Theory versus practice: perspectives of Middle Eastern financial managers

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Abstract

Purpose – The purpose of this paper is to survey financial managers in the Arab Gulf region about a broad set of financial decisions and contrast their answers with both prescriptions of financial theory and practices of their North American and European peers.

Design/methodology/approach – The paper uses Graham and Harvey's questionnaire on the cost of capital, capital budgeting and capital structure that is also employed by Brounen *et al.* in Europe, containing two additional questions on corporate governance. Moreover, the survey included an additional question about Islamic financial instruments.

Findings – Despite each firm's unique characteristics and institutions, chief financial officers (CFOs) in the Middle East are acting in a manner similar to their North American and European counterparts.

Originality/value – All CFOs surveyed are located in countries that abide by a combination of Islamic, civil (French, Romano-Germanic), and common (Anglo-Saxon) laws. To the best of the authors' knowledge, this is the first time that a nearly identical corporate finance survey has been simultaneously administered in North America, Europe and the Arab Gulf region.

Keywords Corporate finances, Middle East, Financial management

Paper type Research paper

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1. Introduction

This paper presents the results of a survey that examined the perspectives of Middle Eastern financial managers regarding their firms' cost of capital, capital budgeting, capital structure and corporate governance. As our base, we have used the extended form of the 2001 Graham and Harvey survey (concentrating on North American and European firms) employed by Brounen *et al.* (2004) that contained two additional questions on corporate governance, to which we added a third question asking whether firms' external financial instruments are in compliance with Islamic law[1]. Our survey also bears some similarity to that conducted by Bancel and Mittoo (2004), because we also focus on the legal system itself as a distinct characteristic and on publicly listed companies. All the CFOs surveyed are located in Bahrain, Kuwait, Oman, Saudi Arabia, Qatar and the United Arab Emirates (UAE), countries that abide by a combination of Islamic, civil (French and Romano-Germanic), and common (Anglo-Saxon) laws. Thus, the survey provides an opportunity to assess La Porta *et al.* (1997) statement that the legal system is preponderant over the financial system regarding firm's external finance. A superior legal system protects investors' rights and lowers transaction costs by reducing uncertainties and providing better contract enforcement. Such investor-friendly framework encourages a firm to increase external finance by either issuing equity or raising debt and therefore affects firm's capital structure. Unlike La Porta *et al.* (1997) who use macro data, we employ a survey that provides micro data and presents the perspective of Middle-Eastern executives.

Our survey is unique, because it allows for an interpretation of how managers' practices are shaped within a peculiar institutional environment. This exploration should shed light on the reasons behind organizational decisions in reaction to varying sets of constraints. While not a perfect systematic experiment, with all relevant variables controlled, it does incorporate the spirit of methodical inquiry. In our case, alternative environments consist of different laws, culture, politics, religion and human and natural resources. Another distinct aspect of our study is that the countries surveyed do not tax either the corporations or the investors. Given that taxation is a major factor in financial decisions and since it varies a great deal across countries, our survey is conducted in a setting that is unaffected by such frictions. We conclude that, despite each firm's unique characteristics and institutions, Middle-Eastern chief financial officers' (CFOs) actions, in general, are similar to those of their North American and European counterparts.

The remainder of the paper is organized as follows. Section 2 provides a brief explanation of Islamic finance and institutions while Section 3 describes the survey method. Capital budgeting, cost of capital, capital structure and debt policy, corporate governance and Islamic finance are investigated in Sections 4-7. Finally, we present our conclusions and suggest directions for future research.

2. Islamic finance and institutions in the Arab Gulf countries

To the best of our knowledge, existing corporate financial studies focus on countries that abide by common law (Anglo-Saxon or British system of precedents), civil law (French or Romano-Germanic tradition law), or some combination. La Porta *et al.* (1999) broaden the range by dividing commercial law into five groups: common, French civil, German civil, Scandinavian and socialist laws, and they offer specific assessments of the impact of such legal systems on the government. They find that countries abiding

by French or socialist laws exhibit inferior government performance (e.g. more corruption, more bureaucratic delays, less provision of essential public goods, lower tax compliance, more ineffective spending and so on). Interestingly, they add a new attribute to their findings, i.e. religious predominance. La Porta *et al.* find that countries with a high proportion of Catholics or Muslims also exhibit inferior government performance. Beck *et al.* (2003, 2006) test the impact of the legal environment and initial endowments (such as natural resources) on a country's financial development. In their 2006 article, they find a positive relationship between the efficiency of the legal system and firm size.

Our research contributes additional characteristics we believe to be unique. Rather than concentrating on the population share of any particular religious group (Protestants, Catholics, Muslims, and so on), we examine the source of the law itself, in particular, focusing on Islamic law and its impact on corporate finance, instead of on governmental policies and their effect on a firm's performance.

Islamic law is particularly interesting in this examination, because its interpretation of interest and usury affects the way firms externally finance their activities through debt and equity. For instance, it is common practice for firms that follow the Islamic law to not issue preferred stocks, only common stocks. To do otherwise would be considered *Riba*[2]. Preferred stocks have priority in:

- income distribution; and
- liquidation.

Such an arrangement would be interpreted as discrimination, which is not allowed under Islamic law. Also, some firms finance their activities with Islamic banks that avoid charging interest rates for the loans but receive other compensation, such as a partnership interest or obligate themselves in other risk-bearing relationships. Popular contracts such as these are known as *Musharaka* and *Mudaraba*[3].

In our sample, we study six Islamic countries: Bahrain, Kuwait, Oman, Saudi Arabia, Qatar and the UAE. All six countries have mixed legal systems in which, generally, the civil code is rooted in the *Sharia* law, but the commercial code is more secular. The commercial code itself is a mix of legal traditions, mainly Anglo-Saxon common law – due to the long influence of the British Empire in the region – and codified laws of France, introduced during the time these countries achieved statehood[4].

