportion of the cost of their actions. Accordingly, there is a positive relationship between the level of managerial ownership and performance (see for example, Jensen and Meckling, 1976; Mehran, 1995; Florackis et al., 2009 among others). Their findings report a positive association between managerial shareholding and firm value at very low levels of shareholding, suggesting that managers are more likely to perform well as their share ownership increases, reflecting their incentive to maximize firm value when they have a large stake in the firm.

However, another strand of literature offers evidence that the relationship between managerial ownership and performance (the alignment effect) may not be linear (see for example, Morck et al., 1988; McConnell and Servaes, 1990; Short and Keasey, 1999; Florackis, 2005 and Davies et al, 2005 among others). In particular, the positive relationship between extent of executive shareholding and firm performance applies only up to a point; thereafter, company performance declines. According to this so-called entrenchment hypothesis, at low or high levels of ownership, alignment is greater

and so ownership is positively related with firm value, whereas at intermediate levels of ownership there is a tendency towards entrenchment. The result is expected to be a negative relation with firm value, since this could give managers more controlling power, enabling them to allocate firm resources for their own interests, regardless of the effects on other shareholders.

Given the mixed theoretical and empirical evidence, the relationship between managerial ownership and firm performance for Jordanian firms becomes an empirical matter. Of relevance here is that, in Jordan, most of the firms are family firms where the founder and/or family members play a crucial role in the day-to-day business of the firm. There is evidence from a number of sources[1] of the prevalence in Jordanian companies of appointment to management positions on the basis of kinship or friendship, rather than on the basis of ability or education, given the control exercised by many founding families. In such a situation, the implementation of corporate governance principles is impeded by managers' limited autonomy, flexibility, and objectivity to monitor company activities and to achieve its objectives. Furthermore, the lack of professionalism in the management of public shareholding companies in Jordan is said to be a widespread problem[2].

In order to analyse the relationship between managerial ownership and firm performance in the Jordanian context, we include a variable that refers to the percentage of equity ownership held by executive directors and their relatives[3].

[1] See for example: World Bank, Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment (Jordan) (June, 2004) and Corporate Governance in the Morocco, Egypt, Lebanon and Jordan countries of the MENA region: MENA Regional Corporate Governance Working Group (2003).
[2] Khaled Wazani, Economic Advisor. The Economic Policy Dialogue. Issued by the Jordanian Forum for Economic Development (JFED), First issue, September 2003, Amman – Jordan.
[3] Relatives are Husband, Wife and Minor Children.

### 3.2.2. Founding Family Ownership

In Jordan, as in other Arab countries, a large number of corporations are owned by families[1,2]. However, little is known about how family ownership affects firm performance. Family ownership may be a source of comparative advantage through potential for reduction in managerial agency costs and maximization of firm value (Demsetz and Lehn, 1985). Founding families also tend to be a stable presence in their firms and their long tenure may incline them to take a long-term view. Moreover, they maintain longer relationships with external bodies such as suppliers (Anderson and Reeb, 2003). On the other hand, founding families may have the potential incentives and power to act for their own benefits at the expense of firm performance. As a result, suboptimal investment decisions, excessive compensation and continued employment of incompetent owner-managers could increase agency costs (Fama and Jenson, 1983; Shleifer and Vishny, 1997). Family owners have also been found to be risk-averse and therefore destroy firm value (Thomson and Pederson 2000).

Several studies find a significant relationship between family firms and firm performance. Anderson and Reeb (2003), in a study of the relationship between family firms and firm performance in the US, find that family firms perform better than nonfamily firms. Maury (2006) shows that in Western Europe, family firms managed by the founding family are more profitable than nonfamily firms. Another strand of the literature, however, shows contrary empirical findings. For example, Claessens et al. (2002) show that in East Asian countries, family firms underperform relative to

[1] For example Jordan Chemical Industries by the Al Taher family, Ready Mix Concrete and Construction Supplies by Al Alammy family, Specialized Investment Compounds by the Al Salfiti family, Printing and Packaging by the Al Fakori family, Darwish Al-Khalili & Sons by Al Khalili family, Jordan Industrial Resources by the Al Muasher family and Arab International Food Factories by the Abu Khadijeh family etc.

[2] Worldwide, the majority of businesses are family owned (La Porta et al., 1999; Claessens et al., 2000; Anderson and Reeb, 2003; Villalonga and Amit 2006).

nonfamily firms. Faccio et al. (2001) add that family control may harm minority shareholders in East Asian firms where transparency is low. Barth et al. (2005) show that, in Norway, family firms owned and managed by the founding family are less productive than nonfamily firms.

More recent studies indicate the importance of the founding family management and family structure in family firms. Villalonga and Amit (2006), in the US, find that founder-CEO firms outperform nonfamily firms; however, when descendants serve as CEOs, firm value is destroyed. Similarly, in Canada, Morck et al. (2000) find weak financial performance in firms controlled by an heir. Bloom and Van Reenen (2007) find that in the US, France, Germany, and the UK, poor management practices are more prevalent in family firms managed by a founder's descendant. Bertrand et al., (2008), in Thailand, find that greater involvement by founders' sons is associated with lower firm-level performance, especially when the founder is dead. Contrary to this trend, the research in France by Sraer and Thesmar (2007), find family firms to perform well, even if they are managed by descendants of founders.

In Jordan, family business ownership is prevalent. Moreover, even in listed companies, due to limitations of prevailing regulations, majority owners continue to exercise a large measure of control. The implication of these factors is that ownership rights and management control are concentrated in the hands of a small circle of family members. Therefore, in contrast to the agency conflict between managers and their widely dispersed shareholders which is prevalent in the Anglo-Saxon countries, agency problems in Jordan are more likely to be between founding family shareholders and minority shareholders. Given the incentives and opportunity for the former to pursue their own interests at the firm's expense, and the possibility of incompetent managers

holding office by virtue of membership of a close connection with the founding family, it may be predicted, therefore, that founding family ownership has a negative relationship with performance. Founding family ownership is defined as the percentage of shares held by founding family and their relatives.

### 3.2.3. Board Variables

The board, as the agent of the shareholders, is an internal governance body established to monitor management behaviour on behalf of shareholders and to protect them from managers who may pursue their personal interests or otherwise act in a manner contrary to the best interests of shareholders (Jensen and Meckling, 1976).

Board size is widely believed to be an important factor in determining the effectiveness of corporate governance (Pearce and Zahra, 1992; Jensen, 1993). However, existing studies disagree as to the effect of board size. Some researchers claim that large boards reduce value because, as board size increases, difficulties of coordination, communication and process outweigh the advantages of having more people to draw on (Yermack, 1996; Eisenberg et al., 1998; and Florackis et al., 2009). Raheja (2005), also, claims that larger board size results in a less effective monitoring role, because of free-riding problems. Others argue that larger boards are more effective because they can offer a wider perspective and better guidance as the strategic options of the firm (Pearce and Zahra, 1991).

In addition to board size, the effectiveness of a board may also depend on its composition. Boards dominated by non-executive directors are said to provide more independent monitoring and to be more likely to be independent of the CEO (Jensen, 1993; Agrawal and Knoeber, 1996). Non-executive directors may also contribute

positively to the quality of directors' deliberations and decisions and provide strategic direction leading to enhanced performance (Pearce and Zahra 1992). Non-executive directors may bring additional knowledge, incentives, and skills needed for monitoring, discipline, and guidance of managers, thereby assisting to alleviating conflicts of interest between insiders and shareholders (Harris and Raviv, 2008). Conversely, some researchers argue that non-executive directors often lack information about the firm, are too busy to contribute effectively, do not bring the requisite skills to the job, and may owe their position to management, giving them an incentive to accept management decisions to safeguard their positions in future (Hermalin and Weisbach, 1991; Franks et al., 2001; Hart, 1995).

Corporate governance literature offers no conclusive evidence on the effect of appointing outside directors. Yermack (1996) finds a positive association between the proportion of outside directors and Tobin's q, while Millstein and MacAvoy (1998) find that US firms with a higher proportion of active independent board members performed much better than those with passive, non-independent boards. Choi et al. (2007) find a strong positive relationship between independent directors and firm performance in Korea. In contrast, a negative or no relationship between the proportion of outside directors and firm performance is reported by Hermalin and Weisbach (1991); Agrawal and Knoeber (1996); Mehran (1995); Haniffa and Hudaib (2006) and Florackis et al., (2009).

Another issue debated in the literature is the influence on the board's effectiveness of the Chief Executive Officer's (CEO) duality. Fama and Jensen (1983) argue that the positions of board chairman (COB) and CEO should be separated, to mitigate the agency problem. Similarly, the Cadbury (1992) report on corporate governance of UK

firms warns of the high probability of opportunistic behaviour on the part of insiders in the absence of a separation of the two positions.

However, there is no consensus in the literature, as to whether the separation of the two positions increases efficiency or not. Fosberg and Nelson (1999), studying a change of leadership structure in an effort to control agency problems, use data from Compustat to find that corporate performance improved significantly in the three years following the change to a separate leadership structure. On the other hand, there are studies which find a negative relationship. For example, Rahman and Haniffa (2005) in a study on Malaysian corporations find that accounting performance of companies with CEO's role duality is lower than in companies with separate roles. This result is similar to the finding of Dahya et al. (1996) from a study in the UK, that accounting performance of companies is reduced in a context of duality. Moreover, some studies find no relationship between duality and corporate performance (Brickley et al. 1997; Hudaib and Haniffa, 2006). To our knowledge, only one study has been conducted in an Arab country, by Elsayed, (2007) in Egypt. He finds no evidence of an impact of CEO duality on corporate performance. However, inclusion in the model of an interaction term between industry type and CEO duality results in a finding of impact of CEO duality on corporate performance that varies across industries. In addition, when firms are categorized according to their financial performance, Elsayed (2007) finds a positive and significant impact of CEO duality only when corporate performance is low.

These variables of board characteristics merit investigation in Jordan, where a range of board characteristics and structures are possible in law. Jordanian boards of directors are organized in accordance with Company Law (1997). The Company law (CL) sets the basic requirements for the board structure, liabilities and responsibilities. Boards in

Jordanian companies have a one-tier board structure in which both executive and non-executive directors sit on the same board. The board size ranges in number from three to thirteen. At least three members must be non-executive, to comply with audit committee requirements. However, the company law makes no stipulations as to board members' skills, independence, possible committee functions, and board performance evaluation. Furthermore, company law does not require the separation of the Chief Executive Officer and the Chairman of the Board positions, nor does it require that the CEO must be a member of the board. A person may be a voting member of a board of directors and also serve as the company's CEO.

In the Jordanian context, there is no available empirical evidence on the impact of board structure on firm performance. However, recent reports[1] indicate that both boards and management are frequently dominated by the controlling family. There is a widespread tendency for boards of Jordanian companies to lack independence from controlling shareholders and from management. Attention is drawn to an absence of rules governing the composition of the board of directors, inadequate guidelines governing the balance of power between executive and non-executive directors, and the lack of awareness of the concept of independent directors.

Therefore, and in order to test the effectiveness of board variables in mitigating agency problems and, thus, generating better performance, we include four variables in our empirical model: a) the total number of directors (Board size), b) the ratio of the number of non-executive directors to the total number of directors (Non-executive directors), and c) a dummy variable which takes the value 1 when the roles of the Chief Executive

[1] See for example: World Bank, Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment (Jordan) (June, 2004); Corporate Governance in Morocco, Egypt, Lebanon and Jordan countries of the MENA region: MENA Regional Corporate Governance Working Group (2003).

Officer and the Chairman of the Board (COB) are not separated and 0 otherwise (Duality), and d) a dummy variable which takes the value 1 when the CEO is also member of the board and 0 otherwise (CEO board member).

### 3.2.4. Concentration of Ownership

The presence of concentrated of ownership may contribute to mitigating or exacerbating some of the firm's agency problems. When ownership is dispersed, individual shareholders have no incentive to monitor the behaviour of managers. They can be 'free-riders', relying on others to govern the management (La Porta et al., 1999). By contrast, when ownership is concentrated among controlling shareholders, they have the incentives and resources to monitor management decisions, possibly resulting in better corporate performance (Stiglizt, 1985; Shleifer and Vishny, 1997). However, such concentration may also bring costs, such as potential agency problems between large and small shareholders, as the controlling owner may have incentives and power to expropriate minority shareholders and to divert corporate resources (Shleifer and Vishny, 1997 and La Porta et al., 1999).

The empirical evidence on the impact of concentration ownership on firm value is mixed. McConnel and Servaes (1990) find a positive correlation between shareholdings of large investors and corporate performance based on Tobin's q. Leech and Leahy (1991) find a positive relationship between external shareholders and performance for UK companies. In contrast, Davies et al. (2005) and Mura (2007) indicate a strong negative correlation between blockholders and corporate value for UK companies; and Haniffa and Hudaib (2006) find a negative relationship between the five largest shareholders and corporate performance of Malaysian listed companies.

Listed companies in Jordan are required by law to disclose the names of the company's large shareholders and the number of shares owned by each of them, where such constitute 5 per cent or more[1]. In order to analyse the impact of ownership concentration on corporate performance, therefore, we include a variable that refers to the sum of the stakes of shareholders with an equity stake greater than 5 per cent, as a percentage of the outstanding shares equity, that is, equity other than founding family if they own 5 per cent or more.

### 3.2.5. Local Institutional Investors

The presence of institutional investors as equity owners is one of the most important external control mechanisms affecting governance. Institutional investors may also have both the incentives and the power to monitor management performance and enhance firm value (Shleifer and Vishny, 1997; Mitton, 2002 and Lins, 2003); have greater expertise and more power, are more likely to act rationally (Dong and Ozkan, 2008) and are capable of influencing management decisions directly through their ownership or indirectly by trading their shares (Gillan and Starks, 2003). Therefore, they are well placed to monitor, discipline, and impose controls on corporate managers. However, institutional investors may prefer to focus on information gathering and trading rather than exerting themselves to influence management (Chen et al., 2007).

Empirical evidence on whether institutional investors do indeed perform an effective monitoring rule is mixed. Whereas McConnel and Servaes (1990) report a positive relationship between institutional investors and firm value, Seifert et al. (2005) find the

[1] JSC Instructions of Issuing Companies Disclosure, Accounting and Auditing Standards 2004, Article 4b4.

relationship to be negative. Short and Keasey (1999) find that institutional investors play no role in determining firm value.

In many emerging countries, however, institutional investors are inefficient in monitoring, because of the underdevelopment of local capital markets and institutions, inadequate regulatory systems, and political constraints (Khanna and Palepu, 1999). It is also possible that institutional investors may be induced to cooperate with managers, rather than challenge their decisions, in order to protect other existing or potential business relationships with the firm (Pound, 1998; Cornett et al., 2007). Thus, they are loyal to corporate management and so tend to hold shares without reacting to management actions that are not in line with the interests of shareholders (Ferreira and Matos, 2008).

In Jordanian listed companies, there is a high level of shareholding by the large domestic institutional investors (including banks, insurance companies, and pension funds such as the Social Security Corporation Investment Unit[1]). For example, we find an average shareholding by the large domestic financial institutions of 19.45 per cent during the study period (2004-2006). However, Jordan is a small country, where there are relatively few local institutions that could effectively exercise oversight over management and offer an external safeguard against inefficient performance. Mutual funds are not common in Jordan and most of the local institutional investors are banks, insurance companies and pension funds such as the Social Security Corporation

[1] The Social Security Corporation is a government-owned and managed entity whose main objective is to provide pensions to all insured persons after retirement or in case of disability or to their heirs after death and to insure them against Work Injuries and Occupational Diseases.
The Social Security Corporation has an investment unit called "The Investment Unit", which was established in 2003 for investing the funds of the Social Security Corporation.
The stock portfolio of the Social Security Corporation is considered as the biggest portfolio in the ASE, it is considered also a well diversified portfolio of 3 billion JD (Al Fanik, 2006).

Investment Unit. In principle, such institutions, given the size of their holdings, should act as external governance agents for other shareholders, especially minority shareholders. However, it is assumed that such investors are unable to play an effective monitoring role, and that consequently there are negative effects on performance, for at least three reasons. First, banks and other institutional investors in Jordan commonly have significant business relationships with companies, since most banks are family-controlled[1], individually or through family related group companies. This weakens their monitoring ability. Secondly, whilst the Social Security Investment Unit is represented on the board of many Jordanian firms, the nominees of these positions are essentially civil servants who lack expertise in corporate matters. Thirdly, even if such members possess the relevant knowledge and skills to exercise oversight in corporate matters, there is no great incentive for them to so, as their tenure and career prospects are divorced from the performance of the companies in which they are appointed to the board.

In such a context, we would expect institutional shareholders in Jordan to adopt a passive stance towards monitoring and disciplining firms' management and, thus, we expect a negative relationship between local institutional investors and performance of the Jordanian companies. Local institutional ownership is defined as ownership of five per cent or more of the outstanding shares.

[1] For example Jordan Bank owned by the Al Kori family, Union Bank owned by the Salfiti family, Jordan Arab Investment Bank by the Al-Qadi family, Jordan National Bank by the Al-Muasher family, and Jordan Commercial Bank by the Al-Sayegh family.

### 3.2.6. Foreign Ownership

There is a body of evidence that the presence of foreign investors is more likely to result in enhanced performance of local firms compared to domestic institutions, especially in emerging market economies. For example, Hanousek et al. (2004) show that foreign ownership has a positive effect on corporate performance, which they attribute to a better monitoring ability. Mitton (2002) and Lins (2003) both find that firm performance is positively related to outside ownership in emerging markets. This supports the view that foreign investors complement domestic institutions as external governance agents. In a recent study, Ferreira and Matos (2008), based on extensive data of financial institution equity holdings from 27 countries around the world, find a significantly positive impact of foreign ownership on firm valuation. Shleifer and Vishny (1986) suggest that such outside ownership can motivate shareholders to monitor managerial performance and act in a manner conducive to increased firm value. In an Indian context, Khanna and Palepu (1999) demonstrate the valuable monitoring role performed by foreign investors as emerging markets integrate with the global economy. It is suggested that foreign institutional investors are often more instrumental in prompting changes in corporate governance practices than domestic money managers (Gillan and Starks, 2003).

One important and unique feature of the Jordanian equity market is the high level of involvement of foreign investors. The market liberalization of Amman Stock Exchange in 1995 opened the gateway to foreign investment in Jordanian listed firms. In fact, Jordan has one of the highest levels of foreign investment of market capital in the world (OECD, 2006). Ownership by foreigners has been on the rise since the beginning of the

2000's in all sectors. Table 3.1 shows the percentage of foreign ownership in shareholding companies by sector for the period 2001-2007.

**Table 3.1: Non-Jordanian ownership in listed companies by sectors as a percentage (%) of market capitalisation during the period 2001-2007**

| Year | Financial Sector | Services | Industry | All Market |
|---|---|---|---|---|
| 2001 | 47.43 | 19.67 | 27.87 | 38.51 |
| 2002 | 47.56 | 26.79 | 26.09 | 37.43 |
| 2003 | 46.28 | 24.29 | 30.1 | 38.84 |
| 2004 | 47.44 | 25.59 | 36.79 | 41.26 |
| 2005 | 49.77 | 26.19 | 38.09 | 45.04 |
| 2006 | 47.73 | 36.55 | 43.71 | 45.53 |
| 2007 | 50.73 | 36.15 | 51.88 | 48.95 |

This table reports foreign investor ownership in companies listed at the ASE as of year-end from 2001-2007 as a percentage of total market value. The Financial sector includes Banks, Insurance, Diversified Financial Services and Real Estate. The Services sector includes Health Care Services, Educational Services, Hotels & Tourism, Transportation, Technology & Communication, Media, Utilities & Energy, and Commercial Services. The Industry sector includes Pharmaceutical & Medical Industries, Chemical Industries, Paper & Carton, Printing & Packing, Food & Beverage, Mining & Extracting, Tobacco & Cigarettes, Engineering & Construction., Electrical Industries, Textile, Leather & Clothing, and Glass & Ceramics.
Source: Various Amman Stock Exchange Annual Reports.

The percentage of foreign ownership increased from 38.51 per cent of total market capitalisation in 2001 to 48.95 per cent in 2007, the investors coming from 102 countries around the world[1]. This increase suggests a preference for long-term gains

[1] There are around one million investors registered with the Securities Depository Centre (SDC) at the end of 2007, of them 947.6 thousand Jordanian investors, 41.2 thousand Arab investors, 3.8 thousand non-Arab investors, according to Samir Jaradat, CEO of Securities Depository Centre. Source*: Al-Raai Newspaper*, Saturday, January 12, 2008, Issue 13612, Vol. 37.

from improved corporate governance, as opposed to short-term investment return. In the case of the ASE, foreign investments are long-term investments, predominantly in international mutual and pension funds, together with foreign government contributions and strategic partnerships with Jordanian public shareholding companies[1].

Equity ownership by large foreign investors across the total sample (2004-2006) averages 10.92 per cent of total shares. This ratio shows a marked increasing pattern. The average ordinary shareholding by foreign investors increases by about 4 percentage points over the three years, from 8.71 per cent in 2004 to 12.16 per cent in 2006. There are also significant differences across firms. For the overall sample, the level of large foreign ownership ranges from 0 to 97.51 per cent.

In this chapter, we analyse the association between large foreign investors and firm value, on the assumption that such investors have the potential to enhance firm value through monitoring. We therefore anticipate a positive relationship between firm value and direct equity ownership by large foreign investors. Foreign ownership is defined as the percentage of outstanding equity held by foreign shareholders (that is, with shareholdings of 5 per cent or more).

### 3.2.7. The Role of Other Control Variables

In order to understand firm performance fully, we include a number of control variables that are likely to influence firm performance. The selection of control variables is dictated by the literature and data availability. In our equation for firm performance, we include size, leverage and dividends as control variables.

[1] Jalil Tarif, the CEO of the ASE. Meeting with the World Bank Mission, available on line: http://www.exchange.jo/pages.php?menu_id=-1&local_type=1&local_id=123&local_details=1

We control for the effect of firm size, since it is generally easier for larger firms to generate funds internally, they have better access to external finance and could benefit from economies of scale (Short and Keasey, 1999; Ozkan, 2002). Moreover, large firms tend to possess larger assets which can be used as collateral and they can borrow on better conditions (Ferri and Jones, 1979), all of which are conducive to better performance. However, smaller firms are presumably more closely held or family-owned, and this could create scope for greater family ownership. Moreover, according to Rajan and Zingales (1995), size may be inversely related to the level of information asymmetries between insiders and outside investors. Therefore, small firms may be more prone to agency problems, due to information asymmetries between inside and outside investors. Finally, the design of an efficient package of governance mechanisms may vary systematically by industry or size of the firm (Fama and Jensen, 1983). In our work, size (SIZE) is equal to the natural log of total sales in the Jordanian Dinar in constant prices.

The ratio of total debt (i.e. long term debt plus short term debt) to total assets is a measure of a firm's leverage. A positive effect on firm performance may be expected as a result of monitoring preformed by the lender; as argued by Stiglitz (1985) and provides tax shields as predicted by Modigliani and Miller (1963). Ross (1977) adds that increased leverage may convey positive news to the market concerning the firm's ability to service a larger amount of debt. However, too much debt increases the risk of bankruptcy, limits the firm's ability to raise new debt and subsequently may force firms to pass up valuable investment opportunities (Myers, 1977; Harris and Raviv, 1990). Tong and Ning (2004) add that high leveraged firms provide a negative signal that the

firm faces future financial problems. Under these arguments, one would expect a negative relationship between leverage and firm performance.

Finally, dividend is also controlled in the analysis. It is defined as the ratio of total dividends to total assets. Higher dividends may suggest the lack of sufficient growth opportunities for the firm. Firms with low profitable investment opportunities may return capital to shareholders in the form of dividends. On the other hand, some researchers contend that dividends may reduce the free resources in the firm and mitigate governance conflicts (Jensen, 1986). In addition dividend announcements provide a positive signal of future earnings (e.g., John and Williams, 1985). La Porta et al. (2000) suggest that high growth firms may pay more dividends in order to create a reputation for being moderate in expropriating wealth. They argue that this is more likely to happen in countries with relatively poor corporate governance structures. In this case, one would expect a positive relationship between dividend payout ratio and firm performance.

## 3.3. Sample and Methodology

### 3.3.1. Sample Selection and Data Collection

In our investigation, we begin with all the firms listed on the Amman Stock Exchange form 2004-2006, subject to the following restrictions: First, as has been the practice in previous studies, we exclude firms operating in the financial industry (e.g., banks, insurance companies, and diversified financial services) due to the differences in the applicable regulatory requirements. Second, a firm should have been listed for at least one full year as of the end of 2006. Finally, suspended or floated price companies are excluded due to illiquidity and incomplete data (i.e. missing data). This yields a usable

sample of 360 firm-year observations across three years (representing 80 per cent of the total non-financial listed companies). Table 3.2 presents the number of listed companies, the number of non-financial companies and the number of companies in the sample.

**Table 3.2: The number of the sample during the period 2004-2006**

| | 2004 | 2005 | 2006 | Full Period |
|---|---|---|---|---|
| No. of listed companies | 192 | 201 | 227 | 620 |
| No. of non-financial companies* | 138 | 146 | 165 | 449 |
| No. of firms in the samples | 109 | 117 | 134 | 360 |
| Proportion of sample to non-financial companies | 78.99% | 80.14% | 81.21% | 80.18% |

This table presents the number of listed companies, the number of non-financial companies, and the number of companies in the sample.

* Non-financial firms include the following sectors: Real Estate, Health Care Services, Educational Services, Hotels & Tourism, Transportation, Technology & Communication, Media, Utilities & Energy, and Commercial Services, Pharmaceutical & Medical Industries, Chemical Industries, Paper & Carton, Printing & Packing, Food & Beverage, Mining & Extracting, Tobacco & Cigarettes, Engineering & Construction, Electrical Industries, Textiles, Leather & Clothing, and Glass & Ceramics. Source: Various Amman Stock Exchange Annual Reports.

As explained in Chapter 2, data on firm's ownership, board and firm-specific accounting data are hand-collected from secondary sources, primarily the mandatory disclosure reports of these firms to the Jordan Securities Commission. The frequency of all variables is annual, and the values are measured as at the end of December for each year.

The annual reports of Jordanian public trading companies are prepared in accordance with, and are considered consistent with, international accounting standards. The annual reports supplied by management are also subject to external auditing, to certify that they are prepared in accordance with statutory and professional principles (international auditing standards). Finally, listed companies have been required, since 1997, to form auditing committees from the board of directors which exercise oversight over the preparation of annual reports. As a further check data pertaining to Jordanian public trading companies are also obtained from other sources, such as the Amman Stock Exchange annual company guide, Jordan Securities Commission (JSC), the Amman Stock Exchange (ASE), the Securities Depository Centre (SDC), and the companies' websites. These sources are used to verify the figures and statistics collected from annual reports.

The name(s) of company founding family is derived from the Memorandum of Association of each company under investigation, obtained via the archive held by the Companies Control Department, a unit at the Ministry of Industry and Trade. As a further robustness check, three experts from the financial sector, stock market and Companies Control Department gave assistance in correctly identifying the founding families. However, it is uncommon in Jordan for two or more families to have the same family name. Furthermore, it is easy to check whether the founding family is still in the firm or not, because the average age of Jordanian firms, on our sample, is low (i.e. 20 years).

### 3.3.2. Dependent Variable - Performance Measure

Previous empirical studies utilize two types of performance measures: accounting profit ratio (ROA); and market-price performance (Tobin's q), to observe the relationship between corporate governance and performance. It can be argued that accounting-based measures are both stable and less subject to speculative and exogenous shocks than market-based measures. It could, however, be suggested that the former can, therefore, be manipulated by managers. Furthermore, they are different in the time perspective, accounting profit is a backward-looking, while Tobin's q is a forward-looking measure of performance. Accounting based measures, as historical reports, are not directly affected by change in the equity market but by accounting practice in valuing assets and revenue recognition and emphasize accomplishment. Tobin's q, on the other hand, reflects the value investors assigned to a firm's intangible assets based on predicted future revenue stream. Nevertheless, Demsetz and Villalonga (2001) assert that the investors community who developed Tobin's q measurement do not "ignore the past in their attempts to determine reasonable expectations for the future profitability of firms" (p.213). The reason is that "high accounting profits are usually accompanied by high stock prices" (p.214). The use of the market value of the firm as numerator of Tobin's q to some significant degree reflects accounting profit rates.

In this chapter we use Tobin's q to investigate the relationship between corporate governance mechanisms and firm value, calculated as the ratio of book value of total assets minus book value of equity plus market value of equity to book value of assets. Tobin's q is the most common measure in empirical corporate governance research. Many other studies use this measure as the dependent variable in research on the effectiveness of corporate governance mechanisms (see among others, Ozkan and

Ozkan, 2004; Datta et al., 2005; and Florackis et al., 2009). Furthermore, we use ROA, defined as earning before interest and taxes to total assets, as a robustness check.

### 3.3.3. Independent Variables

In addition to size, leverage and dividends, we consider a wide set of potential governance mechanisms - as predictors of performance. These are the following: the percentage of shares held by executive directors and their relatives (Executive ownership), the percentage of shares held by founding family and their relatives (Founding family ownership), the number of directors in the board (Board size), the ratio of the number of non-executive directors to the total number of directors on the board (Non-executive directors)[1], a dummy variable which takes the value 1 when the roles of the Chief Executive Officer (CEO) and the Chairman of the Board (COB) are not separated and 0 otherwise (Duality), a dummy variable which takes the value 1 when the CEO is also member of the board and 0 otherwise (CEO board member), the percentage of sum of stakes of all shareholders with equity ownership greater than 5 per cent other than founding family ownership if they own 5 per cent and above (Concentration), the percentage of shares held by large local institutional investors (i.e. banks, insurance, financial and pension funds) with equity ownership equal or more than 5 per cent (Institutional investors), and the percentage of shares held by large foreign investors with equity ownership greater than 5 per cent (Foreign ownership).

Time dummies and industry dummies are also incorporated to capture industry specific effects. Table 3.3 provides list of the variables used in this study.

[1] For the purpose of this study we will refer to the definition of the Jordan Securities Commission to determine the non-executive directors. This specifies that "Any member of the Board of Directors shall be considered as non-executive, if the member is neither an employee of the Company nor receiving a salary there from".

**Table 3.3: Definition of Variables**

| Variable | Definition |
|---|---|
| **Dependent Variable** | |
| Tobin's q | The ratio of the book value of total assets minus the book value of equity, plus the market value of equity to the book value of assets. |
| **Independent Variables:** | |
| Executive ownership | The percentage of equity ownership held by executive directors and their relatives. |
| Founding family ownership | The percentage of equity ownership held by founding family and their relatives. |
| Board size | The total number of directors on the board. |
| Non-executive directors | The ratio of the number of non-executive directors to the total number of directors on the board. |
| Duality | A dummy variable: one indicates that the positions of CEO and chairman of board are held by one person; zero otherwise. |
| CEO board member | A dummy variable: one indicates that the CEO is also a member of the board; zero otherwise. |
| Concentration | The percentage of sum of stakes of all shareholders with equity ownership greater than 5 per cent less than founding family ownership if they own 5 per cent or above. |
| Institutional investors | The percentage of outstanding equity held by local banks, insurance and, financial firms and pension funds (that is, with shareholdings of 5 per cent or more). |
| Foreign ownership | The percentage of outstanding equity held by all foreign shareholders (that is, with shareholdings of 5 per cent or more). |
| Size | The natural log of the total sales in 2004 prices. |
| Leverage | The ratio of book value of short-term plus long-term debt divided by the book value of total assets |
| Dividends | The ratio of dividend payments to total assets. |

### 3.3.4. Methodology

We examine the determinants of corporate performance by utilizing pooled-OLS regression with lagged independent variables, using the following equations:

$$\text{Tobin's q}_{it} = \alpha_i + \beta_1 \text{ Executive ownership}_{it-1} + \beta_2 \text{ Founding family ownership}_{it-1} + \beta_3 \text{ Board size}_{it-1} + \beta_4 \text{ Non-executive directors}_{it-1} + \beta_5 \text{ Duality}_{it-1} + \beta_6 \text{ CEO board member}_{it-1} + \beta_7 \text{ Concentration}_{it-1} + \beta_8 \text{ Institutional investors}_{it-1} + \beta_9 \text{ Foreign ownership}_{it-1} + \beta_{10} \text{ Size}_{it-1} + \beta_{11} \text{ Leverage}_{it-1} + \beta_{12} \text{ Dividends}_{it-1} + \varepsilon_{it}$$

The dependent variable (Tobin's q) is measured for years 2006 and 2005 while the independent variables are measured for years 2005 and 2004 respectively. Specifically, firm performance (Tobin's q) is regressed on year lagged of executive ownership, founding family ownership, board size, non-executive directors' proportion, CEO duality, CEO board member, concentration of ownership, large local institutional ownership, large foreign ownership, size, leverage, and dividends. Using a lagged measure of the independent variables can reduce the problem of endogeneity (Rajan and Zingales, 1995; and Arslan et al., 2008). Also, we incorporate both time dummies and industry dummies in the analysis.

### 3.3.5. Sample Characteristics

Table 3.4 reports the descriptive statistics for the main variables used in our analysis. The performance variable measured by Tobin's q is 1.62. The average equity held by executive directors and their relatives is 5.07 per cent. Holdings of founding family owners and their relatives reach 22.09 per cent, on average, in our sample. This result suggests that many of the public companies in Jordan still have large founding family shareholdings. Ownership concentration averages 40.28 per cent and this value is

relatively constant over time, suggesting that Jordanian companies are relatively undiffused.

The average total equity ownership by large domestic institutional investors accounts for about 19.42 per cent of total shares. This ratio shows a marked decreasing pattern. The average ordinary shareholding by large institutional investors decreases by 4 percentage points over the three years, from 22.42 to 17.17 per cent. Equity ownership by large foreign investors across the total sample averages 10.92 per cent of total shares. This ratio shows a marked increasing pattern. The average ordinary shareholding by large foreign investors increases by about 4 percentage points throughout the sample period, from 8.71 per cent to 12.16 per cent.