Bahrain is a monarchy that gained independence from the British Empire in 1971. The legal system is similar to the other countries in our study, i.e. a combination of English common, codified French and Islamic laws. The commercial code is more secular, and it receives limited input from the ruling Islamic law, but the Islamic law is always sovereign. In Bahrain, 60 per cent of the population is composed of Muslim *Shias* – the result of historical Persian incursions – while the ruling class and courts are composed of *Sunnis*. In certain cases, the Bahraini Chamber of Commerce and Industry works as an arbitrator. Bahrain signed a free trade agreement with the USA in 2005 which involved a reduction of legal restrictions on free trade and labor law regulations.

Kuwait's mixed legal system has an initial preponderant base of customary law and British common law. Until 1961, Kuwait was under the jurisdiction of Great Britain.

After independence, the commercial code was influenced by the French code through the work of Egyptians jurists in charge of assisting the country in legal affairs.

Oman has a monarchy as its form of government. Compared with Bahrain, Kuwait and the UAE, Oman has a lower income per capita, a large land area, and was the first to gain independence in 1651. However, due to repeated invasions, Oman was a British protectorate until 1971. Oman only became truly open to the world economy after 1970, with the reign of the Sultan Qaboos bin Said al-Said who signed a free trade agreement with the USA in 2006. Omani law is influenced by common, codified and Islamic laws. Oman is the only Muslim country in which the Ibadi Islamic form is predominant, instead of the more common *Sunni* and *Shiite* forms.

Saudi Arabia is the oldest among the sovereign modern states in our sample, founded in 1932 by Abd Al-Aziz bin Abd al-Rahman Al Saud (Ibn Saud) after a long campaign to unify the kingdom. Saudi Arabia is the birthplace of Islam, and virtually all of its population professes the Muslim faith. Not surprisingly, its legal system is based on *Sharia* law, although several secular legal codes have been introduced in the recent past. Saudi Arabia is a leading producer of oil and natural gas and holds more than 20 per cent of the world's oil reserves. There are strong government controls over major economic activities. However, more recently, the government has pursued economic reform and diversification in an effort to rely less on natural resources and, as a result, in December 2005, Saudi Arabia joined the World Trade Organization.

Strategically located in a small peninsula on the Arab Gulf, Qatar is a constitutional monarchy that became independent in 1971. More than 70 per cent of its population is Muslim. The legal system is based on Islamic and civil law codes controlled by the monarch (the Amir), although civil codes are being implemented. Nevertheless, Islamic law dominates family and personal affairs. Current economic policy is focused on diversifying away from the energy sector, although gross domestic product, exports, and government revenues are still extremely dependent on oil and gas exploration.

The UAE also achieved its statehood in 1971 from Great Britain. As in the case of Bahrain, Kuwait, and Oman, this presence left a legacy on its present-day legal system. Again, because of its recent statehood, the legal system was influenced by codified law during the establishment of its modern government. Islamic law is also present, mainly in civil law. The UAE is composed of seven highly autonomous emirates, the most important ones being Dubai and Abu Dhabi. Each emirate has its own royal family.

A clear division between financial transactions and ruling institutions, and between commercial and non-commercial law, as we see in most Western countries, is an inaccurate reading of the prevailing conditions in these six Gulf countries. *Sharia* law and its institutions, is hierarchically superior to commercial law; consequently, the legal system is subject to *Sharia* influence and interpretation. Examples are the law of contract, property, and non-bank guarantees (Foster, 2006). Therefore, it is not possible to interpret commercial law as a purely secular system of laws. We believe that these six countries have unique institutions and legal systems, which should prove highly instructive for comparison.

3. Data and method

Survey research is not widespread in the field of corporate finance[5]; one reason is that data from survey research are self-reported. But, because a survey reaches a large number of subjects, it permits a fair confrontation of the prescriptions of a theory and

its practice, allowing for further refinements of both. Our survey builds on the work of Graham and Harvey (2001) and Brounen *et al.* (2004) and, therefore, consists of four groups of questions on cost of capital, capital budgeting, capital structure, and corporate governance. As noted earlier, we added a question to the survey to reflect:

- the different tax systems in the selected countries; and
- the public listing of all firms.

In this sense, our study bears some similarities with Bancel and Mittoo's (2004) survey that focused on publicly listed firms but retains the comprehensive questions provided by Graham and Harvey and Brounen *et al.* Bancel and Mittoo also categorized the countries according to their legal systems – French, German, Scandinavian and English laws – a classification based on La Porta *et al.* (1997).

We chose to focus on CFOs of publicly listed firms – presumably more qualified executives – to concentrate our efforts within a smaller number of firms. To the best of our knowledge, there has been no previous analogous comprehensive survey applied to countries in the Arab Gulf region. Again, this serves to highlight the unique aspect of the research and hints at some of the difficulties that lie ahead. We first mailed the questionnaires by the end of May 2006. Firms' addresses were obtained from the 2005 *Gulf Investment Guide*, published by Zughaibi & Kabbani Financial Consultants (ZKFC, 2005). The questionnaire was addressed to each firm's CFO and provided respondents with the option of responding by mail, fax, e-mail, or on the survey web site. The questionnaire was presented in English, the business language of the region.

We did a second mailing of the survey during the first week of September[6]. Two weeks after the second mailing, we had three research assistants contact the non-respondent CFOs either by phone and/or by personal visits. The second round resulted in 14 more responses, 13 from the UAE, and one from Oman. Table I presents the results.

The survey is based upon a small population consisting of the 479 publicly listed firms within the six Arab Gulf countries. The return rate of 7.9 per cent (38 out of 479 firms) is in line with previous well-known financial surveys[7]. We tested for non-response bias by comparing the results of the first mailing with those of the second, this one being a proxy for the non-respondents. For such a test, as with all other comparisons throughout this study, we employed the non-parametric Mann-Whitney *U*-test (Mann and Whitney, 1947). This test is particularly recommended for situations in which the data are ordinal, and it is more robust than usual parametric tests when samples are not normally distributed (Siegel, 1956).