The average board size is 8.32 directors. In terms of board composition, the average proportion of non-executive directors is 86.90 per cent and this value appears relatively constant over time, suggesting that non-executive directors continue to be in the majority in Jordanian boards. On average, firms tend to have at least seven non-executive directors.

With regard to the separation of the two leading roles of COB and CEO, there are 80 firms out of the final 360 observations (22.22 per cent) in which the positions are not separated. There is a decrease in the number of companies with role duality from 26 per cent in 2004 to 19 per cent in 2006; nevertheless, these results indicate that it is still common in Jordan for the chairman of the board to be also the CEO of the company. Finally, out of 360 observations, there are 247 CEOs who are also members of the board. Finally, the average market sale is 23.09 million Jordanian Dinar (i.e. about US$ 32.56 million), the leverage ratio is 13.29 per cent and the average dividend ratio is 3.28 per cent.

**Table 3.4: Descriptive Statistics**

| | **Full Sample** | **2004** | **2005** | **2006** |
|---|---|---|---|---|
| | Mean | Mean | Mean | Mean |
| Tobin's q | 1.62 | 1.48 | 1.75 | 1.61 |
| Executive ownership | 5.07 | 5.55 | 5.37 | 4.42 |
| Founding family ownership | 22.09 | 22.86 | 21.57 | 20.94 |
| Board size | 8.32 | 8.46 | 8.35 | 8.17 |
| Non-executive directors | 86.9 | 85.25 | 87.17 | 87.73 |
| Duality | 0.22 | 0.26 | 0.23 | 0.19 |
| CEO board member | 0.69 | 0.69 | 0.68 | 0.69 |
| Concentration | 40.28 | 39.32 | 40.34 | 41.01 |
| Institutional investors | 19.42 | 22.42 | 19.20 | 17.17 |
| Foreign ownership | 10.92 | 8.71 | 11.56 | 12.16 |
| Size | 6.68 | 6.65 | 6.72 | 6.67 |
| Leverage | 13.29 | 12.96 | 13.03 | 13.78 |
| Dividends | 3.28 | 3.68 | 3.6 | 2.69 |
| No. of observations | 360 | 109 | 117 | 134 |

This table provides summary statistics for the main variables used in our analysis. All variables are measured at the end of each year. Definitions for all the variables are provided in Table 3.3.

We compute the Pearson Correlation coefficient between corporate performance and the corporate governance variables and present the correlation matrix in Table 3.5. The results suggest that founding family ownership has a significant and negative correlation with Tobin's q. This coefficient suggests that if the founding family continues to keep its ownership in the firm, this will affect firm performance negatively, perhaps because market participants perceive families as using their holdings to obtain private benefits at the expense of minority shareholders. Institutional investors are

negatively correlated with firm performance, suggesting that their monitoring ability and their contribution to improving corporate governance does not exist.

Table 3.5 also shows that CEO duality has an adverse effect on firm performance. However, CEO membership in the board is positively correlated with performance, suggesting that firms with CEO board members are likely to facilitate and participate in the decision making process rather than dominate the decisions of the board, as may be the case when the same individual is CEO and COB together.

Firm size and leverage are negatively correlated with firm performance, suggesting that smaller firms are performing better than larger firms and, perhaps because agency problems increase with firm size, may contribute to this negative correlation. The negative correlation between leverage and performance suggests that too much debt increases the risk of bankruptcy, limits the firm's ability to raise new debt and subsequently may force firms to pass up valuable investment opportunities. Finally, dividend has a positive correlation with firm performance, suggesting that dividends can help reduce agency costs within the firm by reducing the cash available for managements to invest in projects that benefit management at shareholder expense (Jensen, 1986).

To test for possible multicollinearity (Table 3.5), we compute the variance inflation factor (VIF) for each independent variable and the largest one is 1.73, well below the rule of thumb cutoff of 10.0 for multiple regression models (Gujarati, 2003). Thus, we conclude that multicollinearity is unlikely to be a serious problem in this study.

**Table 3.5: Pearson Correlation Coefficients and Variance Inflation Factor (VIF) for the Variables Used in the Study.**

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | VIF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) Tobin's q | 1.00 | | | | | | | | | | | | | |
| (2) Executive ownership | 0.07 | 1.00 | | | | | | | | | | | | 1.30 |
| (3) Founding family ownership | -0.14* | -0.14* | 1.00 | | | | | | | | | | | 1.06 |
| (4) Board size | -0.07 | -0.17** | 0.02 | 1.00 | | | | | | | | | | 1.36 |
| (5) Non-executive directors | 0.06 | -0.16** | 0.08 | 0.25** | 1.00 | | | | | | | | | 1.44 |
| (6) Duality | -0.14* | 0.13* | -0.06 | -0.11 | -0.34** | 1.00 | | | | | | | | 1.32 |
| (7) CEO board member | 0.14* | -0.007 | 0.15* | -0.01 | -0.06 | -0.02 | 1.00 | | | | | | | 1.05 |
| (8) Concentration | 0.07 | 0.13* | 0.03 | -0.03 | 0.12* | -0.31** | 0.02 | 1.00 | | | | | | 1.73 |
| (9) Institutional investors | -0.02 | 0.13* | -0.02 | 0.06 | 0.04 | -0.15* | 0.002 | 0.27** | 1.00 | | | | | 1.58 |
| (10) Foreign ownership | 0.08 | -0.01 | 0.04 | 0.03 | 0.03 | 0.06 | 0.09 | -0.01 | -0.06 | 1.00 | | | | 1.06 |
| (11) Size | -0.13* | 0.15* | 0.01 | 0.39** | -0.02 | -0.03 | -0.05 | 0.11 | 0.08 | 0.02 | 1.00 | | | 1.61 |
| (12) Leverage | -0.14* | 0.06 | 0.01 | 0.12 | 0.09 | 0.12 | 0.01 | -0.001 | -0.11 | 0.01 | 0.30** | 1.00 | | 1.32 |
| (13) Dividends | 0.23** | 0.08 | -0.05 | 0.08 | -0.03 | 0.01 | 0.05 | 0.02 | 0.06 | -0.12 | 0.29** | -0.18** | 1.00 | 1.24 |

This table displays the Pearson Correlation Coefficient and Variance Inflation Factor (VIF) for the main variables used in the study. ** and * indicate the correlation is significant at the 1% and 5% levels respectively. Definitions for all the variables are provided in Table 3.3.

## 3.4. Empirical Results

### 3.4.1. Univariate Analysis

Table 3.6 reports univariate mean-comparison test results of the sample firm subgroups categorized on the basis of above and below median values for executive ownership, founding family ownership, board size, non-executive directors, duality, CEO board member, ownership concentration, large local institutional investors, large foreign ownership, size, leverage and dividends.

In panel A of Table 3.6 we test the hypothesis that firms with above median values of these characteristics differ from firms with below median values with respect to corporate performance (Tobin's q). The results are in line with our expectations and strongly support our hypothesis that founding family ownership exerts a significant influence on corporate performance. More specifically, we find evidence that firms with high performance have low founding family ownership, which possibly suggests that the main agency concern for Jordanian firms seems to be the one between founding family ownership and minority shareholders. This result is statistically significant at the 1 per cent level.

There is also evidence that firms in which the roles of CEO and COB are separated have higher corporate performance relative to those in which these roles are held by the same person. Furthermore, the results suggest that firms with CEO board members have higher firm performance compared with those where the CEO is not a board member. The results reveal that firms with above median ownership concentration and large

foreign inventors have higher firm performance. Finally, we find that firms with above median value of dividend have higher corporate performance.

**Table 3.6: Univariate results**

| | **Panel A** | | | **Panel B** | | |
|---|---|---|---|---|---|---|
| | Average Tobin's q for above median | Average Tobin's q for below median | **t-test** | 1st quartile Tobin's q | 4th quartile Tobin's q | **t-test** |
| Executive ownership | 5.96 | 5.39 | -0.34 | 5.28 | 4.17 | 0.61 |
| Founding family ownership | 19.30 | 24.13 | -2.69*** | 25.68 | 16.10 | 2.83*** |
| Board size | 8.38 | 8.24 | -0.44 | 8.02 | 8.17 | 0.36 |
| Non-executive | 86.59 | 86.04 | 0.33 | 86.78 | 87.31 | -0.28 |
| Duality | 0.22 | 0.26 | -1.93* | 0.29 | 0.13 | 2.09** |
| CEO board member | 0.76 | 0.65 | 2.20** | 0.62 | 0.80 | -2.23** |
| Concentration | 40.59 | 37.73 | 1.94* | 35.05 | 41.54 | -2.65** |
| Institutional investors | 22.32 | 21.52 | 0.28 | 19.53 | 23.07 | -1.96* |
| Foreign ownership | 10.61 | 8.69 | 2.11** | 6.67 | 11.53 | -2.52** |
| Size | 6.59 | 6.65 | 0.46 | 6.49 | 6.58 | -0.48 |
| Leverage | 11.09 | 13.91 | -1.52 | 12.19 | 10.84 | 0.53 |
| Dividends | 4.66 | 2.84 | 2.78*** | 2.37 | 5.31 | -2.91*** |

Panel A reports mean comparison of corporate performance, analysing high (above median) versus low (below median) executive ownership, founding family ownership, board size, non-executive directors, duality, CEO board member, concentration ownership, large local institutional ownership, large foreign ownership, size, leverage and dividends. Panel B provides univariate mean comparisons of firm specific characteristics by Tobin's q quartile (1st vs. 4th quartile). In both panels a t-test statistic is used to compare the mean difference. Definitions for all variables are provided in Table 3.3. ***, ** and * indicate that the mean difference is statistically significant at the 1%, 5% and 10% level respectively.

Table 3.6 presents univariate mean comparisons of several firm characteristics by corporate performance (Tobin's q) quartiles. We are interested in whether the characteristics of companies differ across low-performing firms (first quartile) and high-performing firms (fourth quartile). Specifically, we find evidence that, on average, firms with low corporate performance have high founding family ownership, high percentage of duality, low CEO board membership, low ownership concentration, low large local institutional investors, low large foreign investors and pay low dividends, compared to firms with high corporate performance (fourth quartile).

### 3.4.2. Multivariate Analysis

In this section, we present the results from pooled-regression analysis with lagged independent variables. We start by estimating our baseline model (Model 1) Table 3.7, in which we include only the (non-governance) firm-specific characteristics. In general, the estimated coefficients are in line with the hypothesized signs and with findings reported in the literature. Specifically, our first result is a negative relationship between size and firm performance, supporting the view that the market perceives smaller firms as performing better than larger firms and may also have more growth opportunities. The positive relationship between dividend and corporate performance supports the argument that dividends are a means to mitigate agency conflicts within the firm, which results in an improvement in its market valuation (Easterbrook, 1984; Jensen, 1986). In addition, it might be suggested that such firms are less likely to face bankruptcy, and so they are more able to pay dividends. However, our estimation shows that leverage is positively related to, but does not have any significant impact on corporate performance.

#### 3.4.2.1. Executive Ownership, Founding Family Ownership and Corporate Performance.

In models 2 and 3 (Table 3.7), we construct several regression models to examine the relationship between executive ownership and founding family ownership with corporate performance. We include all the control variables which we used in Model 1 Table 3.7 in all our specifications.

Model 2 Table 3.7 shows that the signs of our control variables are not different than those reported in the previous model. In particular, we find that corporate performance is positively associated with dividends; and negatively associated with size. Also, leverage has no significant impact on performance.

Furthermore, we find that executive ownership is not associated with corporate performance. Furthermore, we test the possibility of a non-linear relationship between executive ownership and performance. However, we find no evidence (not reported) for such a relationship in our sample. Our findings clearly contradict claims found in the literature, that executive ownership helps align the interests of executive directors with those of shareholders (among others, see Jensen and Meckling, 1976). This is most probably due to the fact that this is not the agency problem that we would expect in Jordan.

In Model 3 Table 3.7, we add founding family ownership among explanatory variables. Consistent with our expectations, we find the coefficient of family ownership is significant, but negative (i.e. as founding family ownership increases the performance of the average Jordanian firm decreases). This result may suggest that if the founding family continues to keep its ownership in the firm, market participants perceive families as using their holdings to obtain private benefits at the expense of minority

shareholders. Our findings so far suggest that, in Jordan, in contrast to the agency conflict between managers and their widely dispersed shareholders characteristic of the Anglo-Saxon countries, the main agency concern for Jordanian firms seems to be the one between founding families and minority shareholders.

**Table 3.7: Pooled-OLS regressions prediction of corporate performance**

| Independent variables | Predicted sign | Model 1 | Model 2 | Model 3 |
|---|---|---|---|---|
| Executive ownership | -/+ | - | 0.001<br>(0.57) | 0.0003<br>(0.14) |
| Founding family Ownership | - | - | - | -0.005**<br>(-2.22) |
| Size | -/+ | -0.224**<br>(-2.03) | -0.226**<br>(-2.01) | -0.218*<br>(-1.96) |
| Leverage | -/+ | 0.003<br>(1.04) | 0.003<br>(1.00) | 0.004<br>(1.07) |
| Dividends | -/+ | 0.046***<br>(4.00) | 0.045***<br>(3.91) | 0.044***<br>(3.90) |
| Industry dummies | | **Yes** | **Yes** | **Yes** |
| Time dummies | | **Yes** | **Yes** | **Yes** |
| $R^2$ | | 0.19 | 0.19 | 0.21 |
| No. of observations | | 243 | 243 | 243 |

This table presents pooled-OLS regressions of predicted firm performance using Tobin's q as a proxy for performance with one-year lagged variables. Model 1 includes control variables. Model 2 includes executive ownership. Model 3 has both executive ownership and founding family ownership. All explanatory and control variables are lagged one year. *t*-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. For the estimation, heteroscedasticity-robust standard errors are used. See Table 3.3 for exact definitions of variables.

Furthermore, we also test the possibility of a non-linear relationship between founding family ownership and performance, on the basis that a higher share of founding family ownership can increase the potential for family members to expropriate minority shareholders but may, conversely, be conducive to better alignment of the family incentives with those of minority shareholders. However, our findings provide no evidence (not reported) for such a relationship.

#### 3.4.2.2. Board Structure and Corporate Performance

In this sub-section, we construct several regression models to examine the relations between board attributes and corporate performance and present the results in Models 4 and 5 in Table 3.8. We include all the control variables which we used in the previous models.

In Model 4, we regress corporate performance against board size and non-executive directors. In Model 5, we add duality and CEO board membership.

Models 4 and 5 in Table 3.8 show that the signs of our control variables are not different than those reported in the previous models. In particular, we find that corporate performance is positively associated with dividends; and negatively associated with size. Furthermore, similar to our earlier findings, executive ownership is not associated with corporate performance and founding family ownership still has a negative impact on corporate performance, confirming our earlier finding that founding family ownership seems to be the source of the main agency concern among Jordanian companies.

In Model 4, the findings show that neither board size nor proportion of non-executive directors play a significant role in the governance of Jordanian firms (i.e. the

coefficients of board size and non-executive are not statistically different from zero). Hence, they have no significant impact on corporate performance. However, the sign of the coefficient for board size is negative, suggesting that large boards may be inefficient monitors of firm performance. This may be because larger boards seem to dilute the coordination, communication and decision making compared to small boards (Florackis et al., 2009) or the market perceives larger boards as inefficient as they tend to be symbolic rather than being part of the actual management process (Yermack, 1996; Haniffa and Hudaib, 2006).

The result for non-executive ratio is insignificant, suggesting that the role of non-executive directors is limited. This result may reflect the tendency of the boards of most companies in Jordan to lack independence from controlling shareholders and from management. The Company Law contains no stipulation regarding the composition of the board of directors, nor any clear guidelines governing the balance of power between executive and non-executive directors. Another possible explanation may be that appointees may lack relevant experience or may be dependent on or in other ways closely linked with controlling shareholders such as families, therefore, feeling obligated to act in their interest.

Furthermore, Model 5 in Table 3.8 shows that firms in which the CEO and COB roles are separated, display higher Tobin's q ratio. This result is consistent with the view that the board's monitoring is unlikely to be as effective if the same person holds the two top positions. Furthermore, the results suggest that the CEO can additionally exert a positive effect on firm performance by holding board membership. Firms with CEO board members are likely to have better or more efficient governance mechanisms, which should contribute to enhance performance. This result suggests that if the CEO is

a board member, he or she may facilitate and participate in the decision making process rather than dominate the decisions of the board, as may be the case when he/she is CEO and COB together.

We further interact Founding family ownership with board characteristics (i.e. board size, non-executive directors, CEO-Chairman duality dummy and CEO board membership) to test if the effect of founding family ownership on corporate performance changes with these characteristics. We do this because the main variable which seems to be significant in determining performance is founding family ownership, so we want to check if its impact also depends on board characteristics. In our unreported results we find no significant effect. Thus, we may conclude that board characteristics do not significantly influence Jordanian firms' corporate performance, either directly or indirectly through interactions with founding family ownership. As discussed earlier, most Jordanian companies lack independence from controlling shareholders and from management. Furthermore, in Jordan as in many other Arab and developing countries, management and the board of directors are frequently dominated by members of the founding families. Therefore, Jordanian company board characteristics are not expected to have an important impact on corporate performance.

#### 3.4.2.3. Ownership Concentration, Large Shareholders and Corporate Performance

We next turn our attention to ownership variables and examine their effect on corporate performance. We regress corporate performance (i.e. Tobin’s q) against ownership concentration, large domestic institutional ownership, and large foreign investors and other control variables and present the results in model 6 of Table 3.8.

**Table 3.8: Pooled-OLS regressions prediction corporate performance**

| Independent variables | Predicted sign | Model 4 | Model 5 | Model 6 |
|---|---|---|---|---|
| Executive ownership | -/+ | 0.002<br>(0.99) | 0.003<br>(1.18) | 0.002<br>(0.90) |
| Founding family Ownership | - | -0.005**<br>(-2.26) | -0.006***<br>(-2.94) | -0.006***<br>(-2.96) |
| Board size | -/+ | -0.014<br>(-0.48) | -0.018<br>(-0.65) | -0.007<br>(-0.26) |
| Non-executive directors | -/+ | 0.008<br>(1.65) | -0.007<br>(-1.33) | -0.005<br>(-0.97) |
| Duality | -/+ | - | -0.297***<br>(-3.42) | -0.265**<br>(-2.22) |
| CEO board member | -/+ | - | 0.351***<br>(3.42) | 0.283***<br>(2.97) |
| Concentration | -/+ | - | - | 0.006**<br>(2.48) |
| Institutional investors | - | - | - | -0.008***<br>(-2.63) |
| Foreign ownership | + | - | - | 0.011**<br>(2.39) |
| Size | -/+ | -0.206*<br>(-1.92) | -0.203*<br>(-1.92) | -0.217**<br>(-2.13) |
| Leverage | -/+ | 0.002<br>(0.71) | 0.004<br>(1.20) | 0.005<br>(1.27) |
| Dividends | -/+ | 0.043***<br>(3.93) | 0.045***<br>(4.16) | 0.052***<br>(4.47) |
| Industry dummies | | **Yes** | **Yes** | **Yes** |
| Time dummies | | **Yes** | **Yes** | **Yes** |
| $R^2$ | | 0.22 | 0.27 | 0.34 |
| No. of observations | | 243 | 243 | 243 |

This table presents pooled-OLS regressions of predicted firm performance using Tobin's q as a proxy for performance with one-year lagged variables. In Model 4 and 5 we add board variables. In model 6 we add ownership variables. All explanatory and control variables are one year lagged. *t*-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. For the estimation, heteroscedasticity-robust standard errors are used. See Table 3.3 for exact definitions of variables.

We find that ownership concentration plays a significant role in the governance of the Jordanian firms. We find a positive and statistically significant relationship between ownership concentration and corporate performance. This suggests that external monitoring of firm management by large shareholders improves corporate performance (Shleifer and Vishny, 1997; Gillan and Starks, 2003).

Furthermore, model 6 in Table 3.8 also shows that institutional investors have a statistically significant at 1 per cent and negative relationship with firm value. Our results provide no evidence of an effective role of the local financial institutions in Jordan, a finding consistent with the proposition of Khanna and Palepu (1999) concerning the weakness of domestic institutional monitoring in emerging markets

This finding is consistent with our expectation and in support of our earlier prediction that institutional investors in Jordan are relatively inefficient and/or passive in disciplining management. The lack of monitoring by domestic institutions is, moreover, consistent with the decline in institutional ownership over the period (the mean value declines from 22.42 per cent in 2004 to 17.17 per cent in 2006), since where holdings are smaller, the incentive to monitor decreases. In a small country like Jordan, institutional investors such as banks and directors of companies are likely to have a close relationship. Therefore, this finding could also be explained in the light of the strategic alignment hypothesis, which indicates that institutional investors might be reluctant to challenge management decisions, as they wish to protect existing or potential business relationships with firms (Pound, 1998). This would be consistent with Ferreira and Matos' (2008) finding from a comprehensive data set from 27 countries where grey institutional owners (i.e. banks, insurance companies, and pension funds) are more loyal to corporate management and thus tend to hold shares without reacting to

management actions that are not in line with the interests of shareholders. Therefore, any intervention by the banks is only likely if their own short-term interests are at stake, while those of the firm's shareholders are of less interest to them (Morck and Nakamura, 1999).

Another possible explanation of the result is the relatively small number, as discussed earlier, of local institutions that could effectively serve as external governance agents against poorly performing management. Since mutual funds are not widespread in Jordan, domestic local institutional investors are predominantly banks, insurance and pension funds such as the Social Security Corporation. Theoretically, these institutions are in a position to act as primary monitoring agents for other shareholders, especially minority shareholders. However, in practice their efficiency in this respect is reduced by their significant business relationships with companies since most banks in Jordan are family-controlled, individually or through family related group companies; the lack of corporate expertise of nominees of the Social Security Investment Unit on the board of many Jordanian firms, and the absence of a strong incentive to exercise effective oversight, given that their tenure and career prospects are not related to the performance of the companies to which they are appointed.

Model 6 in Table 3.8 shows that, in contrast to their domestic counterparts, large foreign investors have a significant and positive effect on firm performance[1] . This result suggests that foreign investors have incentives and the ability to participate in the corporate governance process through monitoring and control and, thus, are able to complement the inadequate or inefficient monitoring of domestic institutional investors.

[1] We re-estimated our regression by including a dummy variable to make the distinction between foreign financial institutions and foreign industrial corporations. However, the results do not reveal any significant effect and hence they are not reported.

Our finding confirms the commonly-held view that foreign investors play a greater role in prompting changes in corporate governance practices than domestic institutional investors (Gillan and Starks, 2003). The results for other explanatory variables and firm-specific characteristic are not different than those reported in previous models. Notably, model 6 has a substantially higher the R-square than in the previous models, indicating that model 6 explains variation in firm performance much better.

The findings from the models specified above indicate that the main agency concern for Jordanian firms seems to be the one between founding family ownership and minority shareholders. This seems to be replacing managerial agency arguments. The traditional managerial agency explanations do not seem to hold. Instead, the main agency concern in the Jordanian context seems to between founding family shareholders and other shareholders.

Our findings show that separation of the roles of CEO and COB, and CEO membership in the board may have positive impact on corporate performance. External governance by concentration ownership and large foreign investors may also be effective. However, large local institutional investors seem to play little role in corporate governance of Jordanian firms. Our results imply that the monitoring function of foreign investors enhances firm performance and complements the relatively weak monitoring by domestic institutional investors.

### 3.4.3. Further Checks

In this section, two sub-samples are drawn by the size of the firms. We repeat our pooled-OLS regression with lagged values for independent variables (model 6, Table 3.8) after splitting the sample into large firms and small firms according to their average

size in 2004 and 2005. Firms with a size that lie above the median of the natural logarithm of total sales are called "large firms". On the other hand, firms with a size that lie below the median of the natural logarithm of total sales are called "small firms". The rationale for doing so is to make it possible to check whether the earlier findings hold across different sub-samples of the data and the extent to which firm-specific characteristics, such as firm size, affect the governance mechanisms-performance relationship (see, for a similar approach, Cheung and Wei, 2006 and Florackis et al., 2009).

The corresponding columns (7 and 8) in Table 3.9 report the results from this task. The results strongly support the previous findings. Specifically, founding family ownerships are negatively related to firm performance and significant only in small firms, confirming our expectations that family ownership seems to be the main source of agency problems in Jordanian firms but only in small firms.

Executive ownership, on the other hand, is not related to firm performance. This finding confirms our earlier findings that the classical view of the separation of ownership and control, and the potential conflicts associated with it, might not be valid in Jordanian firms.

In line with the earlier findings, board size and composition are not related to firm value in small and large firms. CEO duality in both small and large firms still has a negative relationship with firm value but is significant in small firms only. On the other hand, CEO board members are positively related to firm performance for both large and small firms, confirming our earlier results that CEO can additionally exert a positive effect on firm performance by holding board membership.

**Table 3.9: Pooled-OLS regression prediction corporate performance**

| Independent variables | Predicted sign | Model 6<br>**All firms** | Model 7<br>**Small firms** | Model 8<br>**Large firms** |
|---|---|---|---|---|
| Executive ownership | -/+ | 0.002<br>(0.90) | 0.004<br>(0.72) | -0.001<br>(-0.40) |
| Founding family Ownership | - | -0.006***<br>(-2.96) | -0.008**<br>(-2.22) | -0.003<br>(-1.42) |
| Board size | -/+ | -0.007<br>(-0.26) | -0.017<br>(-0.36) | -0.015<br>(-0.56) |
| Non-executive directors | -/+ | 0.005<br>(-0.97) | 0.003<br>(0.28) | 0.00005<br>(0.01) |
| Duality | -/+ | -0.265**<br>(-2.22) | -0.588**<br>(-2.57) | -0.139<br>(-1.04) |
| CEO board member | -/+ | 0.283***<br>(2.97) | 0.339*<br>(1.96) | 0.82***<br>(2.74) |
| Concentration | -/+ | 0.006**<br>(2.48) | 0.002<br>(0.41) | 0.006**<br>(2.34) |
| Institutional investors | - | -0.008***<br>(-2.63) | -0.011**<br>(-2.03) | -0.003<br>(-0.98) |
| Foreign ownership | + | 0.011**<br>(2.39) | 0.021**<br>(1.98) | 0.002**<br>(2.38) |
| Size | -/+ | -0.217**<br>(-2.13) | -0.276<br>(-1.55) | 0.348**<br>(2.24) |
| Leverage | -/+ | 0.005<br>(1.27) | 0.001<br>(0.21) | 0.004<br>(1.12) |
| Dividends | -/+ | 0.052***<br>(4.47) | 0.066***<br>(2.64) | 0.041***<br>(4.04) |
| Industry dummies | | **Yes** | **Yes** | **Yes** |
| Time dummies | | **Yes** | **Yes** | **Yes** |
| $R^2$ | | 0.34 | 0.42 | 0.51 |
| No. of observations | | 243 | 114 | 129 |

This table presents pooled-regression predictions of firm performance using Tobin's q as a proxy for performance for small and large firms with one-year lagged variables. *t*-statistic values are reported in parentheses. All explanatory and control variables are one year lagged. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. For the estimation, heteroscedasticity-robust standard errors are used. SeeTable 3.3 for exact definitions of variables.

The results show that ownership concentration plays a significant role in the governance of large firms. We find a positive and statistically significant relationship between ownership concentration and corporate performance for large firms. This suggests that external monitoring of firm management by large shareholders improves corporate performance.

Large local institutional investors are still affecting corporate performance negatively in all firms, but significantly in small firms. This result confirms our earlier finding that local institutional investors in Jordan seem to be limited in their monitoring ability and their contribution to improving corporate governance is limited. On the other hand, large foreign investors are positively related to firm performance for both large and small firms, confirming our earlier result that large foreign investors have incentives and the ability to participate in the corporate governance process through monitoring and control and, thus, are able to complement the inadequate or inefficient monitoring of domestic institutional investors.

Unlike our previous findings, we find that firm size is still negatively related to performance in small firms, but insignificant. However, in large firms the relationship is positive and significant. The positive relationship with large firms may be because larger firms are less exposed to asymmetric information, face less risk of bankruptcy and are likely to have better access to external capital markets. This finding is in line with the majority of capital structure literature (Rajan and Zingales, 1995; Ozkan and Ozkan, 2004).

Moreover, in line with our previous findings, we find a positive but insignificant relationship between leverage and performance for small and larger firms. Finally, dividends are still positively and significantly related to small and large firms.

### 3.4.4. Robustness of Results

To check the robustness of our results, we estimate a number of different specifications that we do not report for the sake of brevity[1]. First, we re-estimate model 6 in table 3.8 by utilizing cross-sectional average methodology proposed by Rajan and Zingales (1995). In particular, the dependent variable is measured in 2006, while for the independent variables, average values for two years (i.e. 2004 and 2005) are used to control for potential endogeneity.

The results strongly support the previous findings. That is, we find significant relationships between duality, ownership concentration, local institutional inventors, size, and dividends, and firm value. Executive ownership, family ownership, board size, non-executive directors, foreign ownership and leverage are not related to corporate performance.

Second, we re-estimated our pooled-regressions with lagged values for independent variables (model 6 of table 3.8) by using a second proxy for firm performance, return on assets (ROA), as an alternative performance measure. Accounting measures such as ROA has been widely used in previous research (see Demsetz, & Lehn, 1985; Ang et al., 2000).

The results show that executive ownership, founding family, board size and composition, CEO board member, concentration ownership, local institutional ownership, foreign ownership and leverage are not significantly related to accounting performance.

On the other hand, CEO duality is found to be significant and negatively related to accounting performance measure. Both the control variables, size and dividend, are

[1] The results are available upon request.

positively and significantly related to accounting performance, which tends to support the notion that higher dividend payment is associated with better financial performance.

Finally, we re-estimated our pooled-regressions with lagged values for independent variables (model 6 of table 3.8) by using an alternative definition for size by using the natural logarithm of total assets as a proxy for firm size. The results strongly support the previous findings, that is, we find founding family ownership, duality, local institutions ownership, and size are negatively and significantly related to firm performance. On the other hand, our findings show that, CEO board members, concentration ownership, foreign ownership, and dividends are positively and significantly related to firm performance.

## 3.5. Policy Implications from the Findings of the Study

The empirical findings of this study have several policy and management implications. First, any efforts to improve corporate governance in Jordan should consider the local culture and environment. For instance, the agency problem that exists in Jordan is different from the one suggested by the standard agency literature. In the Jordanian context, the significant agency problem is related to the "strong" large family shareholders versus "weak" minority shareholders. Because of this, there is a need for legal protection to cover the interests of all a company's stakeholders, especially minority shareholders. The authorities should continue to call for more separation between ownership and management. Controlling family owners should separate themselves from the management of the institution, whether as the chairman of the boards or in senior management positions.

Second, the authorities should undertake a series of regulatory changes to improve corporate governance practices in the Jordanian firms. Particular attention should be given to the independence of board members and a separation of the positions of the chairman of the board and the CEO. Independent directors should not have important or any business ties with the company, and should have the necessary skills and experience to enable them to take an objective stance in board deliberation. Increased availability of external, more objective inputs and the strengthening of governance skills and perspectives will promote boards' willingness and ability to act in the interests of all stakeholders, bring a fresh perspective to strategic directions and market approach, and help to support the long-term, prudent operations of the firm. What is also needed in the Jordanian experience is the separation of the often combined positions of chairman of the board and the chief executive officer (CEO). The regulatory agencies in Jordan should take this into account in setting codes for corporate governance which firms must comply with, as this will limit the power of one individual in managing the company.

Third, the authorities should require more detailed disclosure, especially of ownership structure, focusing on the ultimate owners. This disclosure will enhance the transparency of who actually controls a company and this will benefit all investors, especially minority shareholders.

Fourth, to enhance corporate governance practices in Jordan, private and public sector leaders need to put this issue on the agenda, raising awareness of the importance of good corporate governance by publicizing evidence of how it has resulted in increased investment. The media could also contribute in this endeavor by building an understanding of corporate governance concepts and calling the public and private

sectors to account for their actions. Lastly, efforts should be made to prepare the business leaders of the future teaching the values and concepts of corporate governance in universities.

Finally, the findings of this study have implications for business communities who may be concerned regarding corporate governance practice in Jordan, in addition to academic researchers who are engaged in the ongoing debate concerning proper roles for corporate governance frameworks.

## 3.6. Conclusion

This chapter has examined the impact of several internal corporate governance mechanisms and devices, including managerial ownership, founding family ownership, board variables (i.e. board size, non-executive directors, CEO duality and CEO membership in the board), concentration ownership and large domestic institutional investors and large foreign ownership, on corporate performance. We present an analysis of a unique and reliable hand-collected firm-level data set on 360 firm-year observations of Jordanian non-financial firms listed at the Amman Stock Exchange during 2004-2006. We use pooled-OLS with one year lagged explanatory variables and average cross-sectional regression approaches in an attempt to reduce the potential problem of endogeneity.

Our findings contribute to agency theory and corporate governance literature in a number of ways. First, they enhance understanding of agency theory in a developing country context, an area which has been comparatively neglected, especially, in the Arab region. Second, this study goes beyond previous studies (among others, Yermack, 1996; Eisenberg et al., 1998; Haniffa and Hudaib, 2006; and Ghosh, 2006) by

incorporating a new board characteristic, a membership of the CEO on the board, and analysing its impact on firm performance. Specifically, our results suggest that this factor constitutes an additional potential corporate governance mechanism available to firms, which significantly predicts company performance.

The findings provide strong support for the view that the type of agency problem prevalent in the Jordanian context seems to be between founding family and other shareholders. This result is unaltered when different corporate governance mechanisms are added to the model. Managerial ownership does not play any role in the corporate governance of the Jordanian firms, whereas family ownership aims to protect and preserve family wealth. This seems to be replacing the managerial agency arguments.