	Bahrain	Kuwait	Oman	Saudi Arabia	Qatar	UAE	Total
Number of CFOs contacted	33	139	128	85	35	59	479
First wave	3	8	6	1	1	5	24
Second wave	0	0	1	0	0	13	14
Surveys returned	3	8	7	1	1	18	38
Response rate (%)	9.1	5.8	5.5	1.2	2.9	30.5	7.9
Country composition (%)	7.9	21.1	18.4	2.6	2.6	47.4	100

Table I.
First and second mailing results and country composition of the sample

Also, non-parametric tests are more robust to outliers, a concern when samples are small, such as in our study. Out of 108 items, only four were statistically different between the two mailing waves (all within the question "What factors affect how you choose the appropriate amount of debt for your firm?"). Thus, we conclude that non-response bias is not a major concern in our results.

Similarly, considering that CFOs from the UAE comprised 47 per cent of the total sample, we tested for bias in the results driven by country concentration. Again, we employed the Mann-Whitney *U*-test. These results were even better than for the mailing waves, since only three items were statistically different between the UAE and the other countries in the sample (all within the question "Has your firm seriously considered issuing common stock? If "yes", what factors affect your firm's decisions about issuing common stock?"). Again, given these results, we conclude that the presence of a larger number of UAE's CFOs is unlikely to have biased our results.

Finally, we acknowledge a couple of limitations of our research design. First, there is a timing gap among the three surveys (North America: 1999; Europe: 2001; and Middle East: 2006). Since economic and social conditions might have influenced the perspectives of the respondents, strict comparison of the results may be difficult[8]. However, considering that the decisions probed are mainly of a strategic nature, a short timing difference should not bias the results. Second, we did not conduct a pilot test of the survey instrument in the Middle East, since we wanted it to be as comparable as possible with the previous ones. The trade-off between consistency and specificity is, unfortunately, a common limitation of cross-country studies (Asra and Santos-Francisco, 2001).

3.1 Control variables

In most questions, respondents had to choose from a five-point Likert scale of 0 to 4 (0 meaning "never", 4 meaning "always"). In order to investigate differences in responses to different firm and chief executive officer (CEO) characteristics[9], we segmented the sample according to 17 control variables:

(1) *Size:* smaller firms (those with sales under US$100 million) and larger firms (US$100 million and above).

(2) *P/E:* value firms (those with a price-earnings ratio of less than or equal to 12) and growth firms (above 12).

(3) *Leverage:* low-leverage firms (those with a debt-to-equity ratio up to 0.2) and high-leverage firms (above 0.2).

(4) *Rating:* firms with rating and those with no rating.

(5) *Industry:* financial industry firms and those from all other industries.

(6) *Managerial Ownership:* firms whose percentage of common stock in the hands of management is less than 5 per cent and firms whose managerial holdings are more than 5 per cent of common stock.

(7) *CEO Age:* firms with younger CEOs (up to 40-years old) and older CEOs (above 40-years old).

(8) *CEO Tenure:* firms whose CEO's time in the current job is less than four years and firms whose CEO's time in the current job is more than four years.

(9) *CEO Education:* firms whose CEO holds at least an MBA degree and firms whose CEO holds a non-MBA master's or higher academic degree.

(10) *Regulated Industry:* firms that belong to a regulated industry and those that do not.

(11) *Target D/E:* firms that declare having "no" or a "flexible" target for their debt-equity ratio and those whose target is "strict" or "somewhat strict".

(12) *Foreign Sales:* firms that have export revenues and those that do not.

(13) *Estimates Cost of Capital:* firms that estimate their cost of equity capital and those that do not.

(14) *Foreign Debt Issue:* firms that have seriously considered issuing foreign debt and those that have not.

(15) *Convertible Debt Issue:* firms that have seriously considered issuing convertible debt and those that have not.

(16) *Common Stock Issue:* firms that have seriously considered issuing common stock and those that have not.

(17) *Use of Islamic Finance:* firms that declare using Islamic finance instruments and those that do not.

Since all firms in our sample are public and claim to pay dividends, we did not segment according to these characteristics.

We computed a test of mean differences in responses among each subgroup for each question. Our aim was to investigate whether the practice of corporate finance were affected by the above characteristics of the firms and CEOs. As underscored by Graham and Harvey (2001), surveys measure beliefs and not actions. Here, as in the North American and European studies, we have no way to assess whether beliefs correspond to actions.

3.2 Sample characteristics

In our sample case shown in Figure 1, more than 90 per cent of the firms have sales revenues of less than $1 billion, which is in stark contrast with the USA where 42.5 per cent of the respondent firms have sales above $1 billion. It is clear that the business scale is aligned with the size of the economy. In terms of internationalization, foreign sales are up to 25 per cent of total sales for around 81 per cent of the firms. Sharp contrast, though, exists in the industry sector. In the USA, 42 per cent of the respondent firms are in the manufacturing sector versus about 22 per cent in the Gulf. These roles are reversed for the finance/insurance sector, in which 37.5 per cent of the Gulf firms are from this sector versus 15 per cent in the USA. The retail and wholesale sector comes in third, with 15 per cent of the Gulf firms coming from this sector. A sharper difference in our sample is that all firms are public and claim to pay dividends, compared with 63 and 53 per cent, respectively, in the USA. Summarizing, the firms in our sample are smaller, more internationalized, and more concentrated in the financial sector than the North American and European firms previously surveyed.

Gulf CEOs are considerably younger than their North American counterparts. Of Gulf CEOs, 19 per cent are under 40-years old, while in the USA, this occurs in only 2.7 per cent of the cases. Additionally, 22.8 per cent of North American CEOs are over

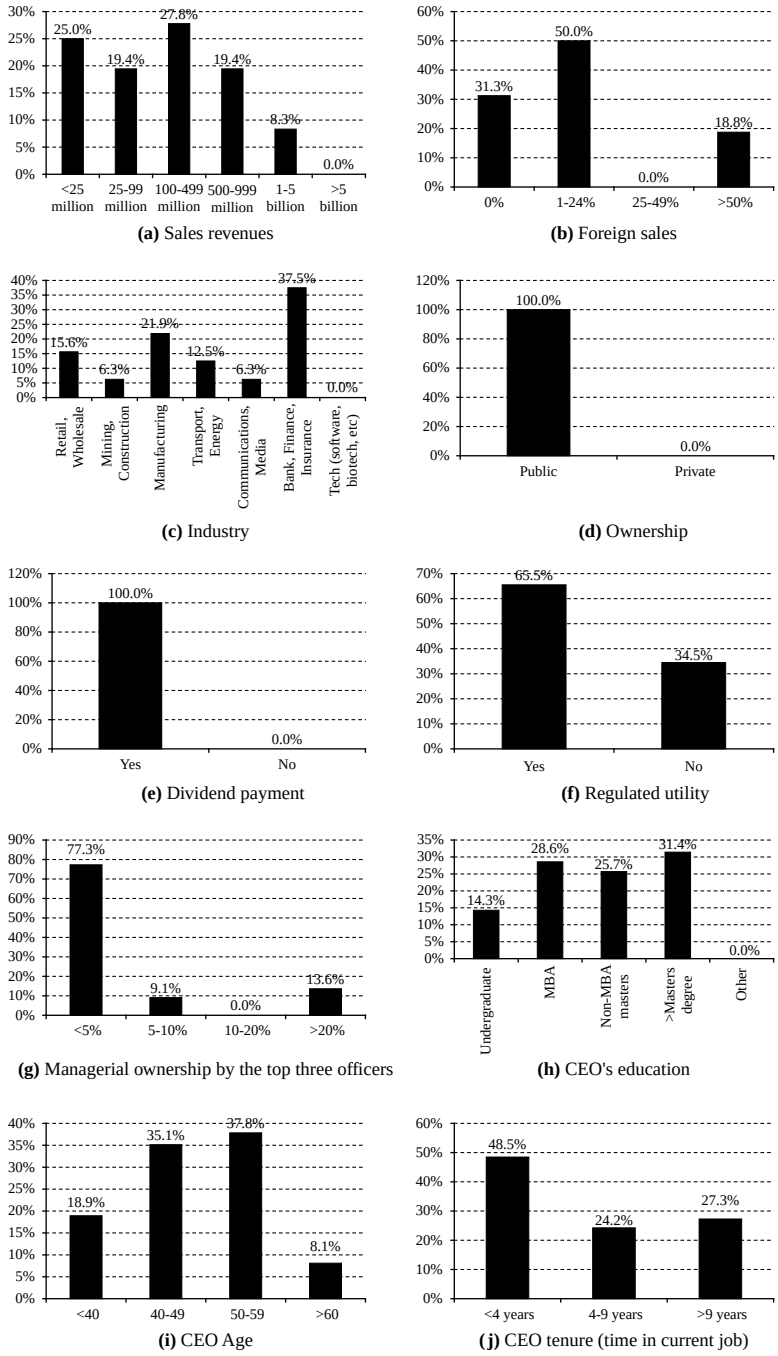


Figure 1.
Sample characteristics

59-years old; whereas, this is the case in only 8 per cent of Gulf CEOs. Also, almost half of the CEOs sampled have been in office for less than four years, while tenure is almost evenly spread among the other ranges. There is, however, a small difference in favor of tenure above nine years in 36 per cent of the cases in the USA, compared with 27 per cent in the Gulf. With respect to CEO education, our results show that 57 per cent of Gulf CEOs have a non-MBA master's or higher degree compared with only 8 per cent in the USA. In the USA, 40 per cent of the respondents have only an undergraduate degree, compared with 14 per cent in the Middle East. On the other hand, North American officers clearly have a larger proportion of stock ownership when compared with their Gulf counterparts. For instance, more than 21 per cent of US respondents claim more than 20 per cent of ownership, in contrast to only 13 per cent in the Gulf. In sum, Gulf CEO's are younger, have less tenure, are better educated, and have less stock ownership than their colleagues in the USA.

4. Capital budgeting methods

The survey's first question asked CFOs how frequently their firms use a number of evaluation techniques for their projects and acquisitions. CFOs from our sample more frequently use the net present value (NPV), the internal rate of return (IRR), and the payback period, a result similar to the findings of Graham and Harvey (2001) and Brounen *et al.* (2004). European firms, however, reported the payback period as their favorite technique, whereas our results are more in line with those of the North American study in this sense. Another surprise is the hurdle rate, which is not as popular in our sample as it is for North American and European CFOs. The predominance of discounted cash flow techniques (NPV and IRR) in our sample suggests that the practice of finance – at least in this respect – is following the prescriptions of finance theory.

Unlike the developed country studies, we identify only a few statistical differences among control variables. The results are presented in Table II. For the sake of brevity, we omit the detailed segmentation statistical results[10]. Results from Graham and Harvey (2001) and Brounen *et al.* (2004) are also reported[11].

Smaller and "value" firms (i.e. those with lower P/E ratios) are more likely to use the profitability index; firms whose percentage of managerial ownership is higher more frequently use the payback period and the accounting rate of return; firms whose CEOs are less experienced in their current position employ real options, profitability index, discounted payback period, and adjusted present value (APV) more frequently than firms whose CEOs are more experienced; regulated industries use the profitability index and the value at risk (VaR) relatively more frequently; exporters prefer the accounting rate of return and the profitability index relatively more; firms that estimate the cost of equity capital are significantly more likely to use almost all techniques more frequently than the other firms, except for the payback period and the accounting rate of return; firms that consider issuing foreign debt more frequently use the profitability index; firms that consider issuing convertible debt prefer the NPV and IRR more than other firms; not surprisingly, CFOs that consider issuing common stock use earnings multiples more frequently than other CFOs; and finally, no difference is found regarding the degree of leverage, rating, industry, CEO age and education, target D/E ratio, and firms that use Islamic finance instruments.