Our analysis fails to detect any significant impact of board size or non-executive directors on firm performance. Our findings show that CEO duality affects firm performance negatively. However, our results support the value of having a CEO who is a member of the board, as a potential corporate governance mechanism available to firms, as this is found to be positively related to company performance.

The significant relationship found between concentration ownership and the governance of the Jordanian firms suggests that external monitoring of firm management by large shareholders improves corporate performance. In contrast, we detect a negative link between performance and local institutional investors, implying that, in the Jordanian context, this group is relatively inefficient and/or passive in disciplining management. In contrast to local institutional investors, our findings show the importance of foreign investors in terms of firm performance. This implies that the monitoring role performed by foreign investors is more important for the Jordanian market, because monitoring by domestic institutional investors is found to be ineffective or relatively limited. The

process of globalization of Jordanian capital markets may lead to good governance practices being imported by domestic firms, and future research on this issue may have very important to explore the determines of foreign investors in the Jordanian equity market in order to attract more foreign investors.

# Chapter 4

# The Effects of Corporate Governance Characteristics on Foreign Ownership

## 4.1. Introduction

In many countries worldwide, there are comparatively few domestic sources of outside finance (Leuz et al., 2008), a situation that has prompted liberalization of many stock markets enabling foreign investors to invest in domestic equity securities (Bekaert et al., 2007). The result has been increasing importance of foreign capital as a source of finance. Jordan, like other Middle Eastern and Arab countries has, since the mid 1990s, made great strides towards making necessary legislative reforms and establishing a legal environment conducive to economic activity, in an attempt to attract much needed foreign investments.

Previous research suggests that foreign investors are disadvantaged compared to domestic investors, regarding knowledge of local firms' operations and performance, as well as the country's economic environment (Cooper and Kaplanis, 1994; Dvorak, 2005; Stulz, 2005). Consequently, foreign investors often display a so-called "home bias", preferring to invest in their own countries despite the globalization of financial markets (see among others, French and Poterba, 1991; Lewis, 1999; Dahlquist and Robertsson, 2001; Chan et al., 2005). Reasons for such bias include information asymmetry, differences in corporate governance, and legal and institutional restrictions (see among others, Dahlquist et al., 2003; Klapper and Love, 2004; and Giannetti and Koskinen, 2008).

Previous studies also indicate that foreign investors reveal preferences for certain firm-specific characteristics (see, Stulz, 1999 and Dahlquist and Robertsson, 2001 among others). For example, Kang and Stulz (1997), based on a sample in the Japanese stock market, find that foreign investors tend to invest in large firms, those with low leverage, and firms with a high export ratio. Dahlquist and Robertsson (2001) analyse the

determinants of aggregated foreign ownership in Swedish firms, and find that foreigners prefer large firms, firms paying low dividends, and firms with large cash holdings. However, in the Swedish case foreigners tend to undervalue firms with a large ownership. In terms of developing countries, Lin and Shiu (2003) find that foreign investors in Korea prefer large firms and firms with a high export ratio. Mangena and Tauringana (2007) provide the first evidence from Africa. They find foreign investment in Zimbabwe is associated with, inter alia, firm size, profitability, liquidity, disclosure, proportion of non-executive directors, institutional ownership, and audit committee.

In addition to the above, poor corporate governance is frequently identified as an important factor in foreign investors' avoidance of foreign firms. There is strong evidence to support the existence of a link between good corporate governance and greater foreign investment in emerging markets. For example, Lang et al., (2004) based on data from 27 countries, find that US investment analysts are less likely to follow firms with poor internal governance, such as firms with a concentrated family/management ownership. Consequently, less attention is paid to these firms and they attract lower valuations. Aggarwal et al. (2005), studying the portfolio holdings of U.S. mutual funds in emerging market, find that U.S. mutual funds invest more in emerging markets that have stronger accounting standards, shareholder rights, and legal frameworks. Giannetti and Simonov (2006) show that foreign portfolio investors are less likely to invest in Swedish companies with weak corporate governance. More recently, Leuz et al. (2008), in a large-scale multinational study, confirm that U.S. investors invest less in poorly governed firms located in countries with weak legal institutions. They conclude that higher standards of disclosure and corporate practice are potential levers to attract more foreign investment.

There is also anecdotal evidence indicating that corporate governance is important in foreign investors' decisions. For example, McKinsey & Company (2000) conducted three separate surveys to discover how shareholders perceive and value corporate governance in developed and emerging markets. Their findings indicate that three-quarters of investors believe that board practices, particularly independent directors, are at least as important as performance when they evaluate companies for investment. They reveal that investors would not buy a company with poor corporate governance and are prepared to pay an additional premium of up to 28 per cent of the share price for well-governed companies in emerging economies[1].

In sum, there is both academic and anecdotal evidence to indicate that the quality of corporate governance and other firm-specific characteristics affect foreign investors' investment decisions in certain companies. However, the existing studies have mainly looked at the stock preferences of U.S. investors, or those of foreign investors in single high-income countries with uniformly high investor protection laws and accounting standards. In the case of the latter, none of the previous studies have looked at the relationship between corporate governance and foreign ownership in different regional areas such as the Arab and MENA countries. Furthermore, the majority of the previous studies mentioned above have investigated the total insider ownership or controlling shareholders (i.e. families and management) in a global sense, without taking into consideration the identity of insider or controlling shareholders such as founding family ownership. In this respect, none of the empirical papers on foreign ownership, that we are aware of, has attempted to combine founding-family ownership and control (i.e.

[1] They defined a well-governed company as "one that has a majority of outside directors with no management ties on its board (truly independent), undertakes formal evaluations of directors, and is very responsive to investors requests for information on governance issues".

founding family involvement in the board of directors) in investigating the impact on foreign ownership in the emerging markets setting. Finally, very few studies have investigated the impact of board structure on foreign ownership; an exception is Mangena and Tauringana (2007).

In this chapter, we aim to addresses these issues by examining whether differences in foreign ownership across listed companies in the Jordanian market are related to company differences in corporate governance mechanisms and other firm characteristics. Specifically, our analysis will focus on two important questions. First, how do founding family ownership and control affect the investment decisions of foreign investors in the Jordanian market? Second, how do other potential corporate governance mechanisms (i.e. institutional investors and board characteristics) and firm-specific characteristics (i.e. market-to-book-ratio, size, leverage and dividends) affect investment foreign investors in the Jordanian market?

Our investigation is unique because of the high level of involvement of foreign investors in the Jordanian stock market. In fact, foreign investment of market capital is one of the highest in the world (OECD, 2006)[1]. For example, foreign investors account for almost half of the market capitalization of all sectors in 2007. There are also significant differences across firms, in the sample; where the level of large foreign ownership ranges from 0 to 97.51 per cent. Nevertheless, despite the crucial role foreign investors play in the Jordanian stock market, the existing empirical evidence on the

[1] See for example: MENA-OECD Investment Programme National Investment Reform Agenda Workshop for the Hashemite Kingdom of Jordan, Monday 19th June, 2006. Available on line: http://www.oecd.org/dataoecd/4/29/38148879.pdf.

major determinants of foreign investment in Jordanian companies, especially at the firm level, is very limited, at best, only under preliminary discussion[1].

Second, many public companies in Jordan, as is typical of most Arab countries and emerging markets, still have large family shareholders, family representatives among their senior management and strong family representation on the board. Such conditions are highly likely to give rise to conflicts of interest between the controlling family and other shareholders. Therefore, this study offers an ideal setting to examine how family ownership and control affect foreign investment decisions.

Third, the Jordanian capital market is one of the most transparent (Saadi-Sedik and Petri, 2006), developed, sophisticated and efficient stock markets in the region (Smith, 2007)[2]. In 2005 the ratio of market capitalization to GDP was high by international standards at 292 per cent (Saadi-Sedik and Petri, 2006). This is particularly so for other countries of the Arab World and the Middle East. Such countries have an acknowledged need of informative meaningful analysis of corporate governance and detailed data and assessment. This would provide a basis for setting priorities and informing the formulation of corporate governance action plans and corporate sector reforms in these countries (Saidi, 2004; 2005 and Najib, 2007). Therefore, the empirical findings of the present study could have value to other Arab economies in the Middle East, all of which share a common heritage, culture, language and religion and where there are strong similarities in regulatory and institutional environments and in the corporate ownership structure of firms (Saidi, 2004; 2005 and Najib, 2007).

[1] MENA-OECD Investment Programme National Investment Reform Agenda Workshop for the Hashemite Kingdom of Jordan, Monday 19th June, 2006. Available on line: http://www.oecd.org/dataoecd/4/29/38148879.pdf.

[2] Smith, G. (2007) finds that the Israeli, Jordanian and Lebanese markets, composite stock price indices follow a random walk and so these markets are weak-from efficient.

Finally, prior empirical work on this topic has been hampered by a shortage of data, due to the difficulties of accessing firm-level data on governance and foreign holdings (Leuz et al., 2008). However, an improvement in reporting and disclosure standards in Jordan presents an opportunity for a relatively rigorous empirical study using firm-level data[1].

Accordingly, in this chapter, we use a unique and reliable hand-collected firm-level dataset that includes, among others, detailed information on foreign ownership, board structure and founding family ownership for a sample of 360 firm-year observations for Jordanian non-financial firms listed on the Amman Stock Exchange during 2004-2006. We employ both cross-sectional regression analysis and probit regression. The empirical analysis is conducted for two alternative definitions of foreign ownership, namely, large foreign ownership and total foreign ownership, to confirm the reliability of our findings.

There are several important features of our analysis which, we believe, extend the literature on foreign ownership and corporate governance.

Our first contribution in this chapter is concerned with the empirical investigation of the impact of founding family ownership and control on foreign investment decisions. The majority of previous studies in this field have looked at insider ownership or controlling shareholders (i.e. families and management)[2] in a global sense, irrespective of the identity of the insider or controlling shareholder. They also overlook the possibility that some foreigners become insiders or controlling shareholders. Furthermore, there has

[1] Omar (2007) reports a significant improvement in disclosure in Jordan after important changes in the economic and accounting regulations.

[2] See for example, Dahlquist et al., (2003) for U.S. investors holding in 51 countries and for Swedish firms, Kho et al., (2007) for U.S. investors holding in 46 equity markets in emerging countries after a period of liberalization, and Leuz et al., (2008) for US investors.

been little previous investigation of board structure and its effect on foreign ownership[1]. This study adds to existing knowledge on the issue by analysing ownership by the founding family and local institutional investors and their effect on foreign ownership.

Second, unlike previous studies that used aggregate foreign ownership (i.e. the total equity shares held by foreign investors)[2], we use two alternative definitions of foreign ownership, namely, large foreign ownership (defined as the percentage of outstanding equity held by foreign shareholders, that is, with shareholdings of 5 per cent or more) and total foreign ownership (defined as the percentage of market value of foreign investors' equity divided by total market capitalization for each firm). Specifically, besides using large foreign shareholders (that is, those with shareholdings of 5 per cent or more) as our dependent variable, we also use the total equity held by foreign investors, regardless of percentage, to assess the sensitivity of our results to the choice of threshold of foreign equity shares.

Third, to the best of our knowledge, this study is the first attempt to analyse investment by foreign investors in relation to corporate governance, including both a variety of corporate governance mechanisms (such as founding family ownership and control, institutional ownership, and board characteristics) and firm specific characteristics (i.e. market-to-book ratio, size, leverage and dividends) in an emerging equity market and, more specifically, one of the Arab and MENA countries.

Finally, this study, by examining empirically the determinants of foreign investment in the Jordanian stock market, will not only shed light on the reasons for Jordan's apparent attractiveness to foreign investors, but may also allow inferences to be drawn that would

[1] One reason for this may be the difficulty involved in collecting board data.
[2] See for example, Dahlquist and Robertsson, 2001 in Sweden; Lin and Shiu, 2003 in Taiwan; Mangena and Tauringana, 2007 in Zimbabwe; Kho et al., (2007) and Lutz et al., 2008 for U.S. investors.

benefit other emerging markets, particularly other countries of the Arab World and the Middle East.

Our analysis provides important findings regarding the determinants of foreign ownership in Jordan. Our results reveal that founding family ownership and founding family control exerts a significant influence on foreign investors' decisions. More specifically, our finding suggests foreign ownership is likely to be lower in firms in which founding family ownership is high and in family controlled firms (i.e. when founding family members are in the board of directors). This result may suggest that foreign investors are not keen on investing in firms in which founding family shareholders are the major shareholders/controllers. Alternatively, although it is not one of the objectives of our empirical analysis, it may also show that founding family owners may discourage foreign investors from taking a major role in firms they (i.e. the founding owners) control.

Domestic institutional investors also appear to deter foreign investors. The findings suggest that firms with large domestic intuitional ownership are related to lower foreign holdings. This finding supports the view that institutional investors in emerging markets are ineffective in monitoring because they have either existing or potential business relations with firms, and, in order to protect those relations, might be less willing to challenge management decisions.

Board characteristics (i.e. board size and the proportion of non-executive directors) also have a negative effect on foreign investors, although the impact is significant only for board size. This result suggests that foreign investors perceive large boards as likely to encounter problems of coordination, control, and decision-making. These results are in line with our earlier findings regarding family ownership and its negative effect on

foreign investors, because most boards in Jordan, as in many other developing countries, are controlled by large shareholders, which in most cases are families.

Regarding firm-specific characteristics, we find that firms with higher growth potential (high market-to-book equity ratios) tend to attract more foreign investment. Moreover, foreign investors have a strong preference for large firms. Foreign investors prefer holding shares in large firms because information asymmetries between local and foreign investors may be relatively less in large firms. Foreign investors seem to avoid firms that pay high dividends and, finally, leverage is not related to the level of foreign investment.

The remainder of this chapter is structured as follows. Section 4.2 discusses foreign equity investment in the Jordanian market. Section 4.3 sets out the theoretical background and hypotheses of the study. Section 4.4 presents data, variables and methodology. Section 4.5 presents results and Section 4.6 is the conclusion.

## 4.2. Foreign Equity Investment in the Jordanian Capital Market

Jordan possesses a number of characteristics which enhance its attractiveness to investors and contributes to creating a stable investment environment. These include political stability, favourable demographics, an established financial structure, tight monetary and fiscal policies, favourable foreign and domestic investment laws. Moreover, Jordan is rapidly integrating into the world economy, as evident by accession to the World Trade Organization in 2000, an Association Agreement with the European Union effective in 2002, conclusion of a free trade agreement with the United States, and signature of investment agreements with many countries around the world[1]. The

[1] See, for more details, Jordan Investment Board, http://www.jordaninvestment.com/.

country's privatization programme and special-status industrial zones are also essential assets which enhance the country's attractiveness as an investment location[1].

To attract more foreign capital flow, Jordan has reformed its law to suit the international capital markets. The three investment laws of 2003 (replacing 1995 legislation) provide for equal treatment of Jordanian and foreign investors. Restrictions related to the percentage of ownership by foreigners have been removed. Foreign investors can invest in different economic sectors with no restrictions on ownership percentage, and they enjoy complete freedom of capital movement and no taxes on capital gains or cash dividends, in an attractive investment structure and open economy.

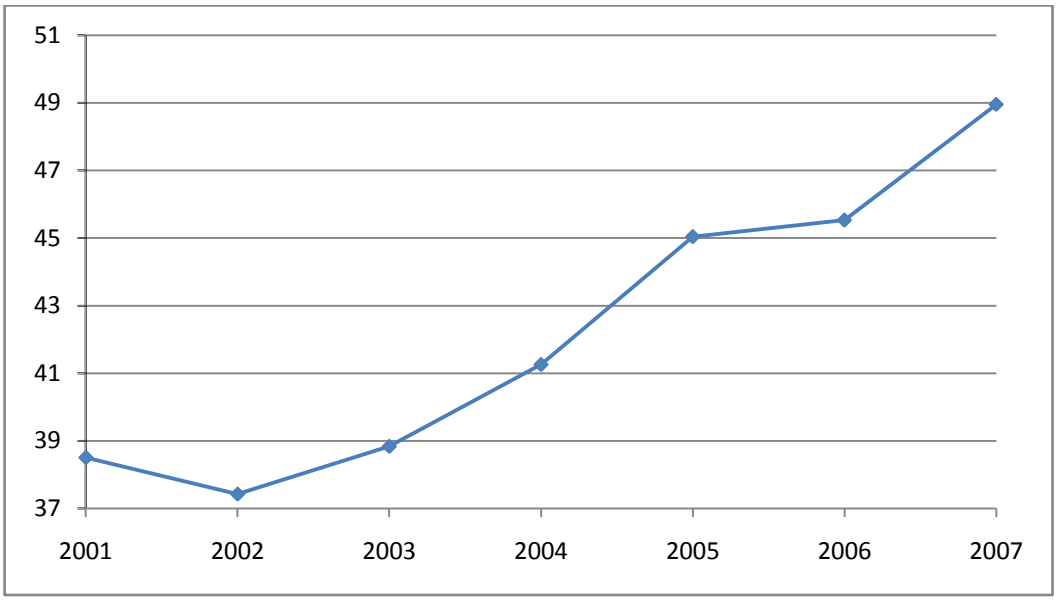
Jordan also offers a good regulatory environment as we discussed earlier in Chapter 2. The Jordan Securities Commission (JSC) supervises the disclosure of information related to securities, issuers, insider trading and major shareholders. It is mandated to protect investors, as well as ensure fairness, efficiency and transparency. In addition, JSC has issued a comprehensive guide for foreign investors in order to assist their understanding of the investment climate in Jordan. Listed companies on the Amman Stock Exchange (ASE) are legally required to institute an audit committee and to disclose their financial, non-financial and operational performance on a continuous and regular quarterly, semi-annual and annual basis. In addition to regular disclosure, companies are required to make immediate disclosure of all material events that may affect the business and/or its earnings. The ASE's automated order-driven Electronic

[1] According to the 2008 World Investment Report issued by the United Nations Conference on Trade and Development (UNCTAD), Jordan ranked 6th out of 142 countries in 2007 in the world in attracting FDI; a large increase in ranking position from the previous years. Jordan has kept the upward trend in this ranking since the early 1990s. Jordan ranked 75 in 1990, 37 in 2000, 13 in 2005 and 7 in 2006.

Trading System is another feature that contributes to its attractiveness to foreign investors.

Ownership by foreigners has been on the rise since the beginning of the 2000s, as a result of regulatory and supervisory changes in the Jordanian Capital Market and creation of many incentives to invest in Jordan. Figure 4.1 shows the market value of outstanding shares held by foreign investors relative to the total market capitalization from 2001-2007.

**Figure 4.1: Foreign Investors Ownership***




This figure shows foreign investor ownership as of year-end from 2001-2007.
* As a percentage of market capitalization.
Source: Various Amman Stock Exchange Annual Reports

The percentage of foreign ownership increased from 38.51 per cent of total market capitalisation in 2001 to 48.95 per cent in 2007. Furthermore, foreign ownership between sectors displays significant changes during the same period, as shown in Table 4.1. This table shows the percentage of foreign ownership in shareholding companies by

sector for the period 2001-2007. For example, it is clear from the table that foreign ownership almost doubled in the services and industry sectors between 2001 and 2007, from 19.67 to 36.15 per cent in the services sector and from 27.87 to 51.88 per cent in the industry sector. In contrast, the foreign share in the financial sector remained relatively stable, increasing only slightly from 47.43 to 50.73 per cent in the same period.

**Table 4.1: Non-Jordanian ownership in listed companies by sectors as a percentage (%) of market capitalisation during the period 2001-2007**

| Year | Financial Sector | Services | Industry | All Market |
|---|---|---|---|---|
| 2001 | 47.43 | 19.67 | 27.87 | 38.51 |
| 2002 | 47.56 | 26.79 | 26.09 | 37.43 |
| 2003 | 46.28 | 24.29 | 30.1 | 38.84 |
| 2004 | 47.44 | 25.59 | 36.79 | 41.26 |
| 2005 | 49.77 | 26.19 | 38.09 | 45.04 |
| 2006 | 47.73 | 36.55 | 43.71 | 45.53 |
| 2007 | 50.73 | 36.15 | 51.88 | 48.95 |

This table reports foreign investor ownership in companies listed at the ASE as of year-end from 2001-2007 as a percentage of total market value. The Financial sector includes Banks, Insurance, Diversified Financial Services and Real Estate. The Services sector includes Health Care Services, Educational Services, Hotels & Tourism, Transportation, Technology & Communication, Media, Utilities & Energy, and Commercial Services. The Industry sector includes Pharmaceutical & Medical Industries, Chemical Industries, Paper & Carton, Printing & Packing, Food & Beverage, Mining & Extracting, Tobacco & Cigarettes, Engineering & Construction., Electrical Industries, Textiles, Leather & Clothing, and Glass & Ceramics.
Source: Various Amman Stock Exchange Annual Reports.

All three sectors have witnessed significant increases in foreign ownership in some years, although these have been more notable in services and industry; for instance, in

services, an increase from 19.67 to 26.79 per cent in 2001 to 2002, and another increase, from 26.19 to 36.55 per cent in 2005 to 2006. Meanwhile, industry experienced substantial growth of foreign ownership in 2004 (from 30.1 to 36.79 per cent), 2006 (from 38.09 to 43.71 per cent) and in 2007 (from 43.71 to 51.88 per cent).

Today, the Jordanian capital market is considered one of the most transparent (Saadi-Sedik and Petri, 2006), developed, sophisticated and efficient stock markets in the region (Smith, 2007). Furthermore, a recent study conducted by the IMF (Saadi-Sedik and Petri, 2006) rates the ASE favourably in comparison with many other regional markets, in terms of the relative lack of investment restrictions, good transparency, and the regulatory environment. The study concludes that investment in the ASE may be an attractive option for investors seeking to diversify their portfolio. Foreign investment at the ASE tends to be long-term investment, predominantly international mutual and pension funds in addition to foreign government contributions and strategic partnerships with Jordanian public shareholding companies[1], the investors coming from 102 countries around the world[2].

## 4.3. Theoretical Background and Hypotheses

In this section, several corporate governance measures and other explanatory variables that may be related to foreign investment are discussed, beginning with the relationship between foreign ownership and founding family ownership and control (i.e. when founding family members are in the board of directors), and moving to the relationship

[1] Jalil Tarif, the CEO of the ASE. Meeting with the World Bank Mission - available on line: http://www.exchange.jo/pages.php?menu_id=-1&local_type=1&local_id=123&local_details=1.
[2] There are around one million investors registered with the Securities Depository Centre (SDC) at the end of 2007, of them 947.6 thousand Jordanian investors, 41.2 thousand Arab investors, 3.8 thousand non-Arab investors, according to Samir Jaradat, CEO of Securities Depository Centre. Source*: Al-Raai Newspaper*, Saturday, January 12, 2008, Issue 13612, Vol. 37

between domestic institutional investors. Board variables are also discussed. Finally, drawing on foreign investment literature, the possible relationship between differences in firm-specific characteristics and differences in foreign ownership in Jordanian listed companies is considered.

### 4.3.1. Founding Family Ownership

Founding family ownership is an important form of ownership structure. Worldwide, the majority of businesses are family owned (La Porta et al., 1999; Claessens et al., 2000; Anderson and Reeb, 2003; Villalonga and Amit 2006). Such a pattern of ownership may be a source of comparative advantage through potential for reduction in agency costs and maximization of firm value (Demsetz and Lehn, 1985; Shleifer and Vishny, 1997), suggesting that family owners might monitor firms more effectively. Moreover, founding families tend to be a sustained long-term presence in firms, and this long-term commitment may incline them to invest in long-term projects rather than shorter horizons. It also offers a degree of stability which may allow them to enjoy a lower cost of debt financing and maintain longer relationships with external bodies such as suppliers (Anderson and Reeb, 2003). From another perspective, however, founding family ownership may be considered as conducting inefficient corporate governance, as family owners are in a position, and have motives, to expropriate wealth from outside shareholders (Fama and Jensen, 1983; Morck et al., 1988; Shleifer and Vishny, 1997). This may result in suboptimal investment decisions, excessive compensation and substantial influence in selecting managers and directors, which can impede the efforts of more capable third parties in managing firms (Anderson and Reeb, 2003).

For these reasons, family ownership may be a deterrent to foreign investors. Evidence that this may be so is provided by Doidge et al. (2007) and Leuz et al. (2008 ) whose findings reveal that U.S. investors hold fewer shares in foreign firms where large blocks of shares are held by insiders (e.g., managers and families), increasing the vulnerability to expropriation by controlling insiders. Kho et al. (2007) report a similar result from a study of a large sample of equity markets in 46 emerging countries after a period of liberalization[1]. They find least home bias of U.S. investors towards countries in which ownership by corporate insiders is low and countries in which ownership by corporate insiders has fallen. The same study also contains firm-level data for Korea, which show that foreign investors invest more in firms with lower insider ownership. Lang et al. (2004), across 27 countries, find that US investment analysts tend not to follow firms with concentrated family ownership, resulting in less attention to these firms and lower valuation.

From the above, it appears that foreign investors consider family ownership as a negative signal when they consider investing in foreign firms. Therefore, it is hypothesized that firms with founding family ownership are less likely to attract foreign investment.

Concerns about founding family ownership are greatest when family members are also in executive positions, as indicated by the findings of the 2001 McKinsey's "Emerging Markets Investors' Opinion Surveys". Respondents indicate that the most influential corporate level factor in their decision whether or not to invest in emerging markets is the "distinction between company and family interests" where family ownership and control tendency are associated with poor corporate governance (Coombes and Watson,

[1] Jordan is not included in this study.

2001; and Mobius, 2001). Such a view may be supported by the theoretical arguments and empirical evidence offered by Fama and Jensen (1983) and Morck et al. (1988), to the effect that agency conflicts are increased where ownership and control are combined.

In Jordan, as in many other developing countries, many firms are owned and controlled by the founding family[1]. For family firms, board control is to be maintained and frequently dominated by the controlling family. Family members play a crucial role in the day to day business of the firm. These members have a strong power to interfere in the affairs of the company. They can hire and fire managers at their discretion. Hence, the managers are likely to focus on controlling owners' interest rather than on maximizing value for all shareholders. They feel a responsibility to sustain ownership control and play a role in management to ensure that the operation of the company, (which is a family asset) is aligned with family interests (Miller and Le Breton-Miller, 2006).

Therefore, our second hypothesis is that firms with family ownership are even less likely to attract investment from foreign investors when the founding family members participate in the boards. No study, that we are aware of, has attempted to combine founding-family ownership and control (i.e. founding family involvement in the board of directors) in investigating the impact on foreign ownership. By doing so, this study provides a new contribution to the literature.

[1] For example Jordan Chemical Industries by the Al Taher family, Ready Mix Concrete and Construction Supplies by Al Alaammy family, Specialized Investment Compounds by the Al Salfiti family, Printing and Packaging by the Al Fakori family, Darwish Al-Khalili & Sons by Al Khalili family, Jordan Industrial Resources by the Al Muasher family and Arab International Food Factories by the Abu Khadijeh family etc.

### 4.3.2. Local Institutional investors

The role of large institutional investors in monitoring corporate management has been well recognized in the literature (Shleifer and Vishny, 1997; Mitton, 2002; and Lins, 2003). It is assumed that large investors such as institutional investors have greater incentives to be involved in monitoring than small ones, because they can bear the high fixed costs of collecting information on management behaviour. They are said to have greater expertise and more power to act rationally (Dong and Ozkan, 2008), and to be capable of influencing management decisions directly through their ownership or indirectly by trading their shares (Gillan and Starks, 2003). They are therefore in a position to influence the performance of the company by contributing to, monitoring or ratifying the board's decisions, and pursuing an agenda of safeguarding shareholders' interests by focusing on projects that add value for them.

In many emerging countries, however, this view may not hold, due to underdevelopment of local capital markets and institutions, deficiencies in the regulatory system, and political constraints (Khanna and Palepu, 1999). It is also possible that institutional investors (e.g. bank, insurance companies, and pension funds) may be induced to cooperate with managers, rather than challenge their decisions, in order to protect existing or potential business relationships with the firm (Pound, 1998; Cornett et al., 2007). Thus, their loyalty to corporate management may be greater than to shareholders, their own holding notwithstanding, preventing them from reacting to management actions that are not in line with the interests of shareholders (Ferreira and Matos, 2008).

In light of the above, it can therefore be reasonably assumed that local financial institutions have a detrimental effect on foreign investment, leading to the hypothesis that: local financial institutional ownership negatively affects foreign ownership.

### 4.3.3. Board Characteristics

Board characteristics are, especially, an important signal for good value of the firm when foreign investors invest into emerging markets, where the regulatory environment, such as reporting requirements and market intermediaries, may be deficient (Khanna and Palepu, 1999). Board characteristics are taken into account by foreign investors when making investment decisions; three quarters of the 200 institutional investors (mostly from the US) who responded to corporate governance market surveys by McKinsey & Company (2000) rated board practices, particularly independent directors, at least as important as financial performance in the evaluation of potential investments, especially in emerging markets.

Board effectiveness depends on board size and the proportion of outsiders in the board. The board, as the agent of the shareholders, is an internal governance body established to monitor management behaviour on behalf of shareholders and to protect them from managers who may pursue their personal interests or otherwise act in a manner detrimental to shareholders (Jensen and Meckling, 1976). There is evidence that the overall size of the board affects the quality of monitoring (Yermack, 1996). However, existing studies provide mixed evidence as to the effect of board size. Some researchers claim that large boards reduce value because, as board size increases, difficulties of coordination, communication and process outweigh the advantages of having more people to draw on (Yermack, 1996; Eisenberg et al., 1998; and Florackis et al. 2009).

However, in Jordan, board size was found not to vary significantly. It is possible, also, that in boards run by funding family shareholders, the size of the board is not related to its efficiency, since the negotiation and decision making is done in a much more informal way. Others argue that larger boards are more effective because they can offer a wider perspective and better guidance of the strategic options of the firm (Pearce and Zahra, 1991).

Some researchers link the supervisory activity of the board to the weight of outsiders (non-executives), on the basis that board independence is necessary for effective monitoring of management. Non-executive directors are said to provide more independent monitoring and to be more likely to be independent of the CEO (Jensen, 1993; Agrawal and Knoeber, 1996). In addition, non-executive directors may also contribute positively to the quality of directors' deliberations and decisions and provide strategic direction leading to enhanced performance (Pearce and Zahra 1992). However, there are studies that find exactly the opposite results. For example, Hermalin and Weisbach (1991), Agrawal and Knoeber (1996), Franks et al. (2001), and Florackis et al. (2009) suggest that non-executive directors are less knowledgeable about the firm, are too busy to contribute effectively, and do not have the necessary skills for the job. Moreover, they may owe their appointment to management, making them reluctant to challenge management decisions, in order to safeguard their positions in the future.

In the Jordanian context, there is no available empirical evidence on the impact on corporate governance of board size and non-executive directors. However, recent reports[1] indicate a widespread tendency for boards of Jordanian companies to lack

[1] See for example: World Bank, Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment (Jordan) (June, 2004); and Corporate Governance

independence from controlling shareholders and from management. Attention is drawn to an absence of rules governing the composition of the board of directors and, inadequate guidelines governing the balance of power between executive and non-executive directors, and the lack of awareness of the concept of independent directors. Furthermore, Jordan shares with many other developing countries a tendency for management and the board of directors to be dominated by members of the founding families.

Given the mixed theoretical and empirical evidence, in this Chapter, we test the exact relationship between board characteristics (i.e. board size and non-executive directors ratio) and foreign ownership for Jordanian firms. However, no predication is made as to the direction of any relationship, given the prevalence, discussed above and as explained in the following parts of this chapter, of domination by the controlling family, whether as chairman of board, board members or in senior management positions.

### 4.3.4. The Role of Other Control Variables

In order to understand whether differences in foreign ownership across listed companies are related to firm-specific differences in corporate governance mechanisms, it is necessary to examine other determinants and organizational characteristics as well. The selection of control variables is determined by literature and data availability.

In our analysis, we include a number of control variables that are suggested in the literature (i.e. Kang and Stulz, 1997 and Dahlquist and Robertsson, 2001), such as market-to-book-ratio, size, leverage and dividends.

---

in the Morocco, Egypt, Lebanon and Jordan countries of the MENA region: MENA Regional Corporate Governance Working Group (2003).

To control for possible influence of a firm's growth potential, the model includes market-to-book-ratio, as a proxy for future growth potential. High market-to-book-ratio firms have a high potential for growth opportunity in future while low market-to-book-ratio firms have low growth potential in the future. If a high potential growth firm is an important factor for foreign investors, the coefficient of the market-to-book-ratio will be significant, with a positive sign.

As for firm size, this can be significant in several ways. Foreign investors may favour large firms because they are less subjected to information asymmetries and because more information is generally available regarding large firms, and thus foreign investors are likely to have more knowledge about large rather than small firms (Kang and Stulz, 1997; Lin and Shiu, 2003). It is usually easier for larger firms to access external finance and they can borrow on better terms (Ferri and Jones, 1979), as larger firms are generally more established than smaller firms. They also tend to have substantial assets that can be used as collateral. For all these reasons, it is likely that large firms will be more attractive to foreign investors. Therefore, a positive relationship between size and foreigners' holdings is expected.

Leverage may encourage lenders to monitor, as argued by Stiglitz (1985), and provide tax shields as predicted by Modigliani and Miller (1963). Ross (1977) adds that higher leverage may be construed as a positive indicator of the firm's ability to service a large amount of debt. However, too much debt increases the risk of bankruptcy, limits the firms' ability to raise new debt and subsequently may prevent firms from seizing valuable investment opportunities (Myers, 1977 and Harris and Raviv, 1990). Hence, the influence of leverage on foreign ownership is ambiguous.

Finally, dividend payment may reduce free resources in the firm and mitigate governance conflicts (Jensen, 1986). Therefore, a positive link between dividend payout and foreign investment is expected. However, higher dividends may be related to absence of growth opportunities for the firm. Firms with few profitable investment opportunities may pay higher dividends (Dahlquist and Robertsson, 2001). Lin and Shiu (2003) propose that foreign investors tend to hold more shares of firms with lower dividend yields to mitigate the negative impact of disharmonious taxation. Therefore, a negative relationship between dividend and foreigners' holdings is expected.

## 4.4. Data and Methodology

### 4.4.1. Data

For our empirical analysis, we use a sample of publicly listed companies over the period 2004-2006. Information on firm's ownership, board and firm-specific accounting data are hand-collected from secondary sources, primarily the mandatory disclosure reports of these firms to the Jordan Securities Commission. The frequency of all variables is annual, and the values are measured as of the end of December for each year.

The annual reports of Jordanian public trading companies are prepared in accordance with and are considered consistent with international accounting standards, and are subject to external auditing, to certify that they are prepared in accordance with statutory and professional principles (international auditing standards). Finally, listed companies have been required since 1997 to form auditing committees from the board of directors, which exercise oversight over the preparation of annual reports. As a further check on reliability, data pertaining to Jordanian public trading companies are also obtained from other sources, such as the Amman Stock Exchange annual company

guide, Jordan Securities Commission, the Amman Stock Exchange, the Securities Depository Centre, and the companies' websites. These sources are used to verify the figures and statistics collected from companies' annual reports.

The name(s) of the company founding family is derived from the Memorandum of Association of each company under investigation, obtained via the archive held by the Companies Control Department, a unit at the Ministry of Industry and Trade. As a further robustness check, three experts from the financial sector, stock market and Companies Control Department gave their insight in order to correctly identify the founding families. However, it is uncommon in Jordan for two or more families to have the same family name. Furthermore, it is easy to check whether the founding family is still in the firm or not, because the average age of Jordanian firms, in our sample, is low (i.e. 20 years).

Our initial sample is the set of all companies listed on the Amman Stock Exchange from 2004 to 2006. The final sample has been constructed as follows. First: we exclude financial firms (e.g., banks, insurance companies, and diversified financial services) due to the differences in the applicable regulatory requirements. Second, a firm should have been listed for at least one full year as of the end of 2006. Finally, suspended or floated price companies are excluded due to illiquidity and incomplete data (i.e. missing data). These criteria provide us with a total of 360 firm-year observations across three years (representing 80 per cent of the total non-financial listed companies).

Table 4.2 presents the number of listed companies, the number of non-financial companies, and the number of companies in the sample.

**Table 4.2: The number of the sample during the 2004-2006 periods**

| | 2004 | 2005 | 2006 | Full Period |
|---|---|---|---|---|
| No. of listed companies | 192 | 201 | 227 | 620 |
| No. of non-financial companies* | 138 | 146 | 165 | 449 |
| No. of firms in the sample | 109 | 117 | 134 | 360 |
| Proportion of sample to non-financial companies | 78.99% | 80.14% | 81.21% | 80.18% |

This table presents the number of listed companies, the number of non-financial companies, and the number of companies in the sample.

***** Non-financial firms include the following sectors: Health Care Services, Educational Services, Hotels & Tourism, Transportation, Technology & Communication, Media, Utilities & Energy, and Commercial Services, Pharmaceutical & Medical Industries, Chemical Industries, Paper & Carton, Printing & Packing, Food & Beverage, Mining & Extracting, Tobacco & Cigarettes, Engineering & Construction., Electrical Industries, Textiles, Leather & Clothing, Glass & Ceramics and Real Estate. Source: Various Amman Stock Exchange Annual Reports.

### 4.4.2. Dependent Variable - Foreign Ownership

The dependent variable is foreign ownership. Two different definitions are used. First, we measure it by the percentage of ownership held by all foreign investors (that is, with shareholding of 5 per cent or more); and secondly the percentage ownership held by foreign investors at the end of the financial year, regardless of percentage, is used as a measure to see if the explanatory variables results depend much on the threshold of foreign shares (i.e. that is, shareholding of 5 per cent or more). Data for foreign ownership obtained from the annual reports for all listed non-financial firms during the period 2004 to 2006 are compared with data in the Amman Stock Exchange annual company guide for verification purposes.

### 4.4.3. Independent Variables

We also include in our analysis a set of corporate governance mechanisms and control variables as follows: the percentage of shares held by founding family and their relatives (Founding family ownership); the ratio of the number of founding family directors to the number of total directors on the board (Founding family board directors); the percentage of shares held by local institutional investors with equity ownership greater than 5 per cent (Institutional investors); the number of directors on the board (Board size), and the ratio of the number of non-executive directors to the total number of directors on the board (Non-executive directors).

The empirical specification also controls for firm specific-characteristics. Market-to-book-ratio is the growth potential measure. Market-to-book-ratio is defined as the ratio of book value of total assets minus book value of equity plus market value of equity to book value of assets.

Size is a firm's size proxied by the sales of the company in constant prices (in logarithm); Leverage is the ratio of total debt (short and long debt) to total assets. Dividend is the ratio of dividend payments to total assets. Finally, industry dummies are also incorporated to capture industry-specific effects. Table 4.3 provides a list of the variables used in this study.

**Table 4.3: Definition of Variables**

| Variable | Definition |
|---|---|
| **Dependent Variable** | |
| Large foreign ownership | The percentage of outstanding equity held by all foreign shareholders (that is, with shareholdings of 5 per cent or more). |
| Total foreign ownership | The percentage of market value of foreign investors' equity divided by total market capitalization for each firm. |
| **Independent Variables:** | |
| Founding family ownership | The percentage of equity ownership held by founding family and their relatives. |
| Founding family board directors ratio | The ratio of the number of founding family directors to the number of total directors on the board. |
| Institutional investors | The percentage of outstanding equity held by local banks, insurance and, financial firms and pension funds (that is, with shareholdings of 5 per cent or more). |
| Board size | The total number of directors on the board. |
| Non-executive directors | The ratio of the number of non-executive directors to the total number of directors on the board. |
| **Control Variables:** | |
| Market-to-book ratio | The ratio of the book value of total assets minus the book value of equity, plus the market value of equity to the book value of assets. |
| Size | The natural log of the total sales in 2004 prices. |
| Leverage | The ratio of book value of short-term plus long-term debt divided by the book value of total assets |
| Dividend | The ratio of dividend payments to total assets. |

### 4.4.4. Methodology

We examine the determinants of foreign ownership by utilizing the cross sectional average methodology proposed by Rajan and Zingales (1995), using the following equation:

$$\text{Foreign ownership}_{it} = \alpha_i + \beta_1 \text{Founding family ownership}_{it} + \beta_2 \text{Founding family board directors}_{it} + \beta_3 \text{Founding family ownership* Founding family board directors}_{it} + \beta_4 \text{Institutional investors}_{it} + \beta_5 \text{Board size}_{it} + \beta_6 \text{Non-executive directors}_{it} + \beta_7 \text{Market-to-book-ratio}_{it} + \beta_8 \text{Size}_{it} + \beta_9 \text{Leverage}_{it} + \beta_{10} \text{Dividends}_{it} + \varepsilon_{it}$$

In particular, the dependent variable is measured at some time t, while for the independent variables we use average-past values. Specifically, the dependent variable (i.e. large foreign ownership and total foreign ownership) is measured in year 2006, while for the independent variables (i.e. founding family ownership, founding family board directors ratio, large domestic institutional investors, board size, non-executive directors, market-to-book-ratio, size, leverage and dividends); we take average values for two years (i.e. 2004 and 2005). Using average values for the explanatory variables is in an attempt to mitigate problems that might arise due to short-term fluctuations and extreme values in our data. Furthermore, using past values reduces the likelihood of observed relations reflecting the effects of foreign ownership on firm-specific factors (see also, Ozkan and Ozkan, 2004, for a similar methodology).

### 4.4.5. Sample Characteristics

Table 4.4 reports the descriptive statistics for the variables used in this study. The average large foreign ownership ranges from 8.71 per cent in 2004 to 12.16 per cent in 2006 and the average total foreign ownership ranges from 12.55 per cent in 2004 to

18.33 per cent in 2006. These results reflect a significant increase in the foreign ownership on ASE during the period of study.

**Table 4.4: Descriptive Statistics for Foreign Ownership, Independent and Control Variables Used in the Study.**

| | Full Sample | 2004 | 2005 | 2006 |
|---|---|---|---|---|
| | Mean | Mean | Mean | Mean |
| **Dependent Variables** | | | | |
| Large foreign ownership | 10.92 | 8.71 | 11.56 | 12.16 |
| Total foreign ownership | 16.09 | 12.55 | 16.83 | 18.33 |
| **Independent Variables** | | | | |
| Founding family ownership | 22.09 | 22.86 | 21.57 | 20.94 |
| Founding family board directors | 24.74 | 24.97 | 24.53 | 24.73 |
| Institutional investors | 19.42 | 22.42 | 19.20 | 17.17 |
| Board size | 8.32 | 8.46 | 8.35 | 8.17 |
| Non-executive directors | 86.90 | 85.25 | 87.17 | 87.73 |
| **Control Variables** | | | | |
| Market-to-book-ratio | 1.62 | 1.48 | 1.75 | 1.61 |
| Size | 6.68 | 6.65 | 6.72 | 6.67 |
| Leverage | 13.29 | 12.96 | 13.03 | 13.78 |
| Dividends | 3.28 | 3.68 | 3.6 | 2.69 |
| No. of observations | 360 | 109 | 117 | 134 |

This table provides descriptive statistics for the main variables used in our analysis. Variables are measured at the end of each year. Definitions for all the variables are provided in Table 4.3.

The average equity (in the sample period) held by the founding family and their relatives averages 22.09 per cent. On average Family board members represent 24.74 per cent of the total board size of companies for the entire period and this value ranges from 0 to 100 per cent of the board size. Institutional investors' ownership accounts for

about 19.42 per cent of total shares. This ratio shows a marked decreasing pattern. The average ordinary shareholding by local institutional investors decreases by 4 percentage points over the three years, falling from 22.42 per cent in 2004 to 17.17 per cent in 2006.

The average board size is 8.32 directors. In terms of board composition, the average proportion of non-executive directors is 86.90 per cent and this value is relatively constant over time, suggesting that non-executive directors continue to be in the majority in Jordanian boards. On average, firms tend to have at least seven non-executive directors. The proportion of non-executive directors in the Jordanian boards is higher than has been reported in other emerging countries, for example, 50 per cent in Malaysia (Haniffa and Hudaib, 2006), 67 per cent in India (Ghosh, 2006) and 82 per cent in Bahrain (Hussain and Mallin, 2002). Regarding the control variables, the mean value for market-to-book-ratio is 1.62, the average market sale is 23.09 million Jordanian Dinars (JD)[1] (i.e. about US$ 32.56 million), the leverage ratio is 13.29 per cent and the average dividend ratio is 3.28 per cent.

Table 4.5 presents the Pearson Correlation for the variables used on the analysis. The results are generally in line with our expectations. Foreign ownership is negatively related to family ownership and founding family board directors. The negative correlations with family ownership and family board directors suggest that foreign investors avoid family-controlled firms. Institutional investors, too, are negatively correlated with foreign ownership, suggesting that their monitoring effect on management is perceived as inefficient. Finally, foreign ownership is positively related to market-to-book-ratio, and to size, but negatively related to dividends.

[1] The Jordanian Dinar (JD) is pegged to the U.S. Dollar since 1995 (JD 1 = $ 1.41).

**Table 4.5: Pearson Correlation Coefficients and Variance Inflation Factor (VIF) for the variables used in the study.**

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | VIF |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) Large foreign ownership | 1.00 | | | | | | | | | | - |
| (2) Founding family ownership | -0.26* | 1.00 | | | | | | | | | 1.13 |
| (3) Founding family board directors | -0.28* | 0.07* | 1.00 | | | | | | | | 1.07 |
| (4) Institutional investors | -0.25* | 0.35* | -0.04 | 1.00 | | | | | | | 1.10 |
| (5) Board size | -0.10 | -0.28* | 0.03 | -0.05 | 1.00 | | | | | | 1.50 |
| (6) Non-executive directors | 0.07 | -0.23* | -0.19** | -0.06 | 0.23* | 1.00 | | | | | 1.19 |
| (7) Market-to-book-ratio | 0.11* | 0.03 | -0.06 | -0.11 | -0.12 | -0.06 | 1.00 | | | | 1.08 |
| (8) Size | 0.14** | -0.07 | 0.01 | -0.08 | 0.45* | -0.04 | -0.01 | 1.00 | | | 1.42 |
| (9) Leverage | 0.12 | 0.02 | -0.09 | -0.15 | 0.15 | 0.12 | -0.08 | 0.30* | 1.00 | | 1.24 |
| (10) Dividends | -0.15** | -0.16 | 0.02 | -0.11 | 0.17** | -0.11 | 0.18** | 0.05 | -0.20** | 1.00 | 1.15 |

This table displays the Pearson Correlation Coefficient and Variance Inflation Factor (VIF) for the main variables used in the study. ** and * indicate the correlation is significant at the 1% and 5% levels respectively. Definitions for all the variables are provided in Table 4.3.

To test for possible multicollinearity (Table 4.5), we compute the variance inflation factor (VIF) for each independent variable and the largest one is 1.50, well below the rule of thumb cutoff of 10.0 for multiple regression models (Gujarati, 2003). Thus, we conclude that multicollinearity is unlikely to be a serious problem in our study.

## 4.5. Empirical Results

In this section, we will focus on the empirical tests and discussion of results on the relationship between firm-specific characteristics and corporate governance mechanisms and foreign investment.

### 4.5.1. Univariate Analysis

In Table 4.6, as our first step in examining the relation between firm-level corporate governance and foreign ownership, we report univariate mean-comparison test results of the sample firm subgroups categorized on the basis of above and below median values for several firm-specific characteristics. We use *t*-test to test the hypothesis that firms with above median values of these characteristics differ from firms with below median values with respect to foreign ownership. The results are in line with our expectations and strongly support our hypothesis that founding family ownership and founding family control exert a significant influence on foreign investors' decisions. More specifically, we find that firms with above median founding family ownership and founding family members on the board of directors have significantly lower foreign ownership, which possibly suggests that foreign investors underweight Jordanian firms with founding family ownership and control. These results are statistically significant at the 1 per cent level.

We also find that firms with above median values of institutional investors and high dividend-paying firms have significantly lower foreign ownership. On the other hand, we find that firms with above median market-to-book-ratio, size, leverage and non-executive directors have relatively high foreign ownership.

**Table 4.6: Univariate results**

| | Average foreign ownership of above variable median | Average foreign ownership of below variable median | **t-test** |
|---|---|---|---|
| Founding family ownership | 9.46 | 27.62 | -4.40*** |
| Founding family board directors | 15.97 | 29.03 | -3.39*** |
| Institutional investors | 14.04 | 24.78 | -2.77*** |
| Board size | 8.09 | 8.14 | -0.118 |
| Non-executive directors | 89.69 | 85.04 | 2.08** |
| Market-to-book-ratio | 1.86 | 1.66 | 1.96* |
| Size | 3.03 | 2.53 | 2.09** |
| Leverage | 16.42 | 11.06 | 2.14** |
| Dividends | 2.1 | 3.80 | -2.03** |

This table reports mean comparison of large foreign ownership analyzing high (above median) versus low (below median) founding family ownership, founding family board directors, institutional investors, board size, non-executive directors, market-to-book ratio, size, leverage and dividends. t-test statistic is used to compare the mean difference. Definitions for all variables are provided in Table 4.3. ***,** and * indicate that the mean difference is statistically significant at the 1%, 5% and 10% level respectively.

Taken together, the univariate results suggest that foreign ownership tends to be lower for firms with high founding family ownership, high founding family members in the board, high institutional investors and high dividend-paying firms. On the other hand,

foreign ownership tends to be higher for firms with high market-to-book-ratio, large firms and with high non-executive directors ratio.

### 4.5.2. Multivariate Analysis

In this section, we conduct a multivariate regression analysis to investigate the relationship between large foreign ownership and several firm-specific characteristics by focusing on the impact of founding family ownership and control on foreign investors.

The results presented in Table 4.7 relate to the level of large foreign ownership and are based on a cross-sectional regression approach. We start by estimating our baseline model (model 1), in which we include only the control variables. In general, the estimated coefficients are consistent with our predictions and with findings reported in the literature. Specifically, we find that large foreign investors is positively associated with market-to-book-ratio possibly indicating that firms with higher growth potential tend to attract more foreign investment. Moreover, we find that foreign investors have a strong preference for large firms. Foreign investors prefer holding shares in large firms because information asymmetries between local and foreign investors may be relatively less in large firms. This finding is consistent with that of Kang and Stulz, (1997) in Japan; Dahlquist and Robertsson (2001) in Sweden; and Lin and Shiu (2003) in Taiwan. Firm size is an influential consideration in foreign investment decisions due to concerns about liquidity and transaction costs (Ferreira and Matos, 2008).

Foreign investors seem to avoid firms that pay high dividends. This may be because higher dividends are associated with lack of growth opportunities for the firms or to reduce the impact of unfavourable taxation. This is in line with previous studies that

find a negative relationship between dividend and foreign ownership (Dahlquist and Robertsson, 2001) in Swedish firms. Similarly, Ferreira and Matos (2008) use a comprehensive data set of financial institution equity holdings from 27 countries around the world and find that foreign institutions tend to avoid high dividend-paying stocks. Finally, leverage is not related to the level of foreign investment.

In model 2, we add our main explanatory variable, founding family ownership. Consistent with our expectations, we find a negative and significant relationship (at the 1 per cent level) between founding family ownership and foreign ownership. This finding suggests that foreign ownership is likely to be lower in firms in which founding family ownership is high.

Whilst it is confirmed that founding family ownership indeed affects foreign investors negatively, it still remains unclear whether it is crucial for foreign investors how families use their control. Specifically, does it make any difference whether founding families are represented in the firm (i.e. the presence of founding family members in the board of directors) or not? Therefore, to shed some light on this question, in model 3, we add also founding family board directors ratio and, in model 4 we add the interaction term between founding family ownership and founding family board directors among explanatory variables to test our hypothesis that firms with founding family ownership are even less likely to attract foreign investors when founding family members are also in the board.

The estimated coefficient of founding family board directors is negative and significant (at the 1 per cent) as expected. Furthermore, the interaction term between founding family ownership and founding family board members is also significant and negative. The results provide support for our earlier prediction that founding family ownership

and founding family control exerts a significant influence on foreign investors' decisions of Jordanian firms. More specifically, this finding suggests that foreign investors have lower equity holdings in family controlled firms (i.e. when founding family members are in the board of directors)[1]. The results for other firm-specific characteristics are no different from those reported in previous models. In particular, we find that firms with higher growth potential tend to attract more foreign investment. Moreover, foreign investors have a strong preference for large firms. Foreign investors seem to avoid firms that pay high dividends and finally, leverage is not related to the level of foreign investment.

We next test the impact of local institutional investors on foreign ownership. The results are reported in model 5 Table 4.7. The estimated coefficient of institutional ownership is negative and significant at 1 per cent, suggesting that firms with large institutional ownership are related to lower foreign holdings. This finding is in line with our earlier prediction. Specifically, this finding provides support for our expectation that institutional investors in emerging markets are inefficient monitors and are thus unlikely to exercise an effective governance role.

An alternative interpretation of the result is that, in a small country like Jordan, a major characteristic is the relative lack of local institutions that could effectively serve as an external governance mechanism against poorly performing management. The fact that mutual funds are not widespread in Jordan suggests that a large portion of the local institutional investors are banks, insurance and pension funds such as the Social

[1] We re-estimated our regressions without founding family ownership with a view that they may be substitutes. However, our results remain unchanged and hence the results are not reported.

Security Corporation Investment Unit[1]. In principle, banks and the Social Security Corporation Investment Unit are in a position to act as primary monitoring agents for other shareholders, especially minority shareholders. However, their monitoring ability is very low due to at least three reasons. Firstly, banks in Jordan generally have significant business relationships with companies, since most banks in Jordan are family-controlled[2], individually or through family related group companies, and thus, their monitoring ability is weak. Secondly, the nominees of the Social Security Investment Unit on the board of many Jordanian firms are typically bureaucrats with minimal expertise in corporate matters. Thirdly, even if these nominees are equipped for the task of oversight in corporate matters, they do not have a strong incentive to be effective monitors, as their tenure and career prospects are rarely affected by the performance of the companies in which they serve on the board as nominees. In such a context, this finding can also be regarded as consistent with the view that some institutional investors are less inclined to play an effective monitoring role, since they desire to protect their existing or potential business relations with firms (Pound, 1998; Cornett et al., 2007) and with Ferreira and Matos' (2008) finding that in the case of grey Institutional Ownership (i.e. banks, insurance companies, and pension funds), their loyalty to corporate management may be greater than to shareholders, their own holding

[1] The Social Security Corporation is a government-owned and managed entity whose main objective is to provide pensions to all insured persons after retirement or in case of disability or to their heirs after death and to insure them against Work Injuries and Occupational Diseases.
The Social Security Corporation has an investment unit called "The Investment Unit", which was established in 2003 for investing the funds of the Social Security Corporation.
The stock portfolio of the Social Security Corporation is considered as the biggest portfolio in the ASE, it is considered also a well diversified portfolio of 3 billion JD (Al Fanik, 2006).

[2] For example Jordan Bank owned by the Al Kori family, Union Bank owned by the Salfiti family, Jordan Arab Investment Bank by the Al-Qadi family, Jordan National Bank by the Al-Muasher family, Jordan Commercial Bank by the Al-Sayegh family.

notwithstanding, preventing them from reacting to management actions that are not in line with the interests of shareholders.

We next consider the role of board characteristics in determining foreign ownership in Jordan. In model 6, we add board variables (i.e. board size and non-executive directors). The findings show that board size is significant and negatively related to foreign ownership. This result suggests that foreign investors perceive large boards to be inefficient monitors of the management. This result is in line with the empirical evidence in corporate governance literature: large boards encounter problems of coordination, control, and decision-making (see, e.g. Yermack, 1996; Eisenberg et al., 1998; and Florackis et al., 2009 among others).

The result for non-executive ratio is insignificant. This result may be interpreted in the light of the claims, reviewed previously, that in most companies in Jordan, an average board lacks independence from controlling shareholders and from management. We have also noted the reports of international bodies concerning the absence of rules governing the composition of the board of directors. Guidelines governing the balance of power between executive and non-executive directors are inadequate and there is no established concept of independent directors.

To summarize our results, we find that foreign ownership tends to be lower for firms with a high founding family ownership and control (i.e. high founding family member in the board), high institutional investors, large board size and high dividend-paying firms. On the hand, foreign ownership tends to be higher for firms with high market-to-book-ratio and large firms.

**Table 4.7: Cross sectional regressions prediction of large foreign ownership.**

| Dependent Variable : **Large Foreign Shareholders** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Independent variables | Predicted sign | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Founding family ownership | - | - | -0.331*** | -0.321*** | -0.171** | -0.092** | -0.159* |
| | | | (-3.91) | (-4.80) | (-2.11) | (-2.05) | (-1.90) |
| Founding family board directors | - | - | - | -0.34*** | -0.233** | -0.213** | -0.218** |
| | | | | (-4.26) | (-2.02) | (-2.39) | (-2.29) |
| Founding family ownership * Founding family board directors | - | - | - | - | -0.011** | -0.013*** | -0.011** |
| | | | | | (-2.01) | (-2.97) | (-2.43) |
| Intuitional investors | - | - | - | - | - | -0.304*** | -0.292*** |
| | | | | | | (-3.60) | (-3.36) |
| Board size | -/+ | - | - | - | - | - | -1.902** |
| | | | | | | | (-2.09) |
| Non-executive directors | -/+ | - | - | - | - | - | -0.033 |
| | | | | | | | (-0.28) |
| Market-to-book-ratio | + | 5.463** | 5.643*** | 4.879*** | 4.997*** | 3.863** | 3.364* |
| | | (2.37) | (2.88) | (2.63) | (2.74) | (2.15) | (1.81) |
| Size | + | 3.667** | 3.081** | 3.791** | 3.768** | 4.133*** | 5.202*** |
| | | (2.05) | (2.13) | (2.40) | (2.40) | (2.98) | (3.87) |
| Leverage | -/+ | 0.002 | 0.040 | -0.011 | -0.025 | -0.114 | -0.094 |
| | | (0.01) | (0.22) | (-0.06) | (-0.15) | (-0.71) | (-0.64) |
| Dividend | -/+ | -1.272*** | -1.243*** | -1.30*** | -1.351*** | -1.482*** | -1.243*** |
| | | (-3.21) | (-3.31) | (-3.80) | (-3.82) | (-4.28) | (-3.59) |
| Industry dummies | | **Yes** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes** |
| $R^2$ | | 0.19 | 0.30 | 0.41 | 0.43 | 0.49 | 0.51 |
| No. of observations | | 134 | 134 | 134 | 134 | 134 | 134 |

This table presents cross-sectional regression predicting foreign ownership. The dependent variable is large foreign ownership measured in 2006 and the independent variables average values for two years (i.e. 2004-2005). Model 1 is the baseline model while models 2, 3, 4, 5and 6 add different ownership and board variables. t-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. For the estimation, heteroscedasticity-robust standard errors are used. See Table 4.3 for exact definitions of variables.

### 4.5.3. Foreign Ownership: Alternative Definition

In order to assess to what extent the findings reported above depend on the threshold of foreign equity shares, in Table 4.8 we present new cross sectional regression with average values by using an alternative definition for the foreign ownership. Specifically, instead of using large foreign shareholders (that is, these with shareholdings of 5 per cent or more) as our dependent variable, we use all ownership held by foreign investors, regardless of percentage, to see if the previous results still hold.

Similar to our earlier findings, the results suggest that foreign investors consider founding family ownership and control (i.e. the presence of the founding family members in the board of directors) undesirable when they invest in the Jordanian stock market. Specifically, our finding suggests that foreign ownership is likely to be lower in firms in which founding family ownership is high. Moreover, firms with founding family ownership are even less likely to attract foreign investors when the founding family members are also present in the board of directors. Additionally, firms with more institutional ownership are less likely to attract investment from foreign investors.

The negative relationship between foreign investors and board size may be because large boards are thought to dilute the coordination, communication and decision making compared to small boards (Florackis et al., 2009). Finally, the results for firm-specific characteristic are no different from those in Table 4.7. Specifically, firms with high growth potential are still positively and significantly related to foreign ownership, foreign investors have a strong preference for large firms, and they are averse to firms that pay high dividends. Leverage shows no association with foreign ownership.

**Table 4.8: Cross sectional regressions prediction of Total foreign ownership.**

| Dependent Variable: **Total Foreign Ownership** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Independent variables | Predicted sign | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Founding family ownership | - | - | -0.31*** | -0.302*** | -0.265*** | -0.181** | -0.251*** |
| | | | (-4.49) | (-4.51) | (-3.01) | (-2.01) | (-2.73) |
| Founding family board directors | - | - | - | -0.141*** | -0.127** | -0.117** | -0.122** |
| | | | | (-3.23) | (-2.05) | (-2.43) | (-2.39) |
| Founding family ownership * | - | - | - | - | -0.001 | -0.003 | -0.008 |
| Founding family board directors | | | | | (-0.43) | (-0.74) | (-1.06) |
| Intuitional investors | - | - | - | - | - | -0.329*** | -0.322*** |
| | | | | | | (-3.76) | (-3.56) |
| Board size | -/+ | - | - | - | - | - | -1.766* |
| | | | | | | | (-1.89) |
| Non-executive directors | -/+ | - | - | - | - | - | -0.100 |
| | | | | | | | (-0.75) |
| Market-to-book-ratio | + | 4.713** | 4.882** | 4.244** | 4.269** | 3.981* | 3.035* |
| | | (2.03) | (2.51) | (2.24) | (2.24) | (1.95) | (1.67) |
| Size | + | 4.961*** | 4.412** | 5.00*** | 4.995*** | 5.381*** | 5.381*** |
| | | (2.69) | (2.47) | (2.94) | (2.93) | (3.60) | (3.60) |
| Leverage | -/+ | 0.041 | 0.076 | 0.033 | 0.031 | -0.066 | -0.066 |
| | | (0.21) | (0.43) | (0.20) | (0.17) | (-0.41) | (-0.43) |
| Dividend | -/+ | -1.273*** | -1.246*** | -1.295*** | -1.311*** | -1.449*** | -1.449*** |
| | | (-2.85) | (-2.83) | (-3.13) | (-3.12) | (-3.44) | (-3.44) |
| Industry dummies | | **Yes** | **Yes** | **Yes** | **Yes** | **Yes** | **Yes** |
| $R^2$ | | 0.20 | 0.29 | 0.36 | 0.37 | 0.43 | 0.45 |
| No. of observations | | 134 | 134 | 134 | 134 | 134 | 134 |

This table provides the results from cross sectional regression analysis predicting foreign ownership. The dependent variable is total foreign ownership measured in 2006 and the independent variables average values for two years (i.e. 2004-2005). Model 1 is the baseline model while models 2, 3, 4, 5 and 6 add different ownership and board variables. t-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. For the estimation, heteroscedasticity-robust standard errors are used. See Table 4.3 for exact definitions of variables.

### 4.5.4. Additional Test: Probit Regression

In order to provide further insights into the impact of corporate governance mechanisms and firm-specific characteristic on foreign investment, we present an additional test. For this purpose, we use a probit model to investigate the relationship between foreign ownership and corporate governance mechanisms. In this model, foreign ownership is a dummy variable, which takes value one if the share of equity of foreign investors is equal or more than 5 per cent and zero otherwise[1]. We use the following regression model:

$$Y_{it}^* = \alpha_0 + \beta X_{it} + \varepsilon_{it}$$

Where $Y_{it}^*$ is the dependent variable, which is unobserved; the choices that are observed are:

$Y_{it} = 1$ if $Y_{it}^* >= 5\%$

$Y_{it} = 0$ otherwise

"*i*" indexes companies and "*t*" indexes years. $\alpha_0$: is the intercept. $\beta$: is the vector of coefficients. $X_{it}$: is the vector of k explanatory variables. $\varepsilon_{it}$ : is the random error. A positive (negative) coefficient sign indicates that the explanatory variable is positively (negatively) associated with the likelihood of foreign investment over 5 per cent.

Table 4.9 presents the estimation results of the probit regression. Overall, with the exception of market-to-book-ratio, all the significant explanatory variables influence foreign ownership likelihood in a manner consistent with the predictions. Our findings provide further support for our earlier findings. Specifically, the results show that both founding family ownership and family control are negatively and significantly related to

[1] It is worth mentioning that information on foreign ownership of less that 5 per cent is not available, since Jordanian listed companies are not required by law to disclose this information

foreign ownership. Our finding suggests that foreign ownership is likely to be lower in firms in which founding family ownership is high and when the founding family members are also present in the board of directors.

**Table 4.9: Results of probit regression on foreign ownership**

| Dependent variable: **Large foreign ownership dummy** | | |
|---|---|---|
| Explanatory variables | Predicted sign | |
| Founding family ownership | - | -0.011*<br>(-1.71) |
| Founding family board directors | - | -0.017***<br>(-2.77) |
| Founding family ownership *<br>Founding family board directors | - | -0.0001<br>(-0.80) |
| Intuitional investors | - | -0.018***<br>(-3.75) |
| Board size | -/+ | -0.081**<br>(-2.09) |
| Non-executive directors | -/+ | 0.006<br>(0.90) |
| Market-to-book-ratio | + | 0.091<br>(1.42) |
| Size | + | 0.575***<br>(3.50) |
| Leverage | -/+ | 0.003<br>(0.05) |
| Dividend | -/+ | -0.038**<br>(-2.14) |
| Years effects | | Yes |
| Log-likelihood | | -202.937 |
| Wald test | | 72.90 |
| No. of observations | | 360 |

This table presents the results of probit regression of the likelihood of foreign ownership estimated over the period 2004-2006. Foreign ownership is a dummy variable, which takes value one if the share of equity of foreign investors is equal or more than 5 per cent and zero otherwise. t-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. See Table 4.3 for exact definitions of variables.

The relationship between institutional ownership and foreign ownership is found to be negative and significant at 1 per cent, supporting our hypothesis that institutional investors are perceived by foreign investors to be inefficient in monitoring management. Consistent with our earlier findings, foreign investors perceive large boards as undesirable compared to small boards. We also find that foreign investors have a strong preference for large firms and they avoid firms that pay high dividend yields. Finally, leverage shows no association with foreign ownership.

### 4.5.5. Further Checks

To check the robustness of our results, we estimate a number of different specifications that we do not tabulate for the sake of brevity[1]. First, we present OLS results for the pooled regression analysis. In particular, we repeat our regression model (model 6 Table 4.7). The results strongly support the previous findings. That is, we find significant and negative relationships between large foreign ownership and founding family ownership and founding family board directors. However, the interaction term between founding family ownership and founding family board members is negatively related, but insignificant, to foreign ownership. Furthermore, local institutional ownership and board size are significant and negatively related to large foreign ownership. With regard to control variables, we find that size is positively and significantly related to large foreign ownership and dividends are negatively and significantly related to large foreign ownership. However, unlike our previous finding, we find that market-to-book-ratio is positively related, but insignificant, to foreign ownership.

[1] The results are available upon request

Second, we repeat our cross sectional regression model (model 6 Table 4.7) and we use founding family CEOs instead of founding family board directors to see their effect on foreign investment decisions. Furthermore, we interact founding family ownership and family CEO to see if the impact of founding family ownership depends on the CEO family dummy. This shows us whether the impact of founding family ownership increases or decreases in firms where the executive director (CEO) is a founding family member. Our results show that founding family ownership and founding family CEOs are negatively related to large foreign ownership. However, the interaction term is negatively related, but insignificant, with foreign ownership.

Finally, we repeat our cross sectional regression model (model 6 Table 4.7) after we interact founding family ownership with board characteristics (i.e. board size and non-executive directors) to test if the effect of founding family ownership on foreign investment decisions changes with these characteristics. We find no significant effect. This result support our earlier findings regarding family ownership and its negative effect on foreign investors, because most boards in Jordan, as in many other developing countries, are controlled by the large shareholders, which in most cases are families.