How frequently does your firm use the following techniques when deciding which projects or acquisitions to pursue?	*n*	%	Mean	Significant control variables
a. NPV	36	83.3 [74.93] (48.74)	3.25 [3.08] (2.28)	Estimates cost of equity
b. IRR	36	83.3 [75.61] (47.21)	3.39 [3.09] (2.24)	CEO age and estimates cost of equity
f. Payback period	37	73.0 [56.74] (56.79)	3.08 [2.53] (2.47)	
j. Sensitivity analysis (e.g. "good" vs "fair" vs "bad")	33	72.7 [51.54] (29.28)	3.03 [2.31] (1.64)	
l. We incorporate the "real options" of a project when evaluating it	31	61.3 [26.56] (40.98)	2.45 [1.49] (1.98)	Estimates cost of equity
d. Earnings multiple approach	34	52.9 [38.92] (28.04)	2.32 [1.89] (1.52)	Rating and estimates cost of equity
i. Accounting rate of return (or book rate of return on assets)	33	48.5 [20.29] (29.13)	2.27 [1.34] (1.53)	Foreign sales, regulated and managerial ownership
h. Profitability index	32	43.8 [11.87] (18.94)	1.97 [0.85] (1.11)	Regulated
g. Discounted payback period	34	41.2 [29.45] (24.74)	1.85 [1.56] (1.37)	Estimates cost of equity
c. Hurdle rate	34	38.2 [56.94] (25.68)	2.00 [2.48] (1.44)	Estimates cost of equity
e. APV	33	36.4 [10.78] (10.55)	1.73 [0.85] (0.81)	Estimates cost of equity
k. VaR or other simulation analysis	32	34.4 [13.66] (19.65)	1.66 [0.95] (1.21)	Regulated, CEO education

Notes: The table presents the CFOs' responses to survey questions; *n* is the number of valid responses for each question; mean is the average score for each question (0-4 for Likert-scale questions); % is the percentage of scores 4 and 3 ("Always" and "Almost Always") for Likert-scale questions; significant control variables are the sample segments that presented significantly different means, using the Mann-Whitney *U*-test; Graham and Harvey (2001) North American survey results are within square brackets; Brounen *et al.* (2004) European survey results are within round brackets

Table II.
Capital budgeting

We notice that Middle Eastern firms that estimate their cost of equity are more likely to use intensively more sophisticated valuation methods than those that do not. In this sense, estimating the cost of equity may be a proxy for the financial sophistication of the firm.

Overall, our results regarding capital budgeting are similar to those of Graham and Harvey (2001) for the North American study, but differ from those of Brounen *et al.* (2004). Similar to the North American sample, the typical Middle Eastern CFO prefers the NPV and IRR techniques, in contrast to the European sample that favors the payback period. Differently from both studies, we find fewer significant differences among control groups. This result may be a consequence of the small sample size of our survey.

5. Cost of capital

The cost of capital decisions are explored in three questions in the survey. The first one asks respondents about the discount rates they use when evaluating a new project abroad. Similar to the North American and European studies, our CFOs favor a single company-wide discount rate even for overseas markets. The percentage of CFOs claiming to use such a discount rate always or almost always is considerably higher than previous studies: 74.2 per cent compared with 58.8 per cent (Graham and Harvey, 2001) and between 24.4 and 64.6 per cent (Brounen *et al.*, 2004).

An analysis of the results from segmented groups does not yield any surprising outcomes as presented in Table III (Panel A). Again, only a few items are significantly different conditional on firm and executive characteristics. Larger firms and firms that use Islamic finance instruments are more likely to use overseas market discount rates; CEOs with shorter tenure show a greater preference for the company discount rate, as do firms that have considered issuing foreign debt; regulated firms and non-export firms favor the use of different discount rates for different components of the cash flow; firms that estimate the cost of equity relatively more frequently use risk-matched, divisional, and conditional-to-cash flow component discount rates; finally, no difference is found regarding the P/E ratio, degree of leverage, rating, industry, managerial ownership, CEO age and education, target D/E ratio, convertible debt and common stock issue.

The second cost of capital question asked the CFO whether the firm estimates the cost of equity capital and how it determines it. As in the North American and European studies, the Capital Assets Pricing Model (CAPM) or beta approach is the most popular choice among the CFOs in our sample. However, while in the Graham and Harvey (2001) study 73.5 per cent of the CFOs report using the CAPM always or almost always, in our sample only 57.1 per cent of the CFOs make such claims. Therefore, our results are closer to those of Brounen *et al.* (2004) European study (between 34 and 55.6 per cent of the CFOs) than to those of the North American survey. Another contrast is the role of regulatory decisions in the estimation of the cost of equity capital, claimed by 26.9 per cent of Middle Eastern CFOs and by only 7 per cent of North American ones, and between 0 and 16.1 per cent of European CFOs. Table III (Panel B) summarizes these results.

Examining the results conditional on firm and CEO characteristics, larger firms and firms whose sales abroad have a larger share of their revenues are more likely to listen to their shareholders in order to determine their cost of capital. These firms and those from regulated industries also are more likely to abide by regulatory decisions. Finally, no difference is found regarding the remaining firm and CEO characteristics. These results are presented in Table III (Panel B).

	n	%	Mean	Significant control variables
Panel A: how frequently would your company use the following discount rates when evaluating a new project in an overseas market?				
a. The discount rate for our entire company	32	71.9	2.75	
		[58.8]	[2.50]	
		(42.0)	(1.88)	
b. The discount rate for the overseas market (country discount rate)	34	67.6	2.62	Size, foreign sales
		[34.5]	[1.65]	
		(16.3)	(0.93)	
d. A risk-matched discount rate for this particular project (considering both country and industry)	34	58.8	2.47	Estimates cost of equity
		[51.0]	[2.09]	
		(25.5)	(1.18)	
c. A divisional discount rate (if the project line of business matches a domestic division)	32	37.5	1.69	
		[15.6]	[0.95]	
		(14.1)	(0.78)	
e. A different discount rate for each component cash flow that has a different risk characteristic (e.g.: depreciation vs operating cash flows)	33	18.2	1.27	Regulated
		[9.9]	[0.66]	
		(7.9)	(0.51)	
Panel B: does your firm estimate the cost of equity capital? If "yes", how do you determine your firm's cost of equity capital?				
b. Using the CAPM (the beta approach)	28	57.1	2.50	
		[73.5]	[2.92]	
		(42.6)	(1.79)	
a. With average historical returns on common stock	30	50.0	2.27	
		[39.4]	[1.72]	
		(24.8)	(1.26)	
c. Using the CAPM but including some extra "risk factors"	26	50.0	2.23	
		[34.3]	[1.56]	
		(21.2)	(1.14)	
d. Whatever our investors tell us they require	27	29.6	1.26	Size, foreign sales
		[13.9]	[0.86]	
		(34.8)	(1.73)	
e. By regulatory decisions	26	26.9	1.35	Size, foreign sales and regulated
		[7.0]	[0.44]	
		(7.3)	(0.54)	
f. Back out from discounted dividend/earnings model, e.g. price = dividend/(cost of capital growth)	24	20.8	1.29	
		[15.7]	[0.91]	
		(10.4)	(0.67)	

Notes: The table presents the CFOs' responses to survey questions; *n* is the number of valid responses for each question; mean is the average score for each question (0-4 for Likert-scale questions); % is the percentage of scores 4 and 3 ("Always" and "Almost Always") for Likert-scale questions; significant control variables are the sample segments that presented significantly different means, using the Mann-Whitney *U*-test; Graham and Harvey (2001) North American survey results are within square brackets; Brounen *et al.* (2004) European survey results are within round brackets

Table III.
Cost of capital

The final cost of capital question asks about the adjustment of the discount rate, cash flow, both, or neither to specific risk factors in project valuation. Results are presented in Table IV. In contrast to the North American and European surveys, most of the CFOs in our sample claim to adjust some of these components to specific risks. The discount rate is adjusted mainly for firm size, business cycle, unexpected inflation and interest rate risks. Cash flows are adjusted for commodity price, business cycle, foreign

When valuing a project, do you adjust either the discount rate or cash flows for the following risk factors?	*n*	Discount rate (%)	Cash flow (%)	Both (%)	Neither (%)
h. Size (small firms being riskier)	35	37.5	12.5	15.6	34.4
		[14.6]	[6.0]	[13.4]	[66.0]
		(16.4)	(12.2)	(11.6)	(59.8)
d. GDP or business cycle risk	32	35.3	26.5	14.7	23.5
		[6.8]	[18.8]	[18.8]	[55.6]
		(10.6)	(14.8)	(10.7)	(63.9)
a. Risk of unexpected inflation	31	31.4	20.0	14.3	34.3
		[11.9]	[14.5]	[11.9]	[61.8]
		(16.5)	(16.4)	(14.6)	(52.6)
b. Interest rate risk (change in general level of interest rates)	31	28.6	17.1	37.1	17.1
		[15.3]	[8.8]	[24.7]	[51.3]
		(23.7)	(18.7)	(23.0)	(34.6)
c. Term structure risk (change in the long- vs short-term interest rate)	35	24.2	18.2	27.3	30.3
		[8.6]	[3.7]	[12.6]	[75.1]
		(17.2)	(9.2)	(11.3)	(62.4)
i. "Market-to-book" ratio (ratio of market value of firm to book value assets)	34	21.9	9.4	28.1	40.6
		[4.0]	[2.0]	[7.1]	[86.9]
		(10.4)	(8.5)	(12.2)	(69.0)
f. Foreign exchange risk	35	20.0	22.9	31.4	25.7
		[10.8]	[15.3]	[18.8]	[55.1]
		(12.5)	(23.6)	(15.6)	(48.3)
j. Momentum (recent stock price performance)	35	16.1	6.5	12.9	64.5
		[3.4]	[2.9]	[4.9]	[88.9]
		(12.2)	(2.2)	(6.0)	(79.6)
g. Distress risk (probability of bankruptcy)	33	12.9	6.5	16.1	64.5
		[7.4]	[6.3]	[4.8]	[81.5]
		(11.7)	(13.2)	(11.1)	(63.9)
e. Commodity price risk	32	8.6	25.7	20.0	45.7
		[2.9]	[18.9]	[10.9]	[67.4]
		(8.0)	(27.5)	(12.9)	(51.6)

Notes: The table presents the frequency percentage of responses of each risk factor to each item (discount rate, cash flows, both, neither); *n* is the number of valid responses for each item; Graham and Harvey (2001) North American survey results are within square brackets; Brounen *et al.* (2004) European survey results are within round brackets

Table IV.
Risk factors and project valuation

exchange, and unexpected inflation risks, clearly risk factors associated with the operating costs and revenues of the firms. Both components are adjusted for interest rate, foreign exchange, market-to-book and term structure risks. Neither of them is adjusted for momentum, distress, commodity price and market-to-book risks. These results are, in general, similar to previous surveys in developed markets, in which mostly macroeconomic risks (business cycle, inflation, interest rate, foreign exchange, term structure and commodity prices) are accounted for more frequently than fundamental risks (size, distress, momentum and market-to-book). None of the control variables present statistically significant differences for any of the risk factors, so they are omitted from Table IV.

6. Capital structure and debt policy

6.1 Trade-off theory

The trade-off theory as first developed by Modigliani and Miller (1963) argues that firms have optimal debt ratios based on the trade-off between the tax deductibility of interest expenses and the costs of financial distress. The question as to whether firms in the Middle East do have a target range for the debt ratio was asked directly of the CFOs in the region. Figure 2 shows the results. While 26 per cent of the CFOs do not have a target range, only 7 per cent of them declare having a strict debt range. The other CFOs have either a flexible target range (29 per cent) or a somewhat tight range (39 per cent). These results are, on average, similar to the findings of Graham and Harvey (2001) and Brounen *et al.* (2004); namely, that most companies do have a target range, but only a few of them have a strict target.