## 4.6. Conclusion

In this chapter, we utilize firm-level data of Jordanian listed corporations from 2004-2006 to investigate the relationship between foreign ownership and corporate governance. Our analysis attempts to provide insights into two important questions. First, how do family ownership and control affect the investment decisions of foreign investors in the Jordanian market? Second, how do other potential corporate governance mechanisms (i.e. institutional investors and board characteristics) and firm-specific

characteristics (i.e. market-to-book-ratio, size, leverage and dividends) affect investment foreign investors in the Jordanian market? In addition to cross-sectional analysis, we also carry out probit regression and two alternative definitions of foreign ownership are used, namely, largest foreign ownership and total foreign ownership, to confirm the reliability of our findings.

Our first contribution in this chapter is concerned with the empirical investigation of the impact of founding family ownership and control on foreign investment decisions. Previous studies in this field have generally investigated the total insider ownership or controlling shareholders (i.e. families and management) without taking the identity of the insider or controlling shareholder into consideration. Furthermore, very few studies have investigated the impact of board structure on foreign ownership. This study, by examining the impact of founding and local institutional involvement on foreign ownership, advances the knowledge in this field. Second, by using two alternative definitions of foreign ownership, namely, large foreign ownership and total foreign ownership, we are able to assess to what extent the findings depend on the threshold of foreign equity shares. Finally, this is, as far as the researcher is aware, the first attempt to analyse investment by foreign investors in relation to corporate governance, including both a variety of corporate governance mechanisms and firm specific characteristics in an emerging equity market and, more specifically, one of the Middle East and North African (MENA) countries.

Our analysis sheds new light on the determinants of foreign investors' portfolio choice. Our results reveal that founding family ownership and founding family control exert a significant influence on foreign investors' decisions. Foreign investors equity holdings are lower in family controlled firms (i.e. when founding family members are in the

board of directors). Institutional investors also appear to make firms less attractive to foreign investors. This finding supports the claims by some researchers that some institutional investors in emerging markets are ineffective in monitoring because of their inclination to protect existing or potential business relations with firms, at the expense of their governance role. Board size and proportion of non-executive directors also seem to be perceived unfavourably by foreign investors. The findings show that both board size and non-executive directors are negatively related to foreign ownership, and the relationship is significant for board size. This result suggests that foreign investors perceive large boards as encountering problems of coordination, control and decision-making. Company specific characteristics are in line with previous literature. We find that high growth potential firms and large firms seem to be more attractive to foreign investors. Foreign investors seem to avoid firms that pay high dividends. Finally, leverage is not related to foreign investors.

The empirical findings of this study have several policy and management implications. First of all, the authorities should seriously consider the possibility of further regulatory changes to improve corporate governance practices in Jordanian firms, to enhance the attractiveness of the Jordanian stock market relative to other markets in the region. Our study could be useful for decision-makers, to gain knowledge of what aspects of corporate governance are evaluated by foreign investors, and how they are perceived. The factors which are suggested in this study, to influence foreign investors, appear to be among those aspects and future researchers may wish to explore others. Second, Jordanian companies seeking foreign investment need to enhance their attractiveness by demonstrating effective corporate governance, as investors show preference for companies that are well managed and transparent in their operations.

# Chapter 5

# The Interaction between Founding Family Ownership, Corporate Governance and Cash Holdings

## 5.1. Introduction

Recent literature on corporate finance emphasizes the importance of the cash holdings policy of firms and how firms can manage their cash reserves (see, e.g., Opler et al., 1999; Dittmar et al., 2003; Ozkan and Ozkan, 2004; and Guney et al., 2007). It is argued that in perfect capital markets, the optimal level of cash holdings is irrelevant. This is because firms can obtain external funds (in both the equity and debt markets) to invest in profitable investment opportunities whenever internal funds are insufficient to fund projects. Firms are also indifferent to internal and external financing. However, capital markets have important imperfections, including asymmetric information, transaction costs and other financial restrictions (see, e.g., Myers and Majluf, 1984). These create a disparity between the cost of internal and external funds. For this reason, it is expected that firms subject to greater imperfections will maintain larger cash reserves, as cash holdings increase firms' ability to undertake investment when they face shortage of internal funds and external finance is too costly. However, it is also recognised that there are costs associated with holding cash. For example, it is claimed that managers have incentives to retain cash to pursue their own private objectives, which may differ from those of outside investors (Jensen, 1986). For example, managers may be inclined to increase the amount of funds under their control, because this to some extent, affords them an opportunity to spend as they wish, squandering funds by consuming perquisites and/or financing projects that equity investors would be unwilling to finance.

Until recently, the literature on corporate finance has paid little attention to the cash holdings of firms. Earlier papers by Kim et al. (1998) and Opler et al. (1999) provide comprehensive reviews on the determinants of cash holdings for publicly listed firms in

the US. They find that the optimal cash is chosen based on a trade off between the costs and the benefits of holding cash. More specifically, Kim et al. (1998) find that firms that face higher costs of external financing, have more volatile earnings, have lower returns on assets and tend to have large cash holdings. Opler et al. (1999), on the other hand, finds that smaller firms with better investment opportunities and risky activities possess a larger proportion of liquid financial assets. However, empirical investigations of the cash holding decision have so far focused mainly on the role of firm-specific fundamentals in the determination of cash holdings.

Very recently, a number of studies highlighted the importance of agency costs and corporate governance as an important determinant of corporate cash holdings. For example, Ozkan and Ozkan (2004), for UK firms, investigate the nature of the relationship between cash holdings and managerial ownership among other corporate governance characteristics including board structure and ultimate controllers of companies. They provide evidence of a non-linear relationship between managerial ownership and cash holdings. They observe that cash holdings first fall and then rise as managerial ownership increases. They also find that firms with ultimate controllers hold higher levels of cash than widely held firms. Cross-country studies (e.g. Dittmar et al., 2003, for more than 11,000 companies from 45 countries; Kalcheva and Lins, 2007, for more than 5,000 firms from 31 countries; Guney et al., 2007, for 4,069 firms from Japan, France, Germany, the UK, and the US) show that companies in countries with poor shareholder protection (poor corporate governance) tend to hold more cash than those in countries with good shareholder protection. This implies the inability of investors in countries with weak shareholder protection to force managers to disgorge executive cash balances (Dittmar et al., 2003). In addition, strong creditor protection

may affect the likelihood of bankruptcy in the event of financial distress, which would, in turn, imply accumulation of large amounts of cash as a precaution against financial distress (Guney et al., 2007). Furthermore, a few recent studies investigate the relationship between foreign ownership and cash holdings. For example, Chang and Noorbakhsh (2006) extend the work of Dittmar et al. (2003) and investigate the nature of the relationship between corporate cash holdings and Foreign Direct Investment (FDI) for 46 countries. They find that "Foreign Direct Investment (FDI) inflows in today's highly integrated capital markets act as substitutes for corporate cash holdings" (P.302). They add that FDI inflows act as a substitute for cash holdings in G-7 countries, but as a complement for cash holdings by firms in the non-G-7 countries. However, the data on FDI inflows used in their study is at the country level, not at firm level. Moreover, Luo and Hachiya (2005) find evidence for a positive relationship between foreign ownership and cash holdings. They explain their result by saying that foreign stockholders might prefer to select profitable firms to invest, and these firms perform well and accumulate more cash. However, they measure foreign ownership as either a total or average ratio of foreign stockholdings and not as large shareholders.

The aforementioned studies provide substantial evidence as to several firm-specific factors that are important for firms' cash holding decisions, such as firm size, leverage, growth opportunities and cash flow volatility. Further, they show that corporate governance (i.e. managerial ownership, ultimate controls, foreign ownership and shareholder protection) is important in explaining corporate cash holdings behavior. However, little, if any, work examines the relation between founding family ownership, large foreign investors and corporate cash holdings. Therefore, in this chapter we provide additional empirical evidence on the determinants of cash holding decisions.

There are several important features of our analysis that, we believe, extend the literature on empirical determinants of cash holdings.

The first major contribution in this chapter is concerned with the empirical investigation of the impact of founding family ownership on corporate cash holdings. Prior researches provide support for the significant influence of managerial ownership on cash holdings decisions (see, e.g., Opler et al., 1999 and Ozkan and Ozkan, 2004). However, to the best of our knowledge, this study is the first to investigate the relationship between founding family equity ownership and cash holdings. We also examine the nature of this relationship (See Dittmar et al., 2003; Ozkan and Ozkan, 2004; Kalcheva and Lins, 2007 and Guney et al., 2007 for reference). Founding family ownership is an important type of ownership structure, given the huge number of firms around the world that are family-owned (La Porta et al., 1999; Claessens et al., 2000; Burkart et al., 2003; Anderson and Reeb, 2003; Villalonga and Amit 2006).) Even among the Standard and Poor (S&P) 500 and Fortune 500 companies, where family ownership is least to be expected, one third have founding family members actively involved in the businesses (Anderson and Reeb, 2003). Furthermore, in most of the Arab countries, as in many other developing countries, many firms are owned and controlled by the founding family[1]. Controlling family owners are involved in the management of the organizations, as Chairman of the Board or board members and often control senior management positions[2].

[1] For example Jordan Chemical Industries by the Al Taher family, Ready Mix Concrete and Construction Supplies by Al Alaammy family, Specialized Investment Compounds by the Al Salfiti family, Printing and Packaging by the Al Fakori family, Darwish Al-Khalili & Sons by Al Khalili family, Jordan Industrial Resources by the Al Muasher family and Arab International Food Factories by the Abu Khadijeh family etc.

[2] Corporate Governance in the Morocco, Egypt, Lebanon and Jordan countries of the MENA region: MENA Regional Corporate Governance Working Group (2003)

In this situation we expect that, in Jordan and in most developing markets, founding family ownership is more important than managerial discretion. Therefore, in this chapter, we argue that there are likely to be two different effects of founding family ownership on the cash holding decisions of Jordanian firms, namely, the alignment and entrenchment effects. The alignment effect is predicated on the assumption that the interests of founding families and other shareholders are better aligned, so that founding families have less incentive to expropriate wealth from other shareholders by holding more cash. We expect that at relatively lower levels of founding family ownership the market perceives increasing founding family ownership favourably, as it may show stronger commitment and greater incentive to monitor and discipline the management that may be independent of or closely linked to founding family owners. This in turn is expected to reduce the expected cost of external finance (both debt and equity) leading to a lower cash holding policy.

However, at higher levels of founding family ownership, it is argued the ability of outside shareholders to monitor and influence management decisions is reduced, which could result in greater control and entrenchment of founding families. In such a situation, firms would be expected to start increasing their cash balances. This may occur for two reasons. First, the market may perceive high levels of founding family ownership less favourably now, as the expropriation of minority shareholders by strong/large controllers becomes more likely and large family owners are more likely to control the management and be free from monitoring and disciplining. That is, they become entrenched at high levels of ownership. This, in turn, increases the expected cost of external finance and firms may choose to increase their cash reserves voluntarily as a precautionary motive in an attempt to reduce the costs of foregone investment

opportunities due to insufficient resources. Second, it is also possible that founding family owners choose to hold larger cash balances as this policy would increase their chance of using readily available liquid resources in their own interest. As they are able to do so only at high levels of ownership, which allow them to control the decision making process and the management, we expect a positive relationship between cash holdings and founding family ownership at high levels of ownership.

Second, to our knowledge, this study is the first to test the effect of large foreign investors, which is an issue that is neglected in the existing literature examining the determinants of corporate cash holdings (See Dittmar et al., 2003; Ozkan and Ozkan, 2004; Luo and Hachiya, 2005; Chang and Noorbakhsh, 2006; Kalcheva and Lins, 2007 and Guney et al., 2007 for reference). Our investigation is unique because of the high level of involvement of foreign investors in the Jordanian stock market. Foreign investment of market capital is one of the highest in the world (OECD, 2006)[1]; for example, foreign investors account for almost half the market capitalization of all sectors in 2007. In this chapter, we argue that the large foreign investors in Jordan, as an emerging market, play an external governance role which could lead to more effective monitoring and would be expected to encourage more efficient management, and behaviour that is better aligned with shareholders' interests. This would make it more difficult for owner-managers to hold larger amounts of a firm's assets in the form of cash to spend on wasteful purposes or on acquiring low-performing investment assets with small or even negative NPV. In line with this argument, we would expect lower cash holdings in firms with direct equity ownership by large foreign investors. In

[1] MENA-OECD Investment Programme National Investment Reform Agenda Workshop for the Hashemite Kingdom of Jordan, Monday 19th June, 2006. Available on line: http://www.oecd.org/dataoecd/4/29/38148879.pdf

addition, we investigate whether board structure and the presence of the large shareholders such as domestic institutional investors have any impact on the determinants of corporate cash holdings[1].

Third, our findings enhance our understanding of corporate cash holdings of firms operating in an emerging market which are characterised by less-developed capital markets (La Porta et al., 1997). To our knowledge, this study is the first attempt to analyse corporate cash holdings in an emerging market, namely Jordan, one of the Middle East and North African (MENA) countries. One main drawback of the previous studies is that they generally focus on single high-income countries with uniformly high investor protection laws (e.g. Kim et al., 1998; and Opler et al., 1999 for US firms and Ozkan and Ozkan, 2004 for UK firms).

Our last contribution lies in the important limitations of cross-country studies. For example, previous studies such as Dittmar et al. (2003) are not based on firm-level data on shareholder and governance features, but rely on country-wide measures of shareholder rights as developed by La Porta et al. (1998). Their findings, in consequence, do not enable clear conclusions to be drawn at the firm level for the effect of agency costs on cash holdings. To circumvent these limitations, therefore, in this chapter, we analyse an extensive range of firm-level attributes which are suggested by previous studies to be important proxies for internal corporate governance. These governance attributes include executive ownership, founding family ownership, board size, CEO-Chairman duality, domestic large institutional investors and large foreign investors, to provide additional empirical evidence on the determinants of firms' cash holdings in Jordan.

[1] Ozkan and Ozkan (2004) also used board and ownership variables in their UK sample. However, we use more than one year for board and ownership variables.

To conduct our analysis, we use unique and reliable hand-collected firm level data that includes, among others, detailed information on the ownership, board structure and founding family ownership for a sample of 360 firm-year observations for Jordanian non-financial firms listed on the Amman Stock Exchange during 2004-2006. In addition to cross-sectional average methodology, we also carry out pooled regression to confirm the reliability of our findings.

As we discussed in the previous chapters, the Jordanian setting is a particularly interesting environment to study, for a number of reasons. First, in Jordan as in many counties around the world, most of the firms are family firms where the founder and/or family members usually hold important positions in management and in the board of directors (La Porta et al., 1999; Claessens et al., 2000; Anderson and Reeb, 2003). Founding family members are involved in the management of the organizations, as Chairman of the Board or board members and often control senior management positions. Therefore, studying Jordanian firms' cash holding decisions would not only be valuable to Jordan but may also benefit other emerging markets.

Second, the role of foreign investors in the Jordanian capital market is unique. The process of globalization of Jordanian capital markets is accompanied by an increase in importance of foreign investees. Restrictions on foreign investment and the percentage of the foreign ownership have been removed, so that foreigners are now allowed to own up to 100 per cent of any investment project in any sector. Foreign investors' participation in the of Jordanian capital market is one of the highest in the world (OECD, 2006). Therefore, the impact of foreign ownership and corporate cash holdings therefore warrants investigation.

Finally, an improvement in reporting and disclosure standards in Jordan presents an opportunity for a relatively rigorous empirical study using firm-level data (Omar, 2007).

Our analysis provides important findings. We find strong evidence that founding family ownership exerts a significant influence on the cash holding decisions of Jordanian firms. These results provide support for a non-linear relationship between founding family ownership and cash holdings. More specifically, we find that founding family move from alignment to entrenchment as their shareholdings in the firm increase. It is demonstrated that the main findings as to the effect of founding family ownership on cash holdings are robust, regardless of alternative definitions of cash holdings and do not change significantly with either board attributes or the presence of other large shareholders. This challenges the managerial agency arguments. In other words, the traditional managerial agency explanations do not seem to hold. Instead, another agency issue is uncovered, namely, conflict between founding family shareholders and other shareholders.

In addition, we provide evidence that the presence of large foreign investors is associated with effective monitoring. This result may suggest that large foreign investors play an effective monitoring and governance role, making it more difficult for corporate manager-owners to make decisions to serve their own benefits and force them to act more as value-enhancing agents on behalf of their shareholders. This supports the view that foreign investors complement domestic institutions as external governance agents. Furthermore, our result provides evidence that local institutional investors do not have any significant impact on corporate cash holdings. This finding provides support for the view that institutional investors in Jordan are relatively passive in disciplining management. Jordanian company board characteristics do not have any

important impact on corporate cash holdings. Finally, the results suggest that corporate cash holding is positively associated with market-to-book value and dividends; and negatively associated with cash flow, leverage, size and tangibility.

The remainder of this chapter is structured as follows. Section 5.2 sets out the theoretical background and hypotheses of the study. Section 5.3 discusses board structure and large institutional and foreign investors in Jordan. Section 5.4 presents data and variables. Section 5.5 presents results and Section 5.6 is the conclusion.

## 5.2. Theory and Empirical Hypotheses

In this section, we first address the role of firm-specific (non-governance) characteristics that influence cash holding decisions. In doing so, we provide detailed discussion about the impact of transaction costs and information asymmetries and agency cost of debt as a determinant of corporate cash holdings. In the following sub-section, we provide detailed discussion on the relationship between corporate governance mechanisms and cash holding decisions. We focus on the relationship between executive directors' ownership, founding family ownership, board variables (i.e. board size and CEO-Chairman duality), large local institutional investors and large foreign ownership and corporate cash holdings.

### 5.2.1. Literature on Cash Holdings (Non-governance) Characteristics

The literature on corporate cash holdings emphasizes two major reasons for cash holdings. The first is the transaction costs motives, which refer, for instance, to the costs of selling some assets or of cutting dividends for the sake of having prompt liquidity. The second is the precautionary motives, which refer to those conditions in which a

firm may experience difficulties in raising external capital (equity or debt) as a result of asymmetric information and/or conflicts with debt holders (agency costs of debt).

Cash accumulation, as the concept of free cash flow could be explained in terms of the agency cost of managerial discretion (Jensen, 1986). Entrenched managers would have an inclination to hold large amounts of cash to pursue their own projects at the shareholders' expense (agency cost of equity), while also avoiding the discipline of capital markets.

In the following sub-sections, we discuss transaction costs, asymmetric information and agency costs of debt in more detail. Furthermore, agency cost of equity (managerial discretion) will also be discussed, in relation to corporate governance and cash holdings.

#### 5.2.1.1. Transaction Costs

The transaction costs motives refer to the cost of converting cash substitutes into cash (Keynes, 1936). Companies lacking sufficient internal resources can raise funds in a number of ways, for instance, by issuing new debt and/or equity, cutting dividends or investment, liquidating existing assets or renegotiating financial contracts. However, any of these strategies are costly. For example, there is cost incurred in accessing secondary markets to sell some real assets, or time spent in renegotiation with current lenders. In consequence, the greater the amount of liquidity (i.e. funds) to be raised, the greater are the associated costs. It could be anticipated, therefore, that the higher the cost of being short of liquidity, the more cash will be accumulated.

Cash flow is the first cash substitute that we include in our cash model. Kim et al. (1998) claim a negative relationship between cash flow and cash holdings, as they consider that cash flows represent an additional source of liquidity for the firm and can

therefore substitute for accumulated cash. Accordingly, firms with greater cash flows will suffer less from the costs of liquidity shortage. Also, there is less risk of having to forego investment opportunities or of facing financial distress, for firms with higher cash flows (Guney et al., 2007). On this basis, a negative relationship between cash flow and cash holdings would be predicted (substitution effect). Opler et al. (1999) and Ozkan and Ozkan (2004) provide evidence in support of this view, for the US and UK markets respectively. As a proxy of cash flow, we use the ratio of profit before interest and tax plus depreciation to total assets.

Leverage is another proxy for the transaction costs of the demand for liquidity. Firms can borrow as an alternative to holding a stock of liquid assets because leverage can act as a proxy for the ability of firms to issue debt (John, 1993, Ozkan and Ozkan, 2004, and Guney et al., 2007). Furthermore, according to Baskin (1987), the greater the ratio of debt to total assets, the higher the costs of investing in liquid assets. Thus, to the extent that leverage of firms acts as a proxy for their ability to issue debt, we would expect a negative (substitution effect) relation between leverage and cash holdings. Contrary to this assumption, Ozkan and Ozkan (2004) argue that a higher level of debt increases the probability of financial distress and costly bankruptcy, so that firms with heavier debt may therefore hold more cash. Thus, to the extent that those firms are likely to accumulate more cash reserves to minimize the risk of financial distress and costly bankruptcy, we would expect a positive (precautionary effect) relationship between cash holdings and leverage at high levels of leverage. Leverage is equal to the ratio of total debt (short and long debt) to total assets.

To control for the potential impact of the firm's dividends policy on its cash holdings, we also include dividend payout ratio as an alternative source of liquid funds. Firms that

pay dividends can generate funds easily and at lower costs than those that do not, by cutting their dividends. Therefore, we assume a negative relationship between dividends and cash holding (Opler et al., 1999). Alternatively, firms that pay dividends may hold more cash than non-dividend paying companies, simply to ensure they have the means to support their dividend payments (Ozkan and Ozkan, 2004). It has also been suggested that since dividends reduce the free resources in the firm, they may mitigate governance conflicts (Jensen, 1986; Easterbrook, 1984). For this reason, cutting dividends may have adverse effects, since doing so gives an unfavourable sign of increased agency costs of equity, thereby implying additional difficulty in raising funds in capital markets. From this perspective, a positive relationship can be expected. We define dividends as the ratio of total dividend payout to total assets.

Finally, firms with more tangible assets can be expected to hold less cash, because when liquidity is short, tangible assets can be sold. Furthermore, firms that have substantial tangible assets can use them as collateral, experience less difficulty in issuing debt and can borrow on better terms (Titman and Wessels, 1988). Such assets also have a greater value than intangible assets, should a firm face bankruptcy. Finally, firms with sufficient liquid assets may be able to avoid recourse to the capital markets to raise funds when they are in need of cash. For all these reasons, we expect a negative relationship between cash holdings and a firm's assets tangibility. As a proxy for assets tangibility we use the ratio of fixed assets to total assets.

#### 5.2.1.2. Asymmetric Information, Agency Cost of Debt

The second set of costs to be considered is information asymmetry and agency cost of debt. The existence of information asymmetries between firms and investors increases

the cost of raising funds from external markets (Myers and Majluf, 1984). Where such a situation prevails, outsiders (both shareholders and creditors) do not have the same information about the company as its insiders. They therefore seek assurance that the securities they buy are not overpriced, and consequently discount them appropriately (Opler et al., 1999). Firms, on the other hand, may find that outsiders require a large discount rate, as a result of which they may prefer not to sell securities and be prevented from investing in some profitable projects. From this perspective, it is assumed that the more sensitive the information is, and the more important information asymmetries are, the higher will be the cost of raising external funds (Myers and Majluf, 1984; Opler et al., 1999). For this reason, firms have a preference for internal over informationally sensitive external finance, as indicated above.

Another important factor that has a derived bearing on cash levels, as attested in various empirical studies (Kim et al., 1998; Opler et al., 1999; and Ozkan and Ozkan, 2004) is the existence of growth opportunities. As Myers and Majluf (1984) point out, firms whose value is determined by growth options suffer more from asymmetry of information. If a firm has investment opportunities, which would increase its value when taken, shortage of cash may force it to forgo some of these opportunities. Hence, firms with such opportunities would be likely to hold more cash in an attempt to reduce the risk of having to give up valuable investment opportunities in some circumstances. In addition, it is important to note that firms with greater growth opportunities are expected to incur high bankruptcy costs (Williamson, 1988; Harris and Raviv, 1990; Shleifer and Vishny, 1997). This is because growth opportunities are intangible in nature and their value plummets at times of financial distress and in case of bankruptcy. This would in turn imply that firms with greater growth opportunities have a greater

motivation to avoid financial distress and bankruptcy, and so would be likely to hold more cash and marketable assets (Ozkan and Ozkan, 2004).

Agency conflicts between shareholders and creditors also make it more difficult and more expensive to obtain external funds. It is argued that companies with high growth opportunities are more likely to face greater agency costs of debt (Ozkan and Ozkan, 2004). Firms have an interest in avoiding situations in which the agency costs of debt are so high as to prevent their raising funds to finance their activities and invest in valuable projects. Opler et al., (1999) argue that firms with valuable investment opportunities, for which the costs of raising external funds can be extremely high, are likely to hold more cash in order to avoid the even higher cost of being short of funds. As a result, it would be predicted that in circumstances of information asymmetry, firms with valuable investment opportunities will accumulate more cash, because the costs they incur in the event of financial distress (agency cost of debt) are higher. Therefore, a positive relationship between cash and investment opportunities is expected.

It has been suggested that information asymmetry is less likely among large rather than small firms (Brennan and Hughes, 1991). Higher information asymmetry may lead to small firms facing more borrowing constraints and higher costs of external funds than larger firms (Brennan and Hughes, 1991; Fazzari et al., 1988; Kim et al., 1998). Ozkan and Ozkan (2004) also suggest that firm size can also have an impact on expected costs of financial distress. They argue that large firms hold less cash because they tend to be diversified and so better protected from financial distress (Titman and Wessels, 1988). Moreover, smaller firms are more likely to be liquidated when they are in financial distress (Ozkan, 1996). To the extent that size is an inverse proxy for asymmetric

information, a negative relationship with cash would be predicted. Our proxy for size is the natural logarithm of total assets in 2004 prices.

It has been suggested that the level of cash flow may be a proxy for asymmetric information faced by a company. According to Myers and Majluf (1984), firms will react to information asymmetry and the signalling problems associated with external financing, by establishing a hierarchy in their use of funding sources. Hierarchy theory assumes a preference to rely on internally-generated sources of finance before looking to the capital market. If this is the case, firms with large cash flows will maintain higher cash holdings. From this perspective, one might expect a positive influence of cash flow on cash holdings, contrary to the transaction costs hypothesis, which predicts a substitution relationship between these two variables.

### 5.2.2. Corporate Governance and Cash Holdings

In this section, several firm-level corporate governance measures that may be related to cash holdings are discussed, beginning with the relationship between executive directors' ownership and cash holdings, and moving on to the relationship between founding family ownership and cash holdings. Board variables are also discussed (i.e. board size and CEO-Chairman duality). Finally, we discuss how firms' ownership structures may affect their choice of cash holdings. We mainly focus on the role of the large local institutional investors and large foreign ownership.

#### 5.2.2.1. Managerial Ownership (Agency Costs of Equity)

Conflicts of interest between managers and shareholders arising mainly from the separation of ownership and control have been well documented. Among these conflicts is the issue of firms' cash holdings. According to Jensen's (1986) free cash-flow

hypothesis, an increase in free cash flow is associated with an increase in agency conflicts between managers and shareholders. In particular, managers may be inclined to accumulate large amounts of cash to finance overinvestment, consumption of private benefits, or even just inefficient investment decisions (Jensen and Meckling, 1976) or to make investments that the capital markets would not be willing to finance. Another reason for holding excess cash may be managers' risk aversion (Fama and Jensen, 1983). More entrenched managers would tend to hold more cash as a way to avoid market discipline and reduce the likelihood of losing their jobs (Opler et al., 1999; Ozkan and Ozkan, 2004). Moreover, Harford (1999) reports that cash-rich firms often engage in value-destroying activities such as overpaying in acquisitions and not returning the excess cash back to the shareholders, which is further evidence in support of the view that managers have the tendency to use excess cash as a safety net to ensure their long-term survival.

Managerial ownership has been suggested as a potential incentive mechanism that serves to align the interests of managers with those of shareholders (Jensen and Meckling, 1976). As managerial ownership increases, managers are less likely to divert resources away from value maximization, as they bear part of the costs of their actions. Therefore, lower expected agency costs resulting from the alignment between managers and shareholders would facilitate the firm's access to capital markets and decrease the cost of capital, making the firm less likely to accumulate cash. Based on this, it would be expected that the relationship between cash holdings and managerial ownership will be negative (the incentive-alignment effect).

However, there is another strand of literature which suggests that the relationship between managerial ownership and cash holdings may not be linear. For example,

Ozkan and Ozkan (2004) provide evidence, for the UK, of a significant cubic relationship. Accordingly, at low levels of managerial ownership there is an alignment between managers and shareholders and managers can be expected to hold less cash. At an intermediate level of managerial ownership, agency costs increase. This is because increased voting power and effective control over the firm may lead managers to become entrenched, and so they will have an incentive to accumulate excess cash holdings in order to retain the flexibility to pursue their own projects (the entrenchment effect). However, managers would reduce the amount of accumulated cash again at very high levels of ownership, because managers would bear the cost of actions that do not maximize value, and so once again would be likely to hold less cash.

Given the mixed theoretical and empirical evidence, we test the exact relationship between managerial ownership and cash holdings for Jordanian firms. However, no significant relationship is predicted between executive ownership and cash holdings, given the prevalence, discussed earlier and as explained in the following parts of this chapter, of domination by the controlling family, whether as chairman of board, board members or in senior management positions.

As a proxy for managerial ownership, we use the percentage of equity ownership held by executive directors and their relatives. Jordanian quoted companies are required to disclose in their financial statements the names of all the board members and the number of securities issued by the Company which are owned by any member of its Board of Directors, any member of its Senior Executive Management or any of their relatives[1].

[1] Relatives are: Husband, Wife and Minor Children.

#### 5.2.2.2. Founding Family Ownership

The effect of founding family ownership is an issue that receives little or no attention in the existing literature that analyses the determinants of corporate cash holdings. Founding family ownership is an important form of ownership structure. Worldwide, the majority of businesses are family owned (La Porta et al., 1999; Claessens et al., 2000; Anderson and Reeb, 2003; Villalonga and Amit, 2006). The study by Claessens et al., (2002) on the ownership structure of East-Asian companies suggests that founding families play a dominant role in Asia. Furthermore, the separation in ownership and control results in an incentive effect and entrenchment effect (Claessens et al., 2002). We argue that there are two different effects of founding family ownership on the cash holding decisions of Jordanian firms, namely, the alignment and entrenchment effects.

The alignment effect is based on the notion that as the ownership of the founding family increases the interests of founding families and other shareholders are better aligned because family members hold large blocks of stock and constitute a long-term presence in the firm. For these reasons, they have less incentive to expropriate wealth from other shareholders through accumulating more cash. The alignment effect theory implies that founding family ownership is a source of comparative advantage through potential for reduction in agency costs and maximization of firm value (Demsetz and Lehn, 1985; Shleifer and Vishny, 1997). The wish to preserve the family name is another reason why family owners might monitor firms more effectively. For example, their long-term commitment may incline them to invest in long-term projects rather than limiting themselves to shorter horizons. It also offers a degree of stability which may allow them to borrow on more favourable terms and maintain longer relationships with external bodies such as suppliers (Anderson and Reeb, 2003). Accordingly, we expect a negative

relationship between cash holdings and founding family ownership at relatively low levels of founding family ownership. This is because the market is likely to perceive increasing founding family ownership favourably as it may show stronger commitment and greater incentives to monitor and discipline the management that may be independent of or closely linked to founding family owners. This in turn is expected to reduce the cost of external finance (both debt and equity) leading to a lower cash holding policy.

In contrast, the entrenchment effect suggests that concentrated ownership creates incentives for controlling shareholders such as founding family members to expropriate wealth from other shareholders (Fama and Jensen, 1983; Morck et al., 1988; and Shleifer and Vishny, 1997). The entrenchment effect implies that founding family ownership may be considered as conducive to inefficient corporate governance, as family owners are in a position, and have motives, to expropriate wealth from outside shareholders (Fama and Jensen, 1983; Morck et al., 1988; Shleifer and Vishny, 1997). This may result in suboptimal investment decisions, excessive compensation and substantial influence in selecting managers and directors, which can impede the efforts of more capable third parties in managing firms (Anderson and Reeb, 2003). Entrenchment may also be explained by greater information asymmetry between founding families and other shareholders. Therefore, at higher levels of ownership, firms are expected to start increasing their cash balances and this may occur for two reasons. First, the market may perceive high levels of founding family ownership less favourably now as the expropriation of minority shareholders by strong/large controllers becomes more likely and large family owners are more likely to control the management and be free from monitoring and disciplining. That is, they are expected to

become entrenched at high levels of ownership. This in turn will increase the expected cost of external finance and firms may choose to increase their cash reserves voluntarily as a precautionary move in an attempt to reduce the costs of foregone investment opportunities due to insufficient resources. Second, it is also suggested that founding family owners choose to hold larger cash balances, as by doing so they would increase their chance of using readily available liquid resources in their own interest. Since this would be possible only at high levels of ownership, which allow them to control the decision making process and the management, we expect a positive relationship between cash holdings and founding family ownership at high levels of ownership.

In this chapter, we attempt to fill the gap in the literature by exploring the effect of founding family ownership on corporate cash holdings. Therefore, we will provide a detailed analysis of the exact nature of the relationship between cash holdings and founding family ownership. As a proxy for founding family ownership, we use the percentage of shares held by founding family and their relatives.

#### 5.2.2.3. Board Characteristics

Decisions as to how much cash the firm should hold, and when or by what means cash should be used, are strategic decisions made by the management of the firm, in accordance with organizational or private objectives. They have implications for shareholders in terms of dividends, ability to benefit from opportunities for investment and growth, and so on. It is in the interest of shareholders, therefore, that governance mechanisms are in place to reduce the risk that such decisions are made only to serve the private purposes of management, at the expense of shareholders.

The board of directors is the key internal governance mechanism, and it is responsible for monitoring and evaluating the management behaviour on behalf of shareholders and to protect them from managers who may pursue their personal interests at the expensive of shareholders or otherwise act in a manner detrimental to shareholders' interests (Jensen and Meckling, 1976). That is why it is important to analyse the role of board characteristics in determining cash reserves.

Board size is widely believed to be an important factor in determining the effectiveness of corporate governance (Pearce and Zahra, 1992; Jensen, 1993) and previous studies indicate that the overall size of the board affects the quality of monitoring (Yermack, 1996). However, existing studies disagree as to the effect of board size. Some researchers are of the opinion that large boards are more effective because they can offer a wider perspective and better guidance on the strategic options of the firm (Pearce and Zahra, 1991). Kiel and Nicholson (2003) find a positive relationship between board size and corporate performance, leading to the inference that large boards are effective in representing shareholders' interest. Others, however, claim that large boards create problems of coordination, communication and process, which outweigh the advantages of having more people to draw on (Yermack, 1996; Eisenberg et al., 1998; and Florackis et al, 2009).

Similarly, there is debate among researchers as to the impact on board's effectiveness of the Chief Executive Officer's (CEO) duality. As discussed earlier, this may be significant for cash holdings, because cash holdings decisions are likely to reflect the agency problem arising from the separation of ownership and control, i.e. the one between managers and shareholders. Fama and Jensen (1983) suggest that the positions of chairman of the board (COB) and CEO should be separated, to mitigate the agency

problem. Similarity, the Cadbury (1992) report on corporate governance of UK firms warns that if the two are not separated, there is increased danger of opportunistic behaviour on the part of insiders.

However, analysts offer competing views as to whether the separation of the two positions increases efficiency or not. Fosberg and Nelson (1999) report that within three years of a change of leadership structure to separate the two positions, in an effort to control agency problems, corporate performance improved significantly. In contrast Rahman and Haniffa (2005), in a study of Malaysian firms, find accounting performance of companies with CEO's role duality to be weaker than in companies with separate roles. Dahya et al. (1996) reach a similar conclusion based on findings from the UK. Other studies find no relationship between duality and corporate performance (Brickley et al. 1997; Haniffa and Hudaib, 2006).

One suggestion which may follow from the above argument is that the board of directors plays an important role in the firm's strategic decisions, including corporate cash holdings. An effective board is conducive to efficient management decisions that maximize firm value and are likely to serve shareholders' interests. Moreover, it will reduce information asymmetry, thus increasing a firm's capability of raising funds externally (Ozkan and Ozkan, 2004). Hence, one would expect these firms to hold smaller amounts of cash. However, firms with a dual leadership structure (headed by a chairman who is also the CEO) are more inclined to serve the interest of the management team, which implies a tendency to hold excessive cash. Also, the cost of external capital is expected to be higher where there is a dual leadership structure and hence firms are expected to accumulate more cash for precautionary motives.

#### 5.2.2.4. Local Institutional Investors

The presence of large financial institutions as investors plays an important role in resolving or exacerbating some of the firm's agency problems. In a situation of dispersed ownership, there is little incentive for individual shareholders to monitor the management. Small shareholders can 'free-ride', relying on others to govern the management (La Porta et al., 1999). By contrast, large investors such as institutional investors, as they have a large proportion of the firm's cash flow, have great incentive, as well as the resources, to monitor management decisions, which could be conducive to better corporate performance (Stiglitz, 1985; Shleifer and Vishny, 1997). Such investors are said to have greater expertise and greater ability to act rationally (Dong and Ozkan, 2008). They can exercise influence over management decisions directly through their ownership or indirectly by trading their shares (Gillan and Starks, 2003). They therefore have the power to influence the performance of the company by contributing to, monitoring or ratifying the board's decisions, and pursuing an agenda of safeguarding shareholders' interest by promoting behaviour that adds value for them. To the extent that the presence of large institutional shareholders results in more effective monitoring of management to safeguard the interest of the shareholders, the cost of external financing would be expected to be lower for firms with large institutional investors; consequently they would have less need to hold higher levels of cash.

There is, however, a case for suggesting that the presence of large shareholders may also generate other agency costs. For example, large shareholders, seeking to maximize their wealth, may have incentives and power to expropriate minority shareholders and to divert corporate resources (Sheifer and Vishny, 1997; La Porta et al., 1999). Institutional investors such as banks, insurance companies, and pension funds may also

have an interest in cooperating with managers, rather than challenging their decisions to avoid risk of damage to or loss of potential business relationships with the firm (Pound, 1998; Cornett et al., 2007). Thus, their interest may be more aligned with corporate management than with shareholders, despite their own holdings, preventing them from reacting to management actions that are not in line with the interests of shareholders (Ferreira and Matos, 2008). This may suggest that the cost of capital would be increased, because potential external investors would address the risk associated with holding shares in a majority-controlled company, by demanding a higher premium. From this perspective, it may be expected that Jordanian firms with large local financial institution investment are more likely to accumulate more cash.

#### 5.2.2.5. Large Foreign Ownership

A number of studies in the international business field suggest that foreign investors have a positive impact on performance of local firms, especially in emerging market economies. For example, Hanousek et al. (2004) show that foreign ownership has a positive effect on corporate performance, attributed to better monitoring ability. Mitton (2002) and Lins (2003) both find a positive relationship between firm performance and outside ownership in emerging markets. This suggests that foreign investors play an external governance role complementary to that of domestic institutions. In a study of financial institution equity holdings from 27 countries around the world, Ferreira and Matos (2008) find foreign ownership to have a significantly positive impact on firm value. Following the market liberalization of the Amman Stock Exchange in 1995, Jordanian firms are increasingly attracting foreign investment, and it is suggested by Shleifer and Vishny (1986) that such outside ownership increases the incentive for

shareholders to monitor managerial performance. Khanna and Palepu (1999) find evidence for such a monitoring role of foreign investors in an Indian context.

The effect of large foreign investors has been neglected in other studies attempting an analysis of the determinants of corporate cash holdings. To our knowledge, only Chang and Noorbakhsh, (2006) and Luo and Hachiya (2005) provide evidence of an association between foreign ownership and cash holdings. However, Chang and Noorbakhsh (2006) extend the work of Dittmar et al. (2003) and investigate the nature of the relationship between corporate cash holdings and Foreign Direct Investment (FDI) for 46 countries (including one company from Jordan). They find that "Foreign Direct Investment (FDI) inflows in today's highly integrated capital markets act as substitutes for corporate cash holdings" (p.302). They add that FDI inflows act as a substitute for cash holdings in G-7 countries, but as a complement for cash holdings by firms in the non-G-7 countries. However, the data on FDI inflows used in their study was at the country level, not at firm level. Moreover, Luo and Hachiya (2005) find evidence for a positive relationship between foreign ownership and cash holdings. They explain their result by saying that foreign stockholders might prefer to select profitable firms in which to invest, and these firms perform well and accumulate more cash. However, they measure foreign ownership as either a total or average ratio of foreign stockholdings and not as large shareholders.

Generally, the existing literature does not provide evidence about the effects of large foreign investors on cash holdings. We suggest that foreign investors with large holdings are more likely to monitor firms in which they invest and in turn, such behaviour would serve an external governance function, encouraging more efficient management, and behaviour that better serves shareholders' interest. It would be much

more difficult for owner-managers to hold larger amounts of a firm's assets in the form of cash, which they might then spend on bad decisions and poorly-performed projects with small or even negative NPV. This also suggests that the cost of external financing would be lower for firms with large foreign investors, implying less need to hold higher levels of cash.

## 5.3. Features of Corporate Governance in Jordan

In this section, we review some features of the Jordanian corporate governance system which make the cash holdings analysis of companies listed at the Amman Stock Exchange interesting. In particular, we focus on board characteristics and large domestic institutional and foreign investors and their expected impact on cash holding decisions of Jordanian firms.

### 5.3.1. Board Structure of the Jordanian Companies

Basic requirements for the board structure, liabilities and responsibilities of Jordanian firms are governed by the Company Law (CL). Boards are single-tier, with both executive and non-executive directors sitting on the same board. Board members, whose term is four years, are elected by the Company's General Assembly in secret ballot. The number of members may vary from three to thirteen. No stipulations are made in the CL as to board independence. However, according to the Jordan Securities Commission (JSC), audit committee requirements necessitate at least three non-executive members. Other regulatory gaps under the CL include the absence of legal requirements regarding board members' skills, independence, possible committee functions, and board performance evaluation, the failure to mandate the separation of the positions of Chief Executive Officer and Chairman of the Board and the lack of any

requirement that the CEO must be a member of the board. As yet, there exists no empirical evidence on the impact of board attributes on the corporate governance of Jordanian firms, although a number of sources[1] comment on the widespread tendency for boards of Jordanian companies to lack independence from controlling shareholders and from management. Such reports point out that there are no rules governing the composition of the board of directors; guidelines governing the balance of power between executive and non-executive directors are inadequate; and the concept of independent directors is not well recognized. Furthermore, Jordan shares with many other developing countries a tendency for management and the board of directors to be dominated by members of the founding families. Attention is drawn in several sources[2] to the prevailing practice of appointing managers on the basis of kinship or friendship with the controlling family, irrespective of qualifications and experience. Where such a practice prevails, governance may be less effective, as managers do not have the required autonomy, flexibility, and objectivity to monitor company activities.

Strategic decisions are therefore likely to be heavily influenced by the interest of the controlling family members which, as agreed previously, may operate for or against cash management. To the extent that this is the case, Jordanian company board characteristics are not expected to have an important impact on corporate cash holdings.

### 5.3.2. Large Institutional Shareholders

In Jordanian listed companies, there is a high level of shareholdings by large domestic institutional investors (including banks, insurance companies, and pension funds such as

[1,7] See for example: World Bank, Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment (Jordan) (June, 2004); and Corporate Governance in the Morocco, Egypt, Lebanon and Jordan countries of the MENA region: MENA Regional Corporate Governance Working Group (2003).

the Social Security Corporation Investment Unit). For example, we find an average shareholding by large domestic financial institutions of 19.42 per cent during 2004-2006. However, Jordan is a small country, where there are relatively few local institutions that could effectively exercise oversight over management and offer an external safeguard against inefficient performance. Mutual funds are not common in Jordan, and most of the local institutional investors are banks and insurance companies. In principle, such institutions, given the size of their holdings, should act as external governance agents for other shareholders, especially minority shareholders. However, in practice, this ability is weakened due to their significant ties with the companies, through family and personal connections[1].

In the case of the nominees of the Social Security Investment Unit in the boards of the Jordanian companies, their effectiveness is reduced by the lack of business expertise, since they are typically bureaucrats. Even where such representatives have the knowledge and expertise to exercise governance, there is little incentive for them to do so, as their tenure and career prospects are governed by the civil system, and are not usually affected by the performance of the firm concerned.

In such a context, we would expect institutional shareholders in Jordan to adopt a passive stance towards monitoring and disciplining firms' management and, thus, to have little influence on cash holding decisions of companies.

### 5.3.3. Foreign Equity Investment in the Jordanian Capital Market

One important and unique feature of the Jordanian equity market is the high level of involvement of foreign investors in the Jordanian stock market. In fact, foreign

[1] For example Jordan Bank owned by the Al Kori family, Union Bank owned by the Salfiti family, Jordan Arab Investment Bank by the Al-Qadi family, Jordan National Bank by the Al-Muasher family, Jordan Commercial Bank by the Al-Sayegh family.

investment of market capital is one of the highest in the world (OECD, 2006). Ownership by foreigners has been on the rise since the beginning of the 2000's in all sectors. Table 5.1 shows the percentage of foreign ownership in shareholding companies by sector for the period 2001-2007.

**Table 5.1: Non-Jordanian ownership in listed companies by sectors as a percentage (%) of market capitalisation during the period 2001-2007**

| Year | Financial Sector | Services | Industry | All Market |
|---|---|---|---|---|
| 2001 | 47.43 | 19.67 | 27.87 | 38.51 |
| 2002 | 47.56 | 26.79 | 26.09 | 37.43 |
| 2003 | 46.28 | 24.29 | 30.1 | 38.84 |
| 2004 | 47.44 | 25.59 | 36.79 | 41.26 |
| 2005 | 49.77 | 26.19 | 38.09 | 45.04 |
| 2006 | 47.73 | 36.55 | 43.71 | 45.53 |
| 2007 | 50.73 | 36.15 | 51.88 | 48.95 |

This table reports foreign investor ownership in companies listed at the ASE as of year-end from 2001-2007 as a percentage of total market value. The Financial sector includes Banks, Insurance, Diversified Financial Services and Real Estate. The Services sector includes Health Care Services, Educational Services, Hotels & Tourism, Transportation, Technology & Communication, Media, Utilities & Energy, and Commercial Services. The Industry sector includes Pharmaceutical & Medical Industries, Chemical Industries, Paper & Carton, Printing & Packing, Food & Beverage, Mining & Extracting, Tobacco & Cigarettes, Engineering & Construction., Electrical Industries, Textiles, Leather & Clothing, and Glass & Ceramics.
Source: Various Amman Stock Exchange Annual Reports.

The percentage of foreign ownership increased from 38.51 per cent of total market capitalisation in 2001 to 48.95 per cent in 2007, the investors coming from 102 countries around the world. This increase suggests a preference for on long-term gains from improved corporate governance, as opposed to short-term investment return. In the

case of the ASE, foreign investments are long-term investments, predominantly in international mutual and pension funds, together with foreign government contributions and strategic partnerships with Jordanian public shareholding companies[1].

Equity ownership by large foreign investors across the total sample (2004-2006) averages 10.92 per cent of total shares. This ratio shows a marked increasing pattern. The average ordinary shareholding by foreign investors increases by about 4 percentage points over the three years, from 8.71 per cent in 2004 to 12.16 per cent in 2006. There are also significant differences across firms. For the overall sample, the level of large foreign ownership ranges from 0 to 97.51 per cent.

In this chapter, we analyse the association between the presence of large foreign investors and cash holdings, on the assumption, noted previously, that such investors play an external governance role, reducing owner-managers' opportunities to engage in wasteful and inefficient behaviour contrary to the interest of other shareholders. We therefore anticipate a negative relationship between cash holding and direct equity ownership by large foreign investors.

## 5.4. Sample and Variables

### 5.4.1. Sample

The study is based on Jordanian firms listed on the Amman Stock Exchange from 2004 to 2006. These are the most recent years for which data were available at the time of the study. At the end of 2004, 2005 and 2006 there were 620 companies, financial and non-financial, listed on the Amman Stock Exchange. Following prior studies and based on

[1] Jalil Tarif, the CEO of the ASE. Meeting with the World Bank Mission, available on line: http://www.exchange.jo/pages.php?menu_id=-1&local_type=1&local_id=123&local_details=1

the availability of annual reports to construct our dependent and independent variables in addition to financial data, we excluded all financial institutions companies (i.e. banks, insurance companies and diversified financial services) from the sample. Furthermore, we exclude any suspended or floated price companies, due to incomplete data. Thus, the final sample consisted of 360 firm-year observations across three years (80 per cent of the total non-financial listed firms). Table 5.2 shows the number of listed companies, the number of non-financial companies and the number of companies in the sample.

**Table 5.2: The number of the sample during the period 2004-2006**

| | 2004 | 2005 | 2006 | Full Period |
|---|---|---|---|---|
| No. of listed companies | 192 | 201 | 227 | 620 |
| No. of non-financial companies* | 138 | 146 | 165 | 449 |
| No. of firms in the samples | 109 | 117 | 134 | 360 |
| Proportion of sample to non-financial companies | 78.99% | 80.14% | 81.21% | 80.18% |

This table presents the number of listed companies, the number of non-financial companies, and the number of companies in the sample.

***** Non-financial firms include the following sectors: Health Care Services, Educational Services, Hotels & Tourism, Transportation, Technology & Communication, Media, Utilities & Energy, and Commercial Services, Pharmaceutical & Medical Industries, Chemical Industries, Paper & Carton, Printing & Packing, Food & Beverage, Mining & Extracting, Tobacco & Cigarettes, Engineering & Construction., Electrical Industries, Textile, Leather & Clothing, Glass & Ceramics and Real Estate. Source: various Amman Stock Exchange Annual Reports.

Data on firms' ownership, board structure and firm-specific accounting data are hand-collected from secondary sources, primarily the mandatory disclosure reports of these firms to the Jordan Securities Commission. The frequency of all variables is annual, and the values are measured as of the end of December for each year.

The annual reports of Jordanian public trading companies are prepared in accordance with and are considered consistent with international accounting standards. The annual reports supplied by management are also subject to external auditing, to certify that they are prepared in accordance with statutory and professional principles (international auditing standards). Finally, listed companies have been required since 1997 to form auditing committees from the board of directors, which exercise oversight over the preparation of annual reports. As a further check on reliability, data pertaining to Jordanian public trading companies are also obtained from other sources, such as the Amman Stock Exchange annual company guide, Jordan Securities Commission, the Amman Stock Exchange, the Securities Depository Centre, and the companies' websites. These sources are used to verify the figures and statistics collected from companies' annual reports.

The names of company founding families are derived from the Memorandum of Association of each company under investigation, obtained via the archive held by the Companies Control Department, a unit of the Ministry of Industry and Trade. As a further robustness check, three experts from the financial sector, stock market and Companies Control Department gave their insight in order to correctly identify the founding families. However, it is uncommon in Jordan for two or more families to have the same family name. Furthermore, it is easy to check whether the founding family is still in the firm or not, because the average age of Jordanian firms in our sample is low (i.e. 20 years).

### 5.4.2. Variables

The dependent variable used in this study is cash holdings, which is the ratio of total cash and equivalent (short term investment, i.e. any investment held for less than one year, such as securities and bonds) to total assets.

With regard to the explanatory factors of cash holdings, we include in our analysis a set of firm-specific variables and corporate governance mechanisms as follows: the ratio of profit before interest and tax plus depreciation to total assets is taken as a proxy of cash flow (Cash flow), the ratio of total debt (short and long debt) to total assets (Leverage), the market-to-book ratio is used as a proxy for growth opportunities of firms defined as the ratio of book value of total assets minus book value of equity plus market value of equity to book value of assets (Market-to-book-ratio). The logarithms of assets (the book value of total assets in million of Jordanian Dinars) is taken as a proxy for size (Size). Dividend is the ratio of dividend payments to total assets (Dividends). We use the ratio of fixed assets to total assets as a proxy for assets tangibility (Tangibility). Finally, industry dummies are also incorporated to capture industry-specific effects on cash holdings.

We also include in our model the following corporate governance variables: the percentage of equity ownership by executive directors and their relatives (Executive ownership), the percentage of shares held by founding family and their relatives (Founding family ownership); the number of directors on the board (Board size); a dummy variable which takes a value of one if the chief executive officer (CEO) and the chairman of the board (COB) are the same person and 0 otherwise (Duality); the percentage of shares held by local institutional investors with equity ownership of 5 per cent or more (Institutional investors); the percentage of shares held by all foreign

shareholders with equity ownership of 5 per cent or more (Large foreign ownership). Table 5.3 provides a list of the variables used in this study.

**Table 5.3: Definition of Variables**

| Variable | Definition |
|---|---|
| **Dependent Variable** | |
| Cash holdings | The ratio of total cash and equivalent (short term investment, i.e. any investment held for less than one year, such as securities and bonds) to total assets. |
| **Independent Variables:** | |
| Cash flow | The ratio of profit before interest and tax plus depreciation to total assets. |
| Leverage | The ratio of book value of short-term plus long-term debt divided by total assets |
| Market-to-book ratio | The ratio of the book value of total assets minus the book value of equity, plus the market value of equity to the book value of assets. |
| Size | The natural log of total assets in 2004 prices. |
| Dividend | The ratio of dividend payments to total assets. |
| Tangibility | The ratio of fixed assets to total assets. |
| Executive ownership | The percentage of equity ownership by executive directors and their relatives |
| Founding family ownership | The percentage of equity ownership held by founding family and their relatives. |
| Board size | The total number of directors on the board. |
| Duality | A dummy variable: one indicates that the position of CEO and chairman of board are held by one person; zero otherwise. |
| Institutional investors | The percentage of outstanding equity held by local banks, insurance, financial firms and, pension funds (that is, with shareholdings of 5 per cent or more). |
| Large foreign ownership | The percentage of outstanding equity held by all foreign shareholders (that is, with shareholdings of 5 per cent or more). |

### 5.4.3. Descriptive Statistics

Table 5.4 reports the descriptive statistics for the variables used in this study. Our results reveal that the mean cash and equivalent to total assets is about 12 per cent and the median for the whole sample is 5.05 per cent (not reported), of total assets in cash reserves, higher than what is reported in UK and US firms. For example, Ozkan and Ozkan (2004), for UK, report means and median values of the cash ratio of 9.9 per cent and 5.9 per cent respectively. Kim et al. (1998), for US, report mean and median values of the cash ratio of 8.1 per cent and 4.7 per cent respectively. Furthermore, Dittmar et al. (2003), based on analysis of data for 1998 for more than 11,000 firms from 45 countries, document a wide cross-country dispersion, with median cash ratios ranging from 0.3 per cent in Kenya to 29.6 per cent in Egypt. They report a median cash ratio of 2.8 per cent for Jordan, but this is based on only one firm. Kalcheva and Lins (2007), based on data for over 5000 firms from 31 countries, find an overall mean cash holding of 12 per cent, with a range from 4 per cent for firms in Argentina to 16 per cent for Norwegian and Japanese firms.

Our data shows also that the average cash holdings range from 10.01 per cent in 2004 to 12.41 per cent in 2006. These results reflect a significant increase in cash holdings on ASE during the period of study. For the overall sample, the level of cash holdings range from 0.0006 per cent to 98.79 per cent.

As reported in Table 5.4, the average cash flow for our sample of firms is 9.03 per cent. The table also reveals that the average leverage is 13.29 per cent and the average market-to-book ratio is 1.62. Our average firm has a book value of total assets of JD 42

million (i.e. about US$ 59 million)[1], average dividends of 3.28 per cent, and an average tangibility of 33.68 per cent.

**Table 5.4: Descriptive Statistics for Cash Holdings and Independent Variables Used on the Study.**

| | Full Sample | 2004 | 2005 | 2006 |
|---|---|---|---|---|
| | Mean | Mean | Mean | Mean |
| **Dependent Variables** | | | | |
| Cash holdings | 11.69 | 10.01 | 12.42 | 12.41 |
| **Independent Variables** | | | | |
| Cash flow | 9.03 | 6.64 | 10.26 | 9.89 |
| Leverage | 13.29 | 12.96 | 13.03 | 13.78 |
| Market-to-book | 1.62 | 1.50 | 1.71 | 1.64 |
| Size | 7.21 | 7.16 | 7.23 | 7.24 |
| Dividend | 3.28 | 3.68 | 3.6 | 2.69 |
| Tangibility | 33.68 | 33.16 | 33.87 | 33.93 |
| Executive ownership | 5.07 | 5.55 | 5.37 | 4.42 |
| Founding family ownership | 22.09 | 22.86 | 21.57 | 20.94 |
| Board size | 8.32 | 8.46 | 8.35 | 8.17 |
| Duality | 0.22 | 0.26 | 0.23 | 0.19 |
| Institutional investors | 19.42 | 22.42 | 19.20 | 17.17 |
| Large foreign ownership | 10.92 | 8.71 | 11.56 | 12.16 |
| No. of observations | 360 | 109 | 117 | 134 |

This table provides summary statistics for the main variables used in our analysis. All variables are measured at the end of each year. Definitions for all the variables are provided in Table 5.3.

[1] The Jordanian Dinar (JD) has been pegged to the U.S. Dollar since 1995 (JD 1 = $ 1.41)

As far as the corporate governance variables are concerned, Table 5.4 also shows that the average executive ownership for our sample of firms is 5.07 per cent. Holdings of founding family owners and their relatives average 22.09 per cent in our sample. This result suggests that many of the public companies in Jordan still have large founding family shareholdings.

The average total equity ownership by large domestic institutional investors accounts for about 19.42 per cent of total shares. This ratio shows a marked decreasing pattern. The average ordinary shareholding by institutional investors decreases by 4 percentage points over the three years, from 22.42 per cent per cent to 17.17 per cent. Equity ownership by large foreign investors across the total sample averages 10.92 per cent of total shares. This ratio shows a marked increasing pattern. The average ordinary shareholding by foreign investors increases by about 4 percentage points over the three years, from 8.71 per cent to 12.16 per cent.

The average board size is 8.32 directors. With regard to the separation of the two leading roles of COB and CEO, there are 80 firms out of the final 360 observations (22.22 per cent) in which the positions are not separated. The number of companies with role duality shows a decrease from 26 per cent in 2004 to 19 per cent in 2006; these results indicate that it is still common in Jordan for the chairman of the board to also be the CEO of the company. Finally, in terms of industry variation in cash holdings, firms in Technology & Communications have the highest mean cash holdings (i.e. 37.29 per cent). In contrast, Paper & Carton Industries and Engineering & Construction report the lowest ratios (i.e. 0.84 per cent and 0.99 per cent respectively).

## 5.5. Empirical Results and Discussions

In this section, we will focus on the empirical tests and discussion of results on the relationship between firm-specific characteristics and corporate governance mechanisms and corporate cash holdings.

### 5.5.1. Univariate Analysis

We compute the Pearson Correlation coefficient between cash holdings and the corporate governance variables and present the correlation matrix in Table 5.5.

We observe that cash holdings are positively correlated to market-to-book ratio and dividends ratio. On the other hand, cash flow size and tangibility are found to be negatively correlated with cash holdings. Finally, as expected, cash holdings are negatively correlated to founding family ownership. Our results show that our independent variables are not highly correlated with each other. To test for possible multicollinearity (Table 5.5), we compute the variance inflation factor (VIF) for each independent variable and the large one is 1.38, well below the rule of thumb cutoff of 10.0 for multiple regression models (Gujarati, 2003). Thus, we conclude that multicollinearity is unlikely to be a serious problem in our study.

**Table 5.5: Pearson Correlation Coefficients and Variance Inflation Factor (VIF) for the variables used in the study.**

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | VIF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) Cash holdings | 1.00 | | | | | | | | | | | | | - |
| (2) Cash flow | -0.22** | 1.00 | | | | | | | | | | | | 1.06 |
| (3) Leverage | -0.13 | 0.02 | 1.00 | | | | | | | | | | | 1.11 |
| (4) Market-to-book | 0.26** | -0.06 | 0.05 | 1.00 | | | | | | | | | | 1.14 |
| (5) Size | -0.24** | 0.16 | 0.03 | -0.17* | 1.00 | | | | | | | | | 1.21 |
| (6) Dividends | 0.21* | 0.13 | 0.02 | 0.21* | 0.09 | 1.00 | | | | | | | | 1.15 |
| (7) Tangibility | -0.30** | 0.04 | 0.04 | -0.15 | 0.07 | -0.16 | 1.00 | | | | | | | 1.09 |
| (8) Executive ownership | -0.05 | 0.03 | 0.04 | 0.03 | 0.02 | 0.03 | 0.14 | 1.00 | | | | | | 1.22 |
| (9) Founding family ownership | -0.15** | -0.02 | -0.05 | -0.10 | 0.03 | -0.03 | 0.06 | 0.24* | 1.00 | | | | | 1.38 |
| (10) Board size | 0.02 | -0.08 | 0.12 | 0.04 | -0.28** | 0.004 | 0.03 | -0.14 | -0.15 | 1.00 | | | | 1.22 |
| (11) Duality | -0.08 | 0.01 | 0.17* | 0.03 | -0.07 | 0.13 | -0.002 | 0.16 | 0.17* | -0.08 | 1.00 | | | 1.14 |
| (12) Institutional investors | -0.03 | 0.07 | -0.16 | -0.11 | 0.11 | -0.06 | -0.03 | -0.07 | -0.25** | -0.05 | -0.15 | 1.00 | | 1.30 |
| (13) Large foreign ownership | -0.007 | 0.06 | 0.14 | 0.13 | -0.03 | 0.02 | 0.03 | 0.21* | -0.21* | -0.10 | -0.02 | -0.25** | 1.00 | 1.35 |

This table displays the Pearson Correlation Coefficient and Variance Inflation Factor (VIF) for the main variables used in the study. ** and * indicate the correlation is significant at the 1% and 5% levels respectively. Definitions for all the variables are provided in Table 5.3.

Table 5.6 presents univariate mean comparisons of several firm characteristics by cash quartiles. We are interested in whether the characteristics of companies differ across low-cash firms (first quartile) and high-cash firms (fourth quartile). In general, the results support the view that firms in the first quartile differ from firms in the fourth quartile. Specifically, we find evidence that, on average, firms with low cash holdings have lower cash flow, have relatively low growth opportunities, pay lower dividends, have a high proportion of tangible assets and have higher levels of leverage than firms with higher cash holdings (fourth quartile). We also observe that low-cash firms show relatively higher levels of founding family ownership and lower foreign ownership. However, the level of executive ownership, local institutional investors, board size, duality and firm size do not seem to differ significantly across the first and the fourth cash quartiles**.**

Overall, the univariate analysis provides some evidence for our earlier expectation and supports our prediction that it is founding family ownership and not managerial ownership that exerts influence on cash holdings decisions of Jordanian firms. Also, the findings are consistent with our expectations and support our prediction that the presence of large foreign investors leads to lower cash holdings.

**Table 5.6: Univariate Analysis**

| | 1st quartile cash holdings | 2nd quartile cash holdings | 3rd quartile cash holdings | 4th quartile cash holdings | **t-test** |
|---|---|---|---|---|---|
| Cash flow | 8.12 | 7.80 | 11.04 | 13.00 | -1.97* |
| Leverage | 16.82 | 15.17 | 11.46 | 7.25 | 3.08*** |
| Market-to-book ratio | 1.43 | 1.51 | 1.55 | 2.40 | -4.61*** |
| Size | 7.18 | 7.11 | 7.21 | 7.17 | 0.052 |
| Dividends | 2.61 | 2.11 | 3.47 | 4.97 | -2.40** |
| Tangibility | 40.94 | 40.24 | 33.46 | 17.47 | 3.77*** |
| Executive ownership | 6.05 | 5.44 | 3.45 | 6.76 | -0.21 |
| Founding family ownership | 21.74 | 30.38 | 21.26 | 18.90 | 3.49*** |
| Board size | 8.44 | 8.26 | 7.84 | 7.99 | 0.82 |
| Duality | 30.30 | 18.18 | 32.35 | 23.53 | 0.62 |
| Institutional investors | 19.63 | 23.43 | 24.13 | 19.41 | 0.04 |
| Large foreign ownership | 9.87 | 8.23 | 16.51 | 14.04 | -2.22** |

This table provides univariate mean comparisons of firm specific characteristics by cash holdings quartile (1st vs. 4th quartile). The t-test statistic is used to compare the mean difference. ***, ** and * indicate that the mean difference is statistically significant at the 1%, 5% and 10% level respectively. Definitions for all variables are provided in Table 5.3.

### 5.5.2. Multivariate Analysis

In this section, we conduct a multivariate regression analysis to investigate the relationship between cash holdings and several firm-specific characteristics by focusing on the impact of founding family ownership on cash holdings. In conducting our analysis we carefully consider the issue of endogeneity. We estimate our model by utilizing the cross-sectional average methodology proposed by Rajan and Zingales (1995). In particular, we measure cash holdings (the dependent variable) in 2006 and we take average values for two years (i.e. 2004 and 2005) for the independent variables.

Using average values for the explanatory variables is an attempt to mitigate problems that might arise due to short-term fluctuations and extreme values in our data. Furthermore, using past values reduces the likelihood of observed relations reflecting the effects of cash holdings on firm-specific factors (see also, Ozkan and Ozkan, 2004, and Guney et al., 2007, for a similar methodology in the cash context).

### 5.5.2.1 Firm-Specific (Non-governance) Characteristics and Cash Holdings

#### 5.5.2.1.1. Cash Holding and Transaction Costs

We start by estimating our baseline model (model 1) Table 5.7, in which we include only the (non-governance) firm-specific characteristics described in section 5.2.1. In general, the estimated coefficients are in line with the hypothesized signs and with findings reported in the literature. Specifically, our first result is a negative relationship between cash flow and cash holdings. This would be in line with the argument that cash flow is substitute to cash holding. A similar negative result is provided by Ozkan and Ozkan (2004).

As the theory predicts the relationship between cash holdings and leverage is also negative and significant (substitution effect), in line with the view that borrowing can be seen as a substitute for holding cash, because it may represent a firm's increased ability to raise external funds. The same negative result is also provided by Opler et al. (1999) and Ozkan and Ozkan (2004).

However, Guney et al. (2007) show that the relationship between cash holdings and leverage is non-linear. Their contention is that to the extent that leverage of firms reflects their ability to issue debt, there would be a negative (substitution effect) relation between leverage and cash holdings. However, with greater levels of leverage firms are

more likely to experience financial distress and consequently risk of bankruptcy. In such a situation, they would have incentives to accumulate larger cash reserves to minimize these risks, and the associated costs. A positive relationship (precautionary effect) between cash holdings and leverage would therefore be anticipated at high levels of leverage. Accordingly, in line with Guney et al. (2007) we test the possibility of a non-linear relationship between leverage and cash holdings. However, we find no evidence (not reported) for such a relationship in our sample.

As far as dividends are concerned, the positive and significant results seems to be consistent with the argument that dividend payers accumulate larger cash holdings to ensure their ability to meet pay-out (Ozkan and Ozkan, 2004).

The significant inverse relationship between cash holding and tangibility is in line with the suggestion that firms with more tangible assets will tend to hold less cash because tangible assets can be sold if it becomes necessary to raise cash. More importantly, firms that have substantial assets (i.e. tangible assets) that can be used as collateral can more easily issue debt and can borrow on more favourable terms (Titman and Wessels, 1988). Such assets, moreover, are valued higher than intangible assets in the case of bankruptcy.