When the CFOs were asked about the factors that affect their firms' decisions to issue common stock, the results were mixed with regard to maintaining a target range (Table V, Panel A). Only half of the CFOs declared that maintaining a target debt-to-equity range is either an important or very important factor affecting their decision to issue equity. These companies, as shown in Table V (Panel A, row "e") below, do, generally, estimate the cost of equity and have seriously considered issuing convertible debt.

The trade-off theory of capital structure supposes that in order to maintain a target range, firms should be constantly rebalancing their target to keep up with stock price changes. However, the results in Table V (Panel B) show that the debt policy of only 10 per cent of the respondents is affected by changes in the price of their common stock.

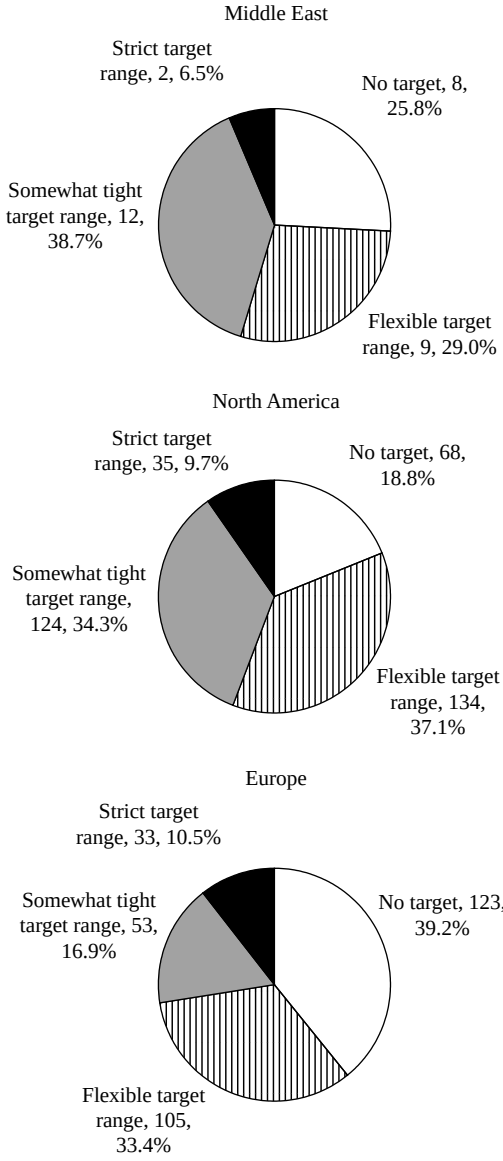
However, observed target ratios may be changing over time even though firms do have a set range (Fisher *et al.*, 1989). The results in Table V (Panel B) address this issue. Transaction costs and fees for issuing debt affect the decisions of only half of the CFOs when they choose the appropriate amount of debt for their firms. Moreover, when asked whether they delay issuing or retiring debt because of transactions costs, only 7 per cent of the CFOs answer positively.

The results in this section offer moderate support for the practice of trade-off theory of capital structure in the Middle East. An alternative theory of capital structure is the pecking order.

6.2 Pecking-order theory

The pecking-order theory argues that, because of information asymmetry, firms choose to use their retained earnings first to finance their investments (Myers, 1984; Myers and Majluf, 1984). When internal financing does not suffice, firms issue debt first and equity last. In this model, firms do not have a set target ratio.

The first question on the pecking-order model asks CFOs about the flexibility they like to preserve in their financing. While this is not a direct test of the pecking-order model, it shows how diligent firms are in keeping some financial slack available for potential new investments. Having enough slack would allow firms to minimize the costs of information asymmetry associated with external financing. The results in Table VI (Panel A) show that the majority of CFOs appreciate financial flexibility, more so when the proportion of managerial ownership is higher. More direct tests of the pecking-order model come from the questions for which the answers are listed



Note: Survey responses to the question: does your firm have a target range for your debt ratio?

Figure 2.
Target debt ratios

in Table V. Almost half the respondents confirm that they issue debt when their internal funds are insufficient to fund their activities (Panel B, row "a"). A quarter of the respondents say that their inability to obtain funds using debt affects their decisions to issue common stock (Panel A, row "k").

	n	%	Mean	Significant control variables
Panel A: has your firm seriously considered issuing common stock? If "yes", what factors affect your firm's decisions about issuing common stock?				
g. Whether our recent profits have been sufficient to fund our activities	18	66.7 [30.4] (44.3)	2.67 [1.76] (1.89)	
l. Earnings per share dilution	17	58.8 [68.6] (17.4)	2.65 [2.84] (0.99)	Size
a. If our stock price has recently risen, the price at which we can issue is "high"	19	52.6 [62.6] (40.8)	2.47 [2.53] (1.69)	
e. Maintaining target debt-to-equity ratio	20	50.0 [51.6] (34.1)	2.40 [2.26] (1.85)	Target D/E and convertible debt
h. Issuing stock gives investors a better impression of our firm's prospects than using debt	17	41.2 [21.5] (1.19)	1.94 [1.31] (13.5)	CEO age, tenure and education
j. The amount by which our stock is undervalued or overvalued by the market	17	35.3 [66.9] (41.8)	1.59 [2.84] (1.95)	
b. Stock is our "least risky" source of funds	20	35.0 [30.6] (28.7)	2.05 [1.76] (1.64)	
c. Providing shares to employee bonus/ stock option plans	18	33.3 [53.3] (37.4)	1.72 [2.34] (2.04)	Rating
d. Common stock is our cheapest source of funds	17	29.4 [14.1] (19.4)	1.47 [1.10] (1.38)	Size, leverage, use of Islamic finance and country
k. Inability to obtain funds using debt, convertibles, or other sources	16	25.0 [15.6] (11.7)	1.13 [1.15] (0.57)	Country
i. Diluting the holdings of certain shareholders	17	23.5 [50.4] (23.0)	1.18 [2.14] (1.35)	Country
f. Using a similar amount of equity as is used by other firms in our industry	18	11.1 [23.0] (12.8)	1.06 [1.45] (1.14)	Foreign sales, industry and CEO age
Panel B: what other factors affect your firm's debt policy?				
c. We issue debt when interest rates are particularly low	30	56.7 [46.4] (27.4)	2.27 [2.22] (1.58)	
a. We issue debt when our recent profits (internal funds) are not sufficient to fund our activities	32	46.9 [46.8] (38.8)	2.03 [2.13] (1.81)	CEO education
b. Using debt gives investors a better impression of our firm's prospects than issuing stock	29	31.0 [9.8] (6.4)	1.45 [0.96] (0.83)	
d. We use debt when our equity is undervalued by the market	29	24.1 [30.8] (8.8)	1.45 [1.56] (0.67)	