#### 5.5.2.1.2. Cash Holdings and Asymmetric Information and Agency Costs of Debt

Table 5.7 also shows a positive relationship between cash holding and market-to-book ratio, which is in line with both the asymmetric information and agency costs of debt explanations of cash holdings. In particular, our results provide strong evidence that firms with better investment opportunities increase their level of cash in order not to be obliged to pass up valuable investment projects in the future. This finding is also

consistent with the suggestion that these firms may find raising external finance more costly, due to problems of information asymmetry. This result is similar to that found by Kim et al. (1998) and Opler et al. (1999) for US firms, Ozkan and Ozkan (2004) for UK firms and Arslan et al. (2006) for Turkey.

The negative and significant relationship between cash holding and size is in line with the argument that large firms, being more likely to be diversified and, hence, less likely to experience financial distress (Titman and Wessels, 1988), have less need to accumulate cash. In addition, they face fewer borrowing constraints and lower cost of external financing than smaller companies (Fazzari et al., 1988). This result is in line with US evidence provided by Opler et al. (1999), UK evidence provided by Ozkan and Ozkan (2004), evidence from Turkey provided by Arslan et al. (2006), and the cross-country evidence provided by Kalcheva and Lins (2007).

To summarize, our first set of results is as follows: a negative relationship between cash flow and cash holdings indicates that cash flow is a substitute for cash holdings. The observed negative relationship between leverage and cash holdings would be in line with the view that borrowing can be seen as a substitute for holding cash, because it may represent a firm's increased ability to raise external funds. The negative relationship between tangibility and cash holdings indicates that firms with more tangible assets will tend to hold less cash because tangible assets can be sold if it becomes necessary to raise cash.

Our results also support the precautionary motive in the literature. The positive relationship between growth firms and cash holdings indicates that firms with better investment opportunities increase their level of cash in order not to be obliged to pass up valuable investment projects in the future. Also, these firms may find raising finance

costly, due to problems of information asymmetry. The negative and significant relationship between cash holding and size indicates that large firms are less likely to accumulate larger cash holdings because they are more diversified, less likely to experience financial distress, and they face fewer borrowing constraints and lower cost of external financing than smaller companies. Finally, we document a positive relationship between dividends and cash holdings. This could reflect firms' reluctance to cut dividend payments which may prove costly, by creating a negative signal of increased agency costs of equity and consequently implying further difficulties in raising funds in capital markets. It is also possible that firms may want to support their high dividend payout policy by holding large cash balances.

#### 5.5.2.2. Corporate Governance and Cash Holdings

In this section we analyse the influence of firm-level corporate governance structure on cash holdings. We start our analysis by looking first at executive and founding family ownership. In the following we test the influence of board characteristics (i.e. board size and duality) on cash holdings and finally the effects of local institutional investors and large foreign investors on cash are tested.

##### 5.5.2.2.1. Executive Ownership, Founding Family Ownership and Cash Holdings

In this sub-section, we construct several regression models to examine the cross-sectional relationship between executive ownership and founding family ownership with corporate cash holdings and present the results in models (2) to (4) in Table 5.7. We include all the control variables which we used in model (1) Table 5.7 in all our specifications.

**Table 5.7: Cross sectional regressions prediction of cash holdings.**

| Independent variables | Predicted sign | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|---|
| Cash flow | -/+ | -0.344** (-2.35) | -0.346** (-2.36) | -0.343** (-2.29) | -0.308* (-1.91) |
| Leverage | -/+ | -0.002* (-1.80) | -0.001* (-1.79) | -0.002* (-1.85) | -0.002** (-2.19) |
| Market-to-book ratio | + | 0.099*** (4.82) | 0.099*** (4.83) | 0.098*** (4.79) | 0.097*** (4.94) |
| Size | -/+ | -0.037* (-1.75) | -0.036* (-1.72) | -0.037* (-1.78) | -0.041** (-2.01) |
| Dividend | -/+ | 0.539* (1.85) | 0.548* (1.91) | 0.520* (1.79) | 0.545* (1.81) |
| Tangibility | - | -0.107** (-2.44) | -0.103** (-2.41) | -0.105** (-2.50) | -0.092** (-2.06) |
| Executive ownership | -/+ | - | -0.001 (-0.92) | -0.0003 (-0.40) | -0.0004 (-0.56) |
| Founding family ownership | - | - | - | -0.001* (-1.92) | -0.004** (-2.16) |
| Founding family squared | + | - | - | - | 0.0001** (2.03) |
| Industry dummies | | **Yes** | **Yes** | **Yes** | **Yes** |
| $R^2$ | | 0.47 | 0.48 | 0.49 | 0.51 |
| No. of observations | | 134 | 134 | 134 | 134 |

This table presents cross-sectional regression predicting cash holdings. The dependent variable is Cash holdings, measured in 2006, as the ratio of total cash and equivalent items to total assets and the independent variables average values for two years (i.e. 2004-2005). Definitions of variables are provided in Table 5.3. t-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. For the estimation, heteroscedasticity-robust standard errors are used.

In model (2) Table 5.7, we regress cash holdings against executive ownership and other control variables. In model (3), we add founding family ownership. In model (4), we add founding family ownership squared to test if there is a non-linear relation between founding family ownership and cash holdings, and retain all other variables.

Model (2) Table 5.7 shows that the signs of our control variables are consistent with our predictions, and all are significant. In particular, we find that cash holdings is positively associated with market-to-book ratio and dividends; and negatively associated with cash flow, leverage, size and tangibility.

Consistent with our expectations, we find that executive ownership is not associated with cash holdings. Furthermore, we test the possibility of a non-linear relationship between executive ownership and cash holdings. However, we find no evidence (not reported) for such a relationship in our sample.

Our result is in contrast to previous findings in the literature that executive ownership exerts a significant influence on cash holdings of firms. For example, Ozkan and Ozkan, (2004) provide evidence, for the UK, of a non-linear relationship between managerial ownership and cash holdings, which they attribute to the opposing influences of incentive alignment and the entrenchment effect. In contrast, Opler et al. (1999) find no significant evidence, for US firms, for a non-linear relationship; in fact, they report a positive relationship (significant at 10 per cent) between cash holdings and managerial ownership at low levels of ownership. However, there is no significant influence of managerial ownership on cash holdings at higher ownership levels.

In models (3) and (4), we detect a significant non-linear relationship between cash holdings and founding family ownership. The results provide support for our earlier prediction that founding family ownership exerts a significant influence on the cash

holding decisions of Jordanian firms. More specifically, the estimated coefficients of founding family ownership and founding family ownership squared suggest that firms first reduce their cash holdings as the levels of ownership by founding families increase, which we interpret as alignment of the interests of insiders (founding family owners) and outside shareholders. This may also be due to the changing perception of the market as a whole regarding the incentives of founding family owners. We argue that the negative relationship between cash holdings and founding family ownership at relatively lower levels of founding family ownership suggests that the market perceives increasing founding family ownership favourably, as it may show stronger commitment and greater incentive to monitor and discipline the management that may be independent of or closely linked to founding family owners. This in turn reduces the expected cost of external finance (both debt and equity) leading to a lower cash holding policy.

We observe that cash holdings continue to decrease as founding family ownership increases up to 36 per cent of founding family ownership[1]. However, at higher levels of ownership, firms start increasing their cash balances. Again, this may occur for two reasons. First, the market perceives high levels of founding family ownership less favourably now as the expropriation of minority shareholders by strong/large controllers becomes more likely and large family owners are more likely to control the management and be free from monitoring and disciplining. That is, they become entrenched at high levels of ownership. This, in turn, increases the expected cost of external finance and firms may choose to increase their cash reserves voluntarily as a precautionary move in an attempt to reduce the costs of foregone investment

[1] It is worth mentioning that 35 out of 134 observations (i.e. 26% of our sample) have founding family ownership exceeding 36%.

opportunities due to insufficient resources. Second, it is also possible that founding family owners choose to hold larger cash balances as this policy would increase their chance of using readily available liquid resources in their own interests. As they are able to do so only at high levels of ownership, which allows them to control the decision making process and the management, we observe a positive relation between cash holdings and founding family ownership at high levels of ownership.

There is also a possibility that the nature of the relationship between founding family ownership and cash holdings differs, depending on firms' growth opportunities. For example, it would be suggested that the entrenchment effect becomes less significant as the firm's growth opportunities increase, because in such circumstances the interest of the founding family and other shareholders are better aligned. This possibility can be explored by interacting founding family ownership and market-to-book ratio. We find no evidence (not reported) that the impact of founding family ownership on cash holdings changes with the presence of growth opportunities. In our unreported results, we find that the estimated coefficients of the interaction variables are not significant.

#### 5.5.2.2.2. Board Characteristics, Large Shareholders and Cash Holdings

In this sub-section, we construct several regression models to examine cross-sectionally the relations between board characteristic and large shareholders and corporate cash holdings and present the results in models (5) and (6) in Table 5.8. We include all control variables which we used in the previous models.

Models (5) and (6) in Table 5.8 show that the estimated signs of our control variables are consistent with the predictors, and estimated coefficients are all significant. In particular, we find that the cash holdings ratio is positively associated with the market-

to-book ratio and dividend payout ratios and negatively associated with cash flow, leverage, size and tangibility. Furthermore, similar to our earlier findings, executive ownership is not associated with corporate cash holdings and founding family ownership still has a non-linear relationship with corporate cash holdings.

In model (5) Table 5.8, we regress cash holdings against board size and the duality dummy which identifies firms in which the CEO is also Chairman of the Board. These results suggest that board size and the CEO-Chairman duality dummy have no significant impact on corporate cash holdings. We further interact founding family ownership with the board characteristics (i.e. board size and the CEO-Chairman duality dummy) to test if the effect of founding family ownership on cash holdings changes with these characteristics. In our unreported results we find no significant effect. Thus, we may conclude that board characteristics do not significantly influence the cash policy of Jordanian firms either directly or indirectly through interactions with founding family ownership. As discussed in Section 5.3.1, most Jordanian companies lack independence from controlling shareholders and from management. Furthermore, in Jordan as in many other Arab and developing countries, management and the board of directors are frequently dominated by members of the founding families. Therefore, Jordanian company board characteristics are not expected to have an important impact on corporate cash holdings.

We next turn our attention to the question of whether corporate cash holdings are affected when there is a large shareholder among the firm's shareholders (i.e. large local institutional investors and large foreign ownership). We regress corporate cash holdings against large domestic institutional ownership and large foreign investors and other control variables and present the results in model (6) of Table 5.8. Our result provides

evidence that local institutional investors do not have any significant impact on corporate cash holdings. This finding is consistent with our expectation and in support of our earlier prediction that institutional investors in Jordan are relatively passive in disciplining management because most of the local institutional investors are banks and insurance companies. Theoretically, such institutions, with their large holdings, might be expected to act as external governance agents for other shareholders, especially minority shareholders.

However, in practice, they are constrained in their ability to do so because of their significant ties with the companies, through family and personal connections. Furthermore, the effectiveness of the representatives of the Social Security Investment Unit is weakened by the lack of business expertise, since they are typically bureaucrats. Even when nominees' knowledge and expertise are sufficient to enable them to exercise governance, there is little incentive for them to do so, as they owe their tenure and career prospects to the civil service system, rather than to the performance of the firm concerned.

In model (6) Table 5.8, we also examine the impact of large foreign investors on corporate cash holdings. Foreign ownership, a variable associated with effective monitoring, has a negative relationship with cash holdings[1]. This possibly suggests that the oversight afforded by influential foreign investors deters owner-managers from accumulating a firm’s assets in the form of cash to spend on unprofitable activities or on acquiring low-performing investment assets with small or even negative NPV. In other words, where there is a substantial concentration of foreign ownership, it is more

[1] We re-estimated our regression by including a dummy variable to make the distinction between foreign financial institutions and foreign industrial corporations. However, the results do not reveal any significant effect and hence they are not reported

difficult for corporate managers to make decisions for their own benefit and they are forced to act more as value-enhancing agents on behalf of their shareholders.

**Table 5.8: Cross sectional regressions prediction of cash holdings**

| Independent variables | Predicted sign | Model 5 | Model 6 |
|---|---|---|---|
| Cash flow | -/+ | -0.321*<br>(-1.93) | -0.308*<br>(-1.81) |
| Leverage | -/+ | -0.002**<br>(-2.01) | -0.001**<br>(-2.11) |
| Market-to-book ratio | + | 0.095***<br>(4.48) | 0.096***<br>(4.80) |
| Size | -/+ | -0.049**<br>(-2.32) | -0.048**<br>(-2.35) |
| Dividend | -/+ | 0.569*<br>(1.93) | 0.526*<br>(1.84) |
| Tangibility | - | -0.09**<br>(-2.08) | -0.089**<br>(-2.06) |
| Executive ownership | -/+ | -0.0005<br>(-0.64) | -0.0002<br>(-0.26) |
| Founding family ownership | - | -0.004**<br>(-2.02) | -0.005**<br>(-2.02) |
| Founding family squared | + | 0.0001*<br>(1.76) | 0.0001*<br>(1.86) |
| Board size | - | -0.007<br>(-1.10) | -0.002<br>(-1.34) |
| Duality | + | -0.015<br>(-0.59) | -0.019<br>(-0.79) |
| Institutions investors | -/+ | - | -0.001<br>(-0.95) |
| Large foreign ownership | - | - | -0.001*<br>(-1.71) |
| Industry dummies | | **Yes** | **Yes** |
| $R^2$ | | 0.52 | 0.53 |
| No. of observations | | 134 | 134 |

This table presents cross-sectional regression predicting cash holdings. The dependent variable is Cash holdings, measured in 2006, as the ratio of total cash and equivalent items to total assets and the independent variables average values for two years (i.e. 2004-2005). Definitions of variables are provided in Table 5.3. t-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. For the estimation, heteroscedasticity-robust standard errors are used.

There is also a possibility that the nature of the relationship between large foreign ownership and cash holdings depends on firms' market-to-book ratio. For example, it is likely that large foreign stockholders might choose profitable firms (i.e. high market-to-book ratio) to invest in, and these firms will be the ones that perform well and accumulate more cash. This possibility can be explored by interacting large foreign stockholders and market-to-book ratio. Thus, one would expect a positive relationship between the interaction term and cash holdings. However, we find no evidence (not reported) that the impact of large foreign stockholders on cash holdings changes with firms' market-to-book ratio. We find that the estimated coefficient of the interaction variable is negative, but insignificant.

#### 5.5.2.2.3. Executive Ownership, Founding Family Ownership and Independent CEOs

The above discussion provides important new insights into the relationship between corporate governance mechanisms and cash holdings. Firstly, in contrast to previous research our findings show no significant relationship between executive ownership and cash holdings. On the other hand, there is strong evidence of the important role played by founding family ownership in determining cash holdings. The results provide support for a non-linear relationship between founding family ownership and cash holdings. Thus, our results show that founding family ownership is more influential than managerial discretion in the Jordanian context. However, one could argue that the nature of the relationship between executive ownership and founding family ownership with cash holdings may vary in the presence of independent CEOs. This possibility can be explored by including independent CEOs in our model and by interacting executive ownership and founding family ownership with independent CEOs. Independent CEOs identified using as a dummy variable: one indicates that the CEO is not a member of the

founding family and zero otherwise. In model (1) Table 5.9, we regress cash holdings against independent CEOs and other control variables. In model (2), we add executive ownership and executive ownership squared. In model (3), we interact executive ownership and executive ownership squared with independent CEOs to test whether the effect of executive ownership on cash depends on the characteristics of the CEOs. Our results provide no support for the view that the impact of managerial ownership on cash holdings changes with the presence of independent CEOs. The estimated coefficients of independent CEOs, executive ownership and executive ownership squared and the interaction variables are not significant. These results further support our earlier expectations and findings that executive ownership does not exert a significant influence on cash holdings of firms. In model (4) Table 5.9, we drop executive ownership and executive ownership squared, because they were insignificant and we add founding family ownership and founding family ownership squared. In model (5) we interact founding family ownership and founding family ownership squared with independent CEOs to test whether this effect depends on the nature of the CEOs. Our findings confirm our earlier findings that founding family ownership plays an important role in determining cash holdings of Jordanian companies. The estimated coefficients of interaction suggest that independent CEOs may have some impact on the nature of the relationship between cash holdings and founding family ownership. In particular, we find that the alignment effect is greater in the presence of independent CEOs, as shown by the negative estimated coefficient of the first interaction term, i.e., (FFamily*Indep. CEOs). Furthermore, the entrenchment effect also becomes larger in the presence of independent CEOs, i.e., (FFown2*Indp. CEOs). In general, these results show that founding family ownership is more important than managerial discretion in the Jordanian context.

**Table 5.9: Cross sectional regressions prediction of cash holdings.**

| Independent variables | Predicted sign | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|---|
| Cash flow | -/+ | -0.342** (-2.31) | -0.344** (-2.31) | -0.328** (-2.19) | -0.272* (-1.93) | -0.269* (-1.97) |
| Leverage | -/+ | -0.002* (-1.77) | -0.002* (-1.77) | -0.002* (-1.91) | -0.002* (-1.97) | -0.002* (-1.97) |
| Market-to-book ratio | + | 0.099*** (4.72) | 0.099*** (4.64) | 0.10*** (4.74) | 0.094*** (4.61) | 0.092*** (4.52) |
| Size | -/+ | -0.036* (-1.77) | -0.038* (-1.68) | -0.042* (-1.84) | -0.043** (-2.20) | -0.052** (-2.45) |
| Dividend | -/+ | 0.534* (1.84) | 0.562* (1.92) | 0.570* (1.97) | 0.604* (1.90) | 0.482 (1.48) |
| Tangibility | - | -0.106** (-2.42) | -0.103** (-2.36) | -0.095** (-2.15) | -0.089** (-2.18) | -0.074* (-1.93) |
| Independent CEOs | -/+ | -0.005 (-0.24) | -0.003 (-0.13) | -0.007 (-0.19) | 0.005 (0.25) | 0.036 (1.05) |
| Executive ownership | -/+ | - | -0.001 (-0.48) | -0.001 (-0.44) | - | - |
| Executive ownership squared | -/+ | - | 7.05e-06 (0.27) | -1.64e-06 (-0.06) | - | - |
| Exown*Indp. CEOs | -/+ | - | - | -0.001 (-0.39) | - | - |
| Exown2*Indp. CEOs | -/+ | - | - | 0.00004 (1.05) | - | - |
| Founding family | - | - | - | - | -0.006*** (-3.84) | -0.004 (-1.55) |
| Founding family squared | + | - | - | - | 0.00008*** (3.45) | 0.00005 (1.48) |
| FFown*Indp. CEOs | -/+ | - | - | - | - | -0.008* (-1.77) |
| FFown2*Indp. CEOs | -/+ | - | - | - | - | 0.0002* (1.86) |
| Industry dummies | | **Yes** | **Yes** | **Yes** | **Yes** | **Yes** |
| $R^2$ | | 0.48 | 0.48 | 0.49 | 0.54 | 0.56 |
| No. of observations | | 134 | 134 | 134 | 134 | 134 |

This table presents cross-sectional regression predicting cash holdings. The dependent variable is Cash holdings, measured in 2006, as the ratio of total cash and equivalent items to total assets and the independent variables average values for two years (i.e. 2004-2005). t-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. See Table 5.3 for exact definitions of variables For the estimation, heteroscedasticity-robust standard errors are used. – indicates that the variable is not in the model.

### 5.5.3. Further Checks

In this section, we carry out additional tests to check whether the findings are robust in the face of alternative specifications and present the results in Table 5.10.

First, we present OLS results for the pooled regression analysis (i.e. 360 firm-year observations). The pooled regression results in model (1) Table 5.10 strongly support the previous findings. In particular, we find that firms' cash holdings increase with market-to-book ratio and dividends; and decrease with leverage, size and tangibility. Furthermore, as expected, the results suggest that executive ownership is not associated with corporate cash holdings and founding family ownership still has a non-linear relationship with corporate cash holdings. The results suggest that the levels of founding family ownership exert a significant influence on cash holding decisions of Jordanian firms. More specifically, the estimated coefficient of founding family ownership and founding family ownership squared suggest that founding families move from alignment to entrenchment as their shareholdings in the firm increase. However, the relationship between cash flow and foreign ownership with cash holdings is still negative but insignificant. Furthermore, unlike the previous findings, we find that the relationship between board size and cash holdings is positive and significant at 5 per cent. One possible explanation for this result is that as board size increases, the board may perform less effectively as a monitoring mechanism. This implies that firms with such boards would suffer from more severe agency problems and poor corporate governance.

Next, in model (2) Table 5.10, we also re-estimate our cross sectional model (model, 6 of Table 5.8) by using alternative cash holdings measures. We now use cash and cash equivalent to net assets (defined as total assets minus cash and cash equivalent) as the

dependent variable in our cash holdings model. This definition has been widely used in previous research (see, Opler et al., 1999; Dittmar et al., 2003).

Our results show that the mean cash and cash equivalent to net assets is 17.62 per cent and the median is 5.25 per cent. Moreover, the results in model (2) Table 5.10 demonstrate that the main finding as to the effect of founding family ownership on cash holdings is robust, regardless of alternative definition of cash holdings. In particular, our findings suggest that the levels of founding family ownership exert a significant influence on cash holdings decisions of Jordanian firms. More specifically, the estimated coefficients of founding family ownership and founding family ownership squared suggest that founding families move from alignment to entrenchment as their shareholdings in the firm increase. However, foreign ownership is still negatively related to cash holdings, but insignificant.

Furthermore, we find that cash holdings is positively associated with market-to-book ratio and negatively associated with cash flow, leverage and tangibility. However, dividends and size are not associated with corporate cash holdings.

Our results are robust, regardless of using other definitions. Apart from the finding of a significant relationship between board size and cash holdings, in the first model, all findings are consistent with those reported in the previous section.

**Table 5.10: Pooled and cross sectional regressions prediction of cash holdings.**

| Independent variables | Predicted sign | Model 1 | Model 2 |
|---|---|---|---|
| Cash flow | -/+ | 0.014<br>(0.13) | -0.498**<br>(-2.20) |
| Leverage | -/+ | -0.001*<br>(-1.70) | -0.003**<br>(-2.13) |
| Market-to-book ratio | + | 0.088***<br>(5.23) | 0.073**<br>(2.46) |
| Size | -/+ | -0.018*<br>(-1.93) | -0.020<br>(-0.56) |
| Dividend | -/+ | 0.424**<br>(2.11) | 0.514<br>(1.16) |
| Tangibility | - | -0.151***<br>(-5.48) | -0.263***<br>(-3.56) |
| Executive ownership | -/+ | -0.0001<br>(-0.16) | -0.0001<br>(-0.08) |
| Founding family ownership | - | -0.003***<br>(-3.01) | -0.007**<br>(-1.99) |
| Founding family squared | + | 0.00002*<br>(1.69) | 0.0001**<br>(2.21) |
| Board size | - | 0.007**<br>(2.11) | -0.011<br>(-1.25) |
| Duality | + | -0.012<br>(-0.70) | -0.001<br>(-0.03) |
| Institutional investors | -/+ | -0.00001<br>(-0.04) | -0.002<br>(-1.16) |
| Large foreign ownership | - | -0.0002<br>(-0.40) | -0.0001<br>(-0.12) |
| Industry dummies | | **Yes** | **Yes** |
| $R^2$ | | 0.45 | 0.40 |
| No. of observations | | 360 | 134 |

This table presents cross-sectional regression predicting cash holdings. In model (1) we use pooled regression, the dependent variable cash defined as cash and equivalent items to total assets and the independent variables measured at the end of each year. All regressions include time dummies. In model (2) the dependent variable is Cash, measured in 2006, as the ratio of total cash and cash equivalent to total assets minus cash and cash equivalent. The independent variables show average values for two years (i.e. 2004-2005). t-statistic values are reported in parentheses. ***, ** and * indicate coefficient is significant at the 1%, 5% and 10% levels respectively. See Table 5.3 for exact definitions of variables.

## 5.6. Conclusion

In this chapter, we empirically investigated the determinants of corporate cash holdings for a sample of 360 firm-year observations based on firm-level data of Jordanian listed corporations over a period of 2004-2006.

Our study contributes to the literature on corporate cash holdings on several grounds. First, to our knowledge, this study is the first to test whether founding family ownership at the firm-level has an association with corporate cash holdings, and the nature of this relationship, which has not yet been considered in other concurrent studies.

Second, to our knowledge, this study is the first to test the effect of large foreign investors, which is an issue that has gone unnoticed in the existing literature dedicated to the analysis of the determinants of corporate cash holdings.

Third, our findings enhance our understanding of corporate cash holdings of firms operating in an emerging market. To our knowledge, this is the first attempt to analyse corporate cash holdings in an emerging equity market, namely Jordan, one of the Middle East and North African (MENA) countries.

Our last contribution lies in the important limitations of cross-country studies. For example, previous studies such as Dittmar et al. (2003) are based on the country-wide measures of shareholder rights as developed by La Porta et al. (1998). In the absence of firm-level data, their study does not provide clear conclusion at the firm level for the effect of agency costs on cash holdings. To circumvent these limitations, therefore, in this chapter, we analyse an extensive range of firm-level attributes which are suggested by previous studies to be important proxies for internal corporate governance. These governance attributes include executive ownership, founding family ownership, board size, CEO-Chairman duality, domestic large institutional investors and large foreign

investors, to provide additional empirical evidence on the determinants of firms' cash holdings in Jordan.

The results reported in our work provide strong evidence that founding family ownership plays an important role in determining cash holdings of Jordanian companies. These results provide support for a non-linear relationship between founding family ownership and cash holdings. We find that founding family owners move from alignment to entrenchment as their shareholdings in the firm increase. Cash holdings of firms fall as founding family ownership increases up to 36 per cent and then rise as founding family ownership increases above 36 per cent. The main findings as to the effect of founding family ownership on cash holdings are shown to be robust, regardless of alternative definitions of cash holdings and do not change significantly with either board attributes or the presence of other large shareholders. In addition, we provide evidence that the presence of large foreign investors leads to lower cash holdings.

Our analysis also reveals that cash holdings is positively associated with market-to-book value and dividends; and negatively associated with cash flow, leverage, size and tangibility. Furthermore, our results provide evidence that local institutional investors do not have any significant impact on corporate cash holdings. This finding provides support for the view that institutional investors in Jordan are relatively passive in disciplining management. Finally, Jordanian company board characteristics do not have any important impact on corporate cash holdings.

# Chapter 6

# Conclusions

The aim of this thesis is to investigate the role of corporate governance and agency conflicts in determining corporate performance, foreign investment and corporate financial decisions. For this purpose, it uses firm-level corporate governance and ownership data from Jordan. Jordan is an economy in which the prevailing corporate structures and regulatory mechanisms provide a data set that lends itself particularly well to the examination of these issues. Our work contains a number of important aspects that potentially contribute to the literature in several respects.

Chapter 2 presents through extensive descriptive statistics a timely review of ownership and corporate governance structure among publicly listed companies, both financial and non-financial, in Jordan, which we hand-collected for this thesis, for 519 firm-year observations of financial and non-financial Jordanian listed firms for the years 2004-2006. This chapter significantly contributes to the existing body of knowledge, by presenting a detailed picture of firm-level corporate governance structure in an emerging market by focusing on ownership and board structure among publicly listed companies in Jordan. The detailed investigations performed in Chapter 2 documented three important features about the Jordanian companies. First, most firms, both financial and non-financial, are family firms. The boards and management are frequently dominated by the founding families. Founding family members are involved in the management of the institution, as chairman of board, board members or senior managers. In addition, board size is relatively constant over time, with an average of nine directors, a large proportion of who are non-executives. Furthermore, role duality, whereby the chairman of the board is also the CEO, is still common, although decreasing slightly over time.

Other interesting facts were revealed by analysis of CEOs' salaries and compensations of both financial and non-financial firms listed at the Amman Stock Exchange. We find that the financial benefits accrued by founder, family and dual-role CEOs, in terms of mean salary and compensation, are significantly higher than average. These findings of high compensation packages for founder, family and dual-role CEOs may reflect their use of power in their own interest.

Finally, our findings show that firm ownership tends to be concentrated, with a prevalence of strong large shareholders, particularly family shareholders, local financial institutions and foreign shareholders. Family owners have an important involvement in all sectors. Their holdings may create a source of power for them, enabling them to influence firm policies and exercise their voting rights to control managers' actions, in their own interests. Local institutional owners, too, have sufficiently large holdings in the Jordanian firms. Additionally, for the most part, the evidence suggests that the role of foreign investors in the Jordanian market is significant high, and that foreign directors constitute a relatively increasing proportion of the board.

Chapter 3 investigated the relationship between internal corporate governance and corporate performance. The analysis contributes to the understanding of the role of agency issues in a developing country context. In particular, the research contributes to filling a gap identified in relation to corporate governance in the Arab region. In the existing performance-governance literature, the main corporate governance/agency issue is the one between managers and shareholders. Consequently, prior research on the subject puts more emphasis on the interactions between managerial ownership, incentives, entrenchment and performance. There is relatively little work addressing agency issues that may be dominant in different countries, so our study is important to

fill this gap. Second, this study extends previous research on corporate governance (see, among others, Yermack, 1996; Eisenberg et al., 1998; Haniffa and Hudaib, 2006; and Ghosh, 2006) by considering the impact of an important board characteristic (i.e. when the CEO is a member of the board) on firm performance, which can potentially work as an important governance devices.

Our analysis revealed a negative relationship between founding family ownership and corporate performance. No significant relationship was detected between executive ownership and firm value. The findings provide strong support for the view that the main agency concern for Jordanian firms seems to be the one between founding families and minority shareholders. Managerial ownership does not play any role in the corporate governance of Jordanian firms, whereas family ownership aims to protect and preserve family wealth. The findings support the view that CEO duality has an adverse effect on firm performance. However, CEO membership of the board tends to have a positive effect on company performance. This result suggests that if the CEO is a board member, he or she may facilitate and participate in the decision making process rather than dominate the decisions of the board, as may be the case when he/she is CEO and COB together. Concentration of ownership is positively related to firm value. A negative and significant relation between performance and large domestic institutional investors is detected, and large foreign investors have a significant and positive effect on firm performance. This implies that the monitoring function of foreign investors enhances firm performance and complements the relatively weak monitoring by domestic institutional investors. Finally, we find that corporate performance is positively associated with dividends; and negatively associated with size. Also, leverage has no significant impact on performance.

In Chapter 4, we empirically investigated the relationship between corporate governance and other firm characteristics and foreign investment decisions. The analysis focused on two important questions; first, how do founding family ownership and control affect the investment decisions of foreign investors in the Jordanian market? Second, how do other potential corporate governance mechanisms (i.e. institutional investors and board characteristics) and firm-specific characteristics (i.e. market-to-book-ratio, size, leverage and dividends) affect investment foreign investors in the Jordanian market?

We contribute to the existing literature on foreign ownership and corporate governance on – at least – two important grounds. Our first contribution in Chapter 4 is concerned with the empirical investigation of the impact of founding family ownership and control on foreign investment decisions. Previous studies in this field have generally investigated the total insider ownership or controlling shareholders (i.e. families and management) without taking the identity of the insider or controlling shareholder into consideration. Furthermore, very few studies have investigated the impact of board structure on foreign ownership. This study, by examining the impact of founding and local institutional involvement on foreign ownership, advances the knowledge in this field. Second, by using two alternative definitions of foreign ownership, namely, large foreign ownership and total foreign ownership, we are able to assess to what extent the findings depend on the threshold of foreign equity shares.

Our results reveal that founding family ownership and founding family control exerts a significant influence on foreign investors' decisions. More specifically, our finding suggests foreign ownership is likely to be lower in firms in which founding family ownership is high and in family controlled firms (i.e. when founding family members

are on the board of directors). The results also suggest that firms with large domestic intuitional ownership are related to lower foreign holdings. Board characteristics (i.e. board size and the proportion of non-executive directors) also have a negative effect on foreign investors, although the impact is significant only for board size. This result suggests that foreign investors perceive large boards as likely to encounter problems of coordination, control, and decision-making. Regarding firm-specific characteristics, we find that firms with higher growth potential (high market-to-book equity ratios) and large firms seem to be more attractive to foreign investors and they avoid firms that pay high dividends. Finally, leverage is not related to the level of foreign investment.

In Chapter 5, we sought to extend the empirical literature on the determinants of cash holding decisions. Our first major contribution in this chapter is concerned with the empirical investigation of the impact of founding family ownership on corporate cash holdings. Prior research provides support for the significant influence of managerial ownership on cash holdings decisions (see, e.g., Opler et al., 1999 and Ozkan and Ozkan, 2004). However, to the best of our knowledge, this study is the first to investigate the relationship between founding family equity ownership and cash holdings. Second, to our knowledge, this study is the first to test the effect of large foreign investors, which is an issue that is neglected in the existing literature examining the determinants of corporate cash holdings. Finally, our findings enhance our understanding of corporate cash holdings of firms operating in an emerging market which are characterised by less-developed capital markets (La Porta et al., 1997). This contrasts with previous studies, which generally focus on single high-income countries with uniformly high investor protection laws (e.g. Kim et al., 1998; and Opler et al., 1999 for US firms and Ozkan and Ozkan, 2004 for UK firms).

The empirical results in Chapter 5 provide strong evidence that founding family ownership exerts a significant influence on cash holding decisions of Jordanian firms. These results provide support for a non-linear relationship between founding families ownership and cash holdings. More specifically, we find that founding family move from alignment to entrenchment as their shareholdings in the firm increase. In addition, we provide evidence that the presence of large foreign investors leads to lower cash holdings. Furthermore, our result provides evidence that local institutional investors do not have any significant impact on corporate cash holdings. Jordanian company board characteristics do not have any important impact on corporate cash holdings. Finally, the results suggest that corporate cash holding is positively associated with market-to-book value and dividends; and negatively associated with cash flow, leverage, size and tangibility.

This thesis has addressed a number of important questions, targeted a number of important objectives and has made a significant contribution as one of the first attempts to explore empirically corporate governance practices at firm-level in Jordan, to investigate the relationship between internal corporate governance and corporate performance, to investigate the relationship between corporate governance and foreign investment decisions and to investigate the relationship between corporate governance and cash holding decisions. However, further research is needed to confirm the results of the present study by employing a longer sample period, different techniques and other variables.