Table V.
Capital structure decision

(*continued*)

	n	%	Mean	Significant control variables
g. Changes in the price of our common stock	29	10.3 [16.4] (4.8)	1.07 [1.08] (0.60)	
e. We delay issuing debt because of transactions costs and fees	29	6.9 [10.2] (5.0)	1.24 [1.06] (0.68)	
f. We delay retiring debt because of recapitalization costs and fees	29	6.9 [12.4] (4.2)	1.03 [1.04] (0.70)	
h. We issue debt when we have accumulated substantial profits	28	3.6 [1.1] (4.4)	1.07 [0.53] (0.58)	

Notes: The table presents the CFOs' responses to survey questions; *n* is the number of valid responses for each question; mean is the average score for each question (0-4 for Likert-scale questions); % is the percentage of scores 4 and 3 ("Always" and "Almost Always") for Likert-scale questions; significant control variables are the sample segments that presented significantly different means, using the Mann-Whitney *U*-test; Graham and Harvey (2001) North American survey results are within square brackets; Brounen *et al.* (2004) European survey results are within round brackets

Table V.

These results are somewhat consistent with the pecking-order model of capital structure. As in Graham and Harvey (2001), our results demonstrate only weak support for either the trade-off or the information asymmetry-based pecking-order theory of capital structure. A third alternative to the two theories is a market timing-based model.

6.3 Market timing

Loughran and Ritter (1995) and Spiess and Affleck-Graves (1995) find that firms experience long-term underperformance in the period following equity issues. Moreover, Stein (1996) shows that managers can time the market to maximize existing shareholders' wealth. Baker and Wurgler (2002, p. 27) expand the market timing theory to long-term capital structure. The theory they present states that "capital structure evolves as the cumulative outcome of past attempts to time the equity market". Some questions in our survey offer insight into the possibility that CFOs might be following the market timing theory. The answer to the most direct question in this area is in Table V (Panel A, row "a") and shows that more than half of the CFOs do consider the stock price as a factor affecting their decisions to issue equity. The firms in this category are the ones that do estimate the cost of equity and did consider issuing foreign debt.

Market timing theory argues that managers do not rebalance their debt ratio, which implies that equity issues, during high market valuations, tend to have long-lasting effects on capital structure. The results in Table VI (Panel A, row "g") show that little more than 10 per cent of respondents rebalance their debt ratio to keep up with stock price changes. However, one-fourth of the CFOs said that they used debt when their equity was being undervalued by the market (row "d").

As for the trade-off and pecking-order theories, the results in hand give mixed support to the market timing theory. Graham and Harvey (2001) argue that the

	n	%	Mean	Significant control variables
Panel A: what factors affect how you choose the appropriate amount of debt for your firm?				
e. Financial flexibility (we restrict debt so we have enough internal funds available to pursue new projects when they come along)	34	73.5 [59.4] (46.8)	2.91 [2.59] (2.12)	Managerial ownership and mailing wave
f. The volatility of our earnings and cash flows	31	64.5 [48.1] (34.6)	2.45 [2.32] (1.72)	
d. The transactions costs and fees for issuing debt	31	58.1 [33.5] (23.3)	2.32 [1.95] (1.48)	Managerial ownership and mailing wave
c. Our credit rating (as assigned by rating agencies)	32	46.9 [57.1] (33.8)	2.00 [2.46] (1.66)	Rating, industry, managerial ownership and foreign debt issue
g. We limit debt so our customers/ suppliers are not worried about our firm going out of business	31	38.7 [18.7] (21.4)	1.84 [1.24] (1.29)	Regulated, target D/E and mailing wave
a. The potential costs of bankruptcy, near-bankruptcy, or financial distress	30	33.3 [21.4] (18.7)	1.50 [1.24] (1.05)	
l. We restrict our borrowing so that profits from new/future projects can be captured fully by shareholders and do not have to be paid out as interest to debt holders	33	27.3 [12.6] (18.6)	1.88 [1.01] (1.10)	Estimates cost of equity
b. The debt levels of other firms in our industry	31	25.8 [23.4] (16.4)	1.52 [1.49] (1.19)	CEO tenure
i. If we issue debt our competitors know that we are very unlikely to reduce our output/sales	30	13.3 [2.23] (2.3)	1.03 [0.40] (0.43)	
k. To ensure that upper management works hard and efficiently, we issue sufficient debt to make sure that a large portion of our cash flow is committed to interest payments	30	6.7 [1.7] (3.2)	0.67 [0.33] (0.41)	Mailing wave
h. We try to have enough debt that we are not an attractive takeover target	31	3.2 [4.8] (2.8)	0.61 [0.73] (0.51)	
j. A high debt ratio helps us bargain for concessions from our employees	30	0.0 [0.0] (0.4)	0.50 [0.16] (0.30)	
Panel B: what factors affect