There are other issues that deserve further attention in future studies. First, there is a need to develop a more sophisticated classification of family and non-family firms. Most previous studies approach the research of family firms from two perspectives:

whether family firm performance's different from that of non-family firms, or whether founder-controlled firms behave differently from descendant-controlled firms. The result from such an investigation will enhance our understanding about how family firms under family members (founders or descendants) are related to firm performance, and how these family firms perform relative to non-family firms.

Second, a natural extension of our work would be to investigate the potential impact of founding families on other corporate policy decisions than cash holdings such as capital structure, dividends policy and corporate disclosure quality. To the extent that corporate policies are strongly influenced by different structures of ownership of public firms, it is important to understand how the prevalence of founding families in an emerging market affects corporate policy decisions. The literature has so far provided very few empirical studies, mainly among samples of Standard and Poor's (S&P) 500 firms, of the impact of founding family ownership on leverage (Anderson et al., 2003), corporate pay out policy (Hu et al., 2007) and corporate earning and disclosure quality (Ali et al., 2007).

Third, it would be interesting to investigate the potential impact of ultimate ownership structures on firm value. This generates an entirely different set of agency conflicts, and these have been shown to be greater than those investigated at the direct ownership level (Bebchnuk et al., 2000). However, the literature on ultimate ownership structure has so far provided very few empirical studies of the impact of ultimate controller on corporate performance and other corporate decisions (see, Claessens et al., 2002; Faccio et al., 2001).

Fourth, further research is needed on boards of directors. For example, an explanatory study could be undertaken to investigate the determinants of board effectiveness in Jordanian listed firms, specifically answering questions such as which are the most

important factors that drive the adoption/operation of specific board structures, mechanisms and practices? To what extent do factors such as ownership structure (founding family ownership, institutional ownership, etc.) board member characteristics (education, experience, reputation, etc.), and organization characteristics (industry, age, leverage, growth, etc.) also influence board effectiveness? A satisfactory answer to these questions will enhance our understanding of several board practices and help to identify any 'gaps' in the governance structure of Jordanian firms.

Fifth, since the present study is limited to non-financial listed firms, it may also be worthwhile to study the specific governance of financial firms listed in the same capital market. As banks, for example, are among the most highly regulated firms in Jordan, their corporate governance practices should be different from other non-financial firms. The result will provide another perspective on corporate governance practices in this country and can be expected to support the current study.

Sixth, further study is needed to explore the role of foreign investors in the Jordanian market. For example, research which employs a case study design could be conducted to explore in more depth the effect of foreign investment on the quality of corporate governance in the Jordanian firms.

Seventh, a natural extension of our work would be to investigate the potential impact of market conditions in the determination of cash holdings decisions. However, we need to extend our sample to include panel data estimations.

Finally, a future potential extension to our work would be to investigate public companies in other Arab and Middle Eastern countries, which could increase the validity of our findings.

# References


Aggarwal, R., Klapper, L. and Wysocki, P.D. (2005). "Portfolio Preferences of Foreign Institutional Investors", *Journal of Banking and Finance*, 29, 2919-2946.

Agrawal, A. and Knoeber, C.R. (1996), "Firms Performance and Mechanisms to Control Agency Problems between Managers and Shareholders", *Journal of Financial and Quantitative Analysis*, 31, 377-397.

Al-Fanik, F. (2006). "Stock Market and the Portfolio of Social Security", *Al Rai Newspaper*, March 21, 12960 (21).

Ali, A., Chen, T. and Radhakrishnan, S. (2007). "Corporate Disclosure by Family Firms" *Journal of Accounting and Economics*, 44, 238-286.

Amman Stock Exchange, http://www.ase.com.jo.

Amman Stock Exchange, Various Annual Reports, 2000-2006 Amman, Jordan.

Anderson, R. and Reeb, D. (2003). "Founding-Family Ownership and Firm Performance: Evidence from the S&P 500", *Journal of Finance*, 58, 1301-1328.

Anderson, R., Mansi, S. and Reeb, D. (2003). "Founding-Family Ownership and the Agency Cost of Debt", *Journal of Financial Economics*, 68, 263-285.

Ang, J.A., Cole, R.A., and Lin, J.W. (2000), "Agency costs and ownership structure" *Journal of Finance*, 55, 81-106.

Arab Monetary Fund, http://www.amf.org.ae/pages/page.aspx.

Arslan, O., Florackis, C. and Ozkan, A. (2006). "The role of Cash Holdings in Reducing Investment Cash Flow Sensitivity: Evidence from a Financial Crisis Period in an Emerging Market", *Emerging Markets Review*, 7, 320-338.

Arslan, O., Florackis, C. and Ozkan, A. (2008). "How and Why Do Firms Establish Financial Flexibility?", working paper, at http://ssrn.com/abstract=1234682.

Aydin, N., Sayim, M. and Yalama, A. (2007). "Foreign Ownership and Firm Performance: Evidence from Turkey", *International Research Journal of Finance and Economics*, 11, 103-111.

Balasubramanian, N., Black, B. and Khanna, V. (2008). “Firm-Level Corporate Governance in Emerging Markets: A Case Study of India”, working paper, at http://ssrn.com/abstract=992529.

Banking Law for the Year 2000, Amman – Jordan.

Banks Directors’ Handbook of Corporate Governance (2004), Central Bank of Jordan, at http://www.cbj.gov.jo/uploads/corp_e.pdf.

Baskin, J. (1987). "Corporate liquidity in games of monopoly power". *Review of Economics and Statistics*, 69, 312-319.

Barth, E., Gulbrandsen, T. and Schonea, P. (2005). “Family Ownership and Productivity: The Role of Owner-Management”, *Journal of Corporate Finance*, 11, 107–127.

Bebchuk, A.L., Kraakman, R., and Triantis, G. (2000). “Stock Pyramids, Cross-Ownership, and Dual Class: The Creation and Agency Costs of Separation between Control and Cash Flow Rights, in Morck, R. (ed.) Concentrated Corporate Ownership. Chicago: University of Chicago Press, 445-460, at http://ssrn.com/abstract=147590.

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

Berle, A. and Means, G. (1932). *The Modern Corporation and Private Property*, New York: MacMillan Company.

Bertrand, M., Johnsonb, S., Samphantharakc, K. and Schoar, A. (2008). "Mixing family with business: A study of Thai business groups and the families behind them", *Journal of Financial Economics*, 88, 466–498.

Black, B., Inessa, L. and Rachinsky, A. (2006), "Corporate Governance Indices and Firms' Market Values: Time-Series Evidence from Russia", *Emerging Markets Review*, 7, 361-379.

Black, B., De Carvalho, A.G. and Gorga, E. (2008). "An Overview of Brazilian Corporate Governance", working paper, at http://ssrn.com/abstract=1003059.

Bloom, N. and Van Reenen, J. (2007). “Measuring and Explaining Management Practices Across Firms and Countries”, *Quarterly Journal of Economics*, 122, 1351–1408.

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

Brickley, J. A., Coles, J. L. and Jarrell, G. (1997). “Leadership structure: Separating the CEO and Chairman of the Board", *Journal of Corporate Finance*, 3, 189-220.

Brickley, J. A., Coles, J. L. and Terry, R. (1994). "Outside Directors and the Adoption of Poison Pills", *Journal of Financial Economics*, 35, 371-390.

Burkart, M., Panunzi, F. and Shleifer, A. (2003). "Family Firms", *Journal of Finance*, 58, 2167-2201.

Byrd, J. and Hickman, K. (1992). "Do Outside Directors Monitor Managers?” *Journal of Financial Economics*, 32, 195-221.

Cadbury Report of the Committee on the Financial Aspects of Corporate Governance, Gee Publications, December 1992, http://www.ecgn.org/ecgn/docs/codes/cadbury.pdf.

Central Bank of Jordan: http://www.cbj.gov.jo/.

Central Bank of Jordan Law 1971, Amman – Jordan.

Chan, K., Covrig, V. and Ng, L. (2005). "What Determines the Domestic Bias and Foreign Bias? Evidence from Mutual Fund Equity Allocations Worldwide", *Journal of Finance*, 60, 1495–1534.

Chang, K. and Noorbakhsh, A. (2006). "Corporate cash holdings, foreign direct investment, and corporate governance". *Global Finance Journal*, 16, 302–316.

Chen, X., Jarrad, H. and Kai, L. (2007). "Monitoring: which institutions matter?", *Journal of Financial Economics*, 86, 279–305.

Cheung, A.W.K. and Wei, K.C.J. (2006). "Insider Ownership and Corporate Performance: Evidence from the Adjustment Cost Approach", *Journal of Corporate Finance*, 12, 906-925.

Choi, J., Park, S., and Yoo, S. (2007). "The Value of Outside Directors: Evidence from Corporate Governance Reform in Korea", *Journal of Financial & Quantitative Analysis*, 42, 941-962.

Claessens, S., Djankov, S., Fan, J.P.H., and Lang, L.H.P. (2002). "Disentangling the incentive and entrenchment effects of large shareholders". *Journal of Finance*, 57, 2741-2771.

Claessens, S., Djankov, S. and Lang, L. H. P. (2000) "The Separation of Ownership and Control in East Asian Corporations", *Journal of Financial Economics*, 58, 81–112.

Coleman, K. and Biekpe, N. (2006). "The Relationship Between Board Size, Board Composition, CEO Duality and Firm Performance: Experience from Ghana", *Corporate Ownership & Control*, 4, 114-122.

Company Law No. 22 for the Year 1997. Amman. Jordan.

Coombes, P. and Watson, M. (2001). " Giving new life to the corporate governance reform agenda for emerging markets", *Directorship*, 27, 4-8.

Cooper, I. A. and Kaplanis, E. (1994). "Home Bias in Equity Portfolio, Inflation Hedging, and International Capital Market Equilibrium", *Review of Financial Studies*, 7, 45–60.

Cornett, M.M., Marcus, A.J., Saunders, A. and Tehranian, H. (2007). "The Impact of Institutional Ownership on Corporate Operating Performance", *Journal of Banking & Finance*, 31, 1771–1794.

Corporate Governance Code for Banks in Jordan (2007), Central Bank of Jordan, at http://www.cbj.gov.jo/uploads/code_book__e.pdf.

Corporate Governance Instructions for Insurance Companies in Jordan (2006), at http://www.irc.gov.jo/doc/PIOD/Instructions-2-2006-final.pdf.

Corporate Governance in the Morocco, Egypt, Lebanon and Jordan countries of the MENA region (2003): MENA Regional Corporate Governance Working Group, at http://www.gcgf.org/ifcext/cgf.nsf/AttachmentsByTitle/MENA_Sep_03_CG_in_MENA_countries/$FILE/MENA_Sep_03_MENA_CG_Report.pdf.

Creane, S., Goyal, R. Mubarak, A. M. and Sab, A. (2004) "Financial Sector Development in the Middle East and North Africa", *International Monetary Fund Working Paper 04/20*, at http://ssrn.com/abstract=879026.

Dahlquist, M., Pinkowitz, L., Stulz, R.M. and Williamson, R. (2003). "Corporate Governance and the Home Bias", *Journal of Financial and Quantitative Analysis*, 38, 87–110.

Dahlquist, M., and Robertsson, G. (2001). "Direct Foreign Ownership, Institutional Investors, and Firm Characteristics", *Journal of Financial Economics*, 59, 413 - 440.

Dahya, J., Dimitrov, O. and McConnell, J. J. (2008). "Dominant Shareholders, Corporate Boards, and Corporate Value: A Cross-Country Analysis," *Journal of Financial Economics*, 87, 73-100.

Dahya, J., Lonie, A.A., and Power, D.M. (1996). "The case for separating the roles of chairman and CEO: an analysis of stock market and accounting Data". *Corporate Governance: An International Review*, 4, 71 -77.

Datta, S., Iskandar-Datta, N. and Raman, K. (2005). "Managerial Stock Ownership and the Maturity Structure of Corporate Debt", *Journal of Finance*, 60, 2333-2350.

Davies, J.R., Hillier, D. and McColgan, P. (2005). "Ownership Structure, Managerial Behavior and Corporate Value", *Journal of Corporate Finance*, 11, 645-660.

Demsetz, H. and Lehn, K. (1985). "The Structure of Corporate Ownership: Causes and Consequences", *Journal of Political Economy*, 93, 1155-1177.

Demsetz, H. and Villalonga, B. (2001). "Ownership Structure and Corporate Performance", *Journal of Corporate Finance*, 7, 209-233.

Denis, D.K. (2001). "Twenty-five years of Corporate Governance Research …. And Counting", *Review of Financial Economics*, 10, 191-212.

Denis, K. and McConnell, J. (2003). "International Corporate Governance". *Journal of Financial and Quantitative Analysis*, 38, 1-36.

Dittmar, A., Mahrt-Smith, J. and Servaes, H. (2003). "International corporate governance and corporate cash holdings". *Journal of Financial and Quantitative Analysis*, 38, 111–133.

Doideg, C., Karolyi, G. and Stulz, R. (2007). "Why do countries matter so much for corporate governance?", *Journal of Financial Economics*, 86, 1-39.

Dong, M. and Ozkan, A. (2008). "Institutional Investors and Direct Pay: An Empirical Study of UK Companies", *Journal of Multinational Financial Management*, 18, 16-29.

Dvorak, T. (2005). "Do Domestic Investors Have an Information Advantage? Evidence from Indonesia", *Journal of Finance*, 60, 817–839.

Easterbook, F.H. (1984). "Two Agency-cost Explanations of Dividends", *The American Economic Review*, 74, 650-659.

Eisenberg, T., Sundgren, S. and Wells, M. (1998). "Larger Board Size and Decreasing Firm Value in Small Firms", *Journal of Financial Economics*, 48, 35-54.

Elsayed, K. (2007). "Does CEO Duality Really Affect Corporate Governance?", *Corporate Governance: An International Review*, 15, 1203-1214.

Executive Privatization Commission: http://www.epc.gov.jo.

Faccio, M. and Lang, L.H.P. (2002). "The Ultimate Ownership of Western European Corporations", *Journal of Financial Economics*, 65, 365–395.

Faccio, M., Lang, L.H.P. and Young, L. (2001). "Dividends and Expropriation", *American Economic Review*, 91, 54-78.

Fama, E. (1980). "Agency Problem and Theory of Firm", *Journal of Political Economy*, 88, 288–325.

Fama, E. F. and Jensen, M. C. (1983). "Separation of Ownership and Control", *Journal of Law and Economics*, 26, 301–25.

Fazzari, S.M., Hubbard, R.G. and Petersen, B. (1988). "Financing constraints and corporate investment". *Brooking Papers on Economic Activity*, 141–195.

Ferreira, M. and Matos, P. (2008). "The Colors of Investors' Money: The Role of Institutional Investors Around the World". *Journal of Financial Economics*, 88, 499–533.

Ferri, M.G. and Jones, W.H. (1979). "Determinants of Financial Structure: A New Methodological Approach", *Journal of Finance*, 34, 631-644.

Florackis, C. (2005). "Internal Corporate governance mechanisms and corporate performance: Evidence for UK Firms". *Applied Financial Economics Letters*,1, 211-216.

Florackis, C. and Ozkan, A. (2009). "The Impact of Managerial Entrenchment on Agency Costs: An Empirical Investigation Using UK Panel Data", *European Financial Management*, 15, 497-528.

Florackis, C., Kostakis A, and Ozkan, A. (2009). "Managerial ownership and performance", *Journal of Business Research*, in press.

Fosberg, R. and Nelson, M.R. (1999). "Leadership Structure and Firm Performance", *International Review of Financial Analysis*, 8, 83-96.

Franks, J., Mayer, C. and Renneboog, L. (2001). "Who Disciplines Management in Poorly Performing Companies?", *Journal of Financial Intermediation*, 10, 209-248.

French, K.R. and Poterba, J.M. (1991). "Investor Diversification and International Equity Markets", *The American Economic Review*, 81, 222–226.

Ghosh, S. (2006). "Do Board Characteristics Affect Corporate Performance? Firm-level Evidence for India". *Applied Economics Letter*, 13, 435-443.

Giannetti, M., and Koskinen. Y. (2008). "Investor Protection. Equity Returns, and Financial Globalization", *Journal of Financial and Quantitative Analysis*. Forthcoming.

Giannetti, M., and Simonov, A. (2006). "Which Investors Fear Expropriation? Evidence from Investors' Portfolio Choices", *Journal of Finance*, 61, 1507-1547.

Gillan, S.L. (2006). "Recent Developments in Corporate Governance: An Overview", *Journal of Corporate Finance*, 12, 381-402.

Gillan, S. and Starks, L. (2003). "Corporate Governance, Corporate Ownership, and the Role of Institutional Investors: A Global Perspective", *Journal of Applied Finance*, 13, 4–22.

Gompers, P., Ishii, J. and Metrick, A. (2003). "Corporate Governance and Equity Prices", *Quarterly Journal of Economics*, 188, 107-155.

Gregg, P., Jewell, S. and Tonks, I. (2005). Executive Pay and Performance in the UK 1994-2002. Working Paper, University of Exeter.

Gujarati, D.N. (2003). *Basic Econometrics*. 4th ed. London: McGraw-Hill.

Guney, Y., Ozkan, A. and Ozkan, N. (2007). "International evidence on the non-linear impact of leverage on corporate cash holdings. *Journal of Multinational Financial Management*, 17, 45-60.

Hall, B. and Liebman, J. (1998). "Are CEOs Really Paid Like Bureaucrats?", *Quarterly Journal of Economics*, 113, 653-691.

Hampel Report (1998). "Committee on Corporate Governance: Final Report". Chairman, Sir Ronald Hampel. London: GEE.

Haniffa, R. and Hudaib, M. (2006). "Governance Structure and Firm Performance of Malaysian Listed Companies", *Journal of Business, Finance and Accounting*, 33, 1034–1062.

Hanousek, J., Kočenda, E. and Svejnar, J. (2004). Ownership, Control and Corporate Performance after Large-Scale Privatization, *William Davidson Institute Working Paper Number 652*, at http://ssrn.com/abstract=508623.

Harford, J. (1999). "Corporate Cash Reserves and Acquisitions", *Journal of Finance*, 54, 1969-1997.

Harris, M. and Raviv, A. (1990). "Capital Structure and the Informational Role of Debt", *Journal of Finance*, 45, 321-349.

Harris, M. and Raviv, A. (2008). "A Theory of Board Control and Size". *The Review of Financial Studies*, 21, 1797 – 1832.

Hart, O. (1995). "Corporate Governance: Some Theory and Implications", *The Economic Journal*, 105, 678-689.

Hayes, R., Mehran, H., and Schaefer, S. (2005). Board Committee Structures, Ownership and Firm Performance. Working Paper, *Federal Reserve Bank of New York and University of Chicago.*

Hermalin, B. and Weisbach, M. (1991). "The Effects of Board Composition and Direct Incentives on Firm Performance", *Financial Management*, 20, 101–112.

Higgs Report (2003), Review of the role and effectiveness of non-executive directors, London: GEE.

Holderness, C. (2003). "A Survey of Blockholders and Corporate Control". *Economic Policy Review*, 9, 51-63.

Holderness, C.G. and Sheehan, D.P. (1988). "The Role of Majority Shareholders in Publicly Held Corporations: An Exploratory Analysis", *Journal of Financial Economics*, 20, 317-346.

Hu, A. and Kumar, P. (2004). "Managerial Entrenchment and Payout Policy", *Journal of Financial and Quantitative Analysis*, 39, 759-790.

Hu, Y., Wang, D. and Zhang, S. (2007). "Founding Family Ownership, Management and Payout Policy", working paper, at http://ssrn.com/abstract=1024300.

Hussain, S. and Mallin, C. (2002). "Corporate Governance in Bahrain", *Corporate Governance: An International Review*, 10, 197-210.

Insurance Commission, http://www.irc.gov.jo/home.asp.

Insurance Regulatory Act 1999, Amman – Jordan.

Jensen, M. C. (1986). "Agency Costs of Free Cash Flow, Corporate Finance and Takeovers", *American Economic Review*, 76, 323-329.

Jensen, M. C. (1993). "The Modern Industrial Revolution, Exit and Failure of Internal Control Systems", *Journal of Finance*, 48, 831–880.

Jensen, M. C. and Meckling, W. H. (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics*, 3, 305–60.

Jensen, M. and Murphy, K. (1990). "Performance Pay and Top-Management Incentives". *Journal of Political Economy*, 98, 225-264.

John, T.A. (1993). "Accounting measures of corporate liquidity, leverage, and costs of financial distress". *Financial Management*, 22, 91–100.

John, K. and Williams, J. (1985). "Dividends, Dilution, and Taxes: A Signaling Equilibrium", *Journal of Finance,* 40, 1053–1070.

Jordan Investment Board, http://www.jordaninvestment.com/.

Jordan Securities Commission, http://www.jsc.gov.jo.

Jordan Securities Commission, "Instructions of Issuing Companies Disclosure, Accounting and Auditing Standards for the Year 2004", issued by the Jordan Securities Commission.

Jordan Securities Commission, Various Annual Reports, 2000-2006, Amman, Jordan.

Jordan Shareholding Companies Guide, Various issues 2004-2006, Amman Stock Exchange, Amman, Jordan.

Kalcheva, I. and Lins, K.V. (2007). "International evidence on cash holdings and expected managerial agency problem". *The Review of Financial Studies*, 20, 1087-1112.

Kang, J. and Stulz, R.M. (1997). "Why is there a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan", *Journal of Financial Economics*, 46, 3–28.

Keynes, J.M. (1936). The General Theory of Employment, Interest and Money. London: McMillan.

Khanna, T. and Palepu, K. (1999). Emerging Market Business Groups, Foreign Investors, and Corporate Governance. *NBER working paper series 6955.*

Kho, B-C., Stulz, R.M. and Warnock, F.E. (2007). "Financial Globalization Governance and the Evolution of the Home Bias", *BIS Working Paper No. 220,* at http://ssrn.com/abstract=911595.

Kiel, G.C. and Nicholson, G.J. (2003). "Board Composition and Corporate Performance: How the Australian Experience Informs Contrasting Theories of Corporate Governance", *Corporate Governance: An International Review*, 11, 189-205.

Kim, C-S., Mauer, D.C. and Sherman, A.E. (1998). "The determinants of corporate liquidity: theory and evidence". *Journal of Financial and Quantitative Analysis*, 33, 335–359.

Klapper, L. and Love, I. (2004). "Corporate Governance, Investor Protection and Performance in Emerging Markets," *Journal of Corporate Finance*, 10, 703-728.

Lang, M., Lins, K. and Miller, D. (2004). "Concentrated Control, Analyst Following, and Valuation: Do Analysts Matter Most When Investors Are Protected Least?", *Journal of Accounting Research*, 42, 589-623.

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

La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. W. (1998). "Law and Finance", *Journal of Political Economy*, 106, 1113–1155.

La Porta, R., Lopez-De-Silanes, F. and Shleifer, A. (1999). "Corporate Ownership around the World", *Journal of Finance*, 54, 471–517.

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

Leech, D. and Leahy, J. (1991). "Ownership Structure, Control Type Classification and the Performance of Large British Companies", *The Economic Journal*, 101, 1418-1437.

Lemmon, M. L. and Lins, K.V. (2003) "Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis", *Journal of Finance*, 58, 1445 – 1468.

Leuz, C., Lins, K.V. and Warnock, F.E. (2008). "Do Foreigners Invest Less in Poorly Governed Firms?", *The Review of Financial Studies,* Forthcoming.

Lewis, K. (1999). "Trying to Explain Home Bias in Equities and Consumption", *Journal of Economics Literature*, 37, 571.608.

Lin, C.H. and Shiu, C-Y. (2003). "Foreign Ownership in the Taiwan Stock Market-An Empirical Analysis", *Journal of Multinational Financial Management*, 13, 19-41.

Lins, K. (2003). "Equity Ownership and Firm Value in Emerging Markets", *Journal of Financial and Quantitative Analysis*, 38, 159-184.

Lipton, M., Lorsch, J.W., (1992). "A Modest Proposal for Improves Corporate Governance", *The Business Lawyer*, 48, 59-78.

Luo, Q. and Hachiya, T. (2005). "Corporate governance, cash holdings, and firm value: evidence from Japan", *Review of Pacific Basin Financial Markets and Policies*, 8, 613-636.

Mangena, M. and Tauringana, V. (2007). "Disclosure, Corporate Governance and Foreign Share Ownership on the Zimbabwe Stock Exchange", *Journal of International Financial Management and Accounting*, 18, 53-85.

Maury, B. (2006). “Family Ownership and Firm Performance: Empirical Evidence from Western European Corporations”, *Journal of Corporate Finance*, 12, 321–341.

McConnell, J.J. and Servaes, H. (1990). “Additional Evidence on Equity Ownership and Corporate Value,” *Journal of Financial Economics*, 27, 595-612.

McKinsey & Company (2000). *Three surveys on corporate governance*. London: McKinsey & Co.

Mehran, H. (1995). "Executive Compensation Structure, Ownership and Firm Performance", *Journal of Financial Economics*, 38, 163-184.

MENA-OECD Investment Programme National Investment Reform Agenda Workshop for the Hashemite Kingdom of Jordan, Monday 19th June, 2006. Available on line: http://www.oecd.org/dataoecd/4/29/38148879.pdf.

Miller, D. and Le Breton-Miller, I. (2006). "Family Governance and Firm Performance: Agency, Stewardship, and Capabilities." *Family Business Review*, 19, 73-87.

Millstein, I. M. and MacAvoy, P.W. (1998). "The Active Board of Directors and Performance of the Large Publicity Traded Corporations", *Columbia Law Review*, 98, 1283-1322.

Mitton, T. (2002). "A cross-firm Analysis of the Impact of Corporate Governance on the East Asian Financial Crisis", *Journal of Financial Economics*, 64, 215-241.

Mobius, M. (2001). "Good Governance Is A Global Challenge", *Corporate Board*, 22, 1-4.

Modigliani, F. and Miller, M. (1963). "Corporate Income Taxes and the Cost of Capital: A Correction", *American Economic Review*, 53, 433-443.

Monks, R.A.G., Minow, N. (2001). *Corporate Governance*, Blackwell, Cambridge.

Morck, R. and Nakamura, M. (1999). “Banks and Corporate Control in Japan”, *Journal of Finance,* 54, 319–339.

Morck, R., Shleifer, A. and Vishny, R. (1988). "Management Ownership and Market Valuation: An Empirical Analysis", *Journal of Financial Economics*, 20, 293–315.

Morck, R., Strangeland, D. and Yeung, B. (2000). “Inherited Wealth, Corporate Control, and Economic Growth”. In: Morck, R. (Ed.), *Concentrated Corporate Ownership*. University of Chicago Press, Chicago.

Mura, R. (2007). "Firm Performance: Do Non-Executive Directors Have Minds of their Own? Evidence from UK Panel Data", *Financial Management, 36, 81-112.*

Myers, S. (1977). "Determinants of Corporate Borrowing", *Journal of Financial Economics*, 5, 147-175.

Myers, S.C. and Majluf, N.S. (1984). "Corporate financing and investment decisions when firms have information that investors do not have". *Journal of Financial Economics*, 13, 187–221.

Najib, H., (2007). "State of Corporate Governance in Arab Countries: An Overview", Munich Personal RePEc Archive, at http://mpra.ub.uni-muenchen.de/4566/.

Omar, B. (2007). Exploring the Aggregate, Mandatory and Voluntary Financial Disclosure Behaviour Under a New Regulatory Environment: The Case of Jordan, PhD Thesis, University of Hull.

Omet, G. (2005). “Ownership Structures in MENA Countries: Listed Companies State-Owned, Family Enterprises and Some Policy Implications”, MENA Regional Corporate Governance Forum: Advancing the Corporate Governance Agenda in MENA, 14-15 September, 2005, at http://www.oecd.org/dataoecd/26/2/35402110.pdf.

Opler, T., Pinkowitz, L., Stulz, R. and Williamson, R. (1999). "The determinants and implications of cash holdings", *Journal of Financial Economics*, 52, 3–46.

Organization for Economic Co-operation and Development (OECD) (2004), "OECD Principles of Corporate Governance", The OECD, Paris. Available on line: http://www.ifc.org/ifcext/corporategovernance.nsf/Content/WhyCG.

Ozkan, A. (1996). "Corporate bankruptcies, liquidation costs and the role of banks", *The Manchester School* 64, 104-119.

Ozkan, A. (2002). "The Determinants of Corporate Debt Maturity: Evidence from UK Firms", *Applied Financial Economics*, 12, 19-24.

Ozkan, A. and Ozkan, N., (2004). "Corporate Cash Holdings: An Empirical Investigation of UK Companies", *Journal of Banking and Finance*; 28, 2103-34.

Ozkan, N. (2007). "Do Corporate Governance Mechanisms Influence CEO Compensation? An Empirical Investigation of UK Companies", *Journal of Multinational Financial Management*, 17, 349-364.

Pearce, J.A. and Zahra, S.A. (1991), "The relative power of CEOs and boards of directors: associations with corporate performance", *Strategic Management Journal*, 12, 135-153.

Pearce, J.A. and Zahra, S.A. (1992). "Board Composition from A Strategic Contingency Perspective", *Journal of Management Studies*, 29, 411-438.

Pound, J. (1988). "Proxy contents and the efficiency of shareholder oversight", *Journal of Financial Economics*, 20, 237-265.

Raheja, C. G. (2005). "Determinants of Board Size and Composition: A Theory of Corporate Boards". *Journal of Financial & Quantitative Analysis*, 40, 283-306.

Rahman, R. and Haniffa, R. (2005). "The effect of role duality on corporate performance in Malaysia", *Corporate Ownership & Control*, 2, 40-47.

Rajan R.G. and Zingales, L. (1995). "What Do We Know about Capital Structure? Some Evidence from International Data", *Journal of Finance*, 50, 1421-1460.

Roe, M. (1993). "Some Differences in Corporate Structure in Germany, Japan, and the United States", *Yale Law Journal*, 102, 1927-2003.

Ross, S.A. (1977). "The Determination of Financial Structure: The Incentive-Signalling Approach", *Bell Journal of Economics*, 8, 23-40.

Saadi-Sedik, T. and Petri, M. (2006). The Jordanian Stock Market-Should You Invest in It for Risk Diversification or Performance?, *IMF Working Paper, 06/18,* at http://ssrn.com/abstract=926242.

Saidi, N. (2004). Corporate Governance in MENA Countries: Improving Transparency & Disclosure. The Second Middle East and North Africa Regional Corporate Governance Reform, at http://www.oecd.org/dataoecd/17/42/33944145.pdf.

Saidi, N. (2005). Corporate Governance in the Arab Countries: Role of the Banking System in Ensuring Transparency & Disclosure, Forum on Corporate Governance in Banks and Financial Institution in Line with International Standards & Practices, at http://www.gcgf.org/ifcext/cgf.nsf/Content/Home.

Securities Depository Centre, http://www.sdc.com.jo/english/.

Securities Law No. 23 of 1997, Amman, Jordan.

Securities Law No. 76 of 2002. Amman. Jordan.

Seifert, B., Gonenc, H. and Wright, J. (2005). "The international evidence on performance and equity ownership by insiders, blockholders, and institutions," *Journal of Multinational Financial Management*, 15, 171-191.

Shleifer, A. and Vishny, R.W. (1986). "Largest Shareholders and Corporate Control", *Journal of Political Economy*, 94, 461–488.

Shleifer, A. and Vishny, R.W. (1997). 'A Survey of Corporate Governance', *Journal of Finance*, 52, 737–84.

Short, H. and Keasey, K. (1999). "Managerial Ownership and the Performance of Firms: Evidence from the UK", *Journal of Corporate Finance*, 5, 79-101.

Smith, G. (2007). "Random Walks in Middle Eastern Stock Markets", *Applied Financial Economics*, 17, 587-596.

Sraer, D. and Thesmar, D. (2007). "Performance and Behavior of Family Firms: Evidence from the French Stock Market", *Journal of European Economic Association*, 5, 709–751.

Stiglitz, J. E. (1985). "Credit Markets and the Control of Capital", *Journal of Money, Credit & Banking*, 17, 133-152.

Stulz, R. M. (1999). "Globalization, Corporate Finance, and the Cost of Capital", *Journal of Applied Corporate Finance*, 12, 8-25.

Stulz, R. M. (2005). "The Limits of Financial Globalization", *Journal of Finance*, 60, 1595–1638.

Tarif, J. (2005). “The Jordanian Experience with Corporate Governance Codes, MENA Regional Corporate Governance Forum: Advancing the Corporate Governance Agenda in MENA, 14-15 September, at http://www.oecd.org/dataoecd/18/41/35381697.pdf.

Thomsen, S. and Pedersen, T. (2000). "Ownership structure and economic performance in the largest European companies", *Strategic Management Journal*, 21, 689-705.

Thomsen, S., Pedersen, T. and Kvist, H. (2006). "Blockholder Ownership: Effects on Firm Value in Market Control Based Governance Systems", *Journal of Corporate Finance*, 12, 246-269.

Tirole, J. (2006). *The Theory of Corporate Finance*, Princeton University Press.

Titman, S. and Wessels, R. (1988). "The determinants of capital structure choice". *Journal of Finance*, 43, 1–19.

Tong, S. and Ning, Y. (2004). “Does Capital Structure Affect Institutional Investor Choices?, *The Journal of Investing*, 13, 53-66.

Villalonga, B. and Amit, R. (2006). "How do family ownership, management, and control affect firm value?". *Journal of Financial Economics*, 80, 385.417.

Weisbach, M. (1988). "Outside Directors and CEO Turnover", *Journal of Financial Economics*, 20, 431–460.

Williamson, O. (1988). "Corporate finance and corporate governance". *Journal of Finance*, 43, 567–591.

World Bank, Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment (Jordan) (June, 2004), Available on Line: http://www.worldbank.org/ifa/rosc_cg_tha.pdf.

Yermack, D. (1996). "Higher Market Valuation of Companies with a small Board of Directors", *Journal of Financial Economics*, 40, 185-211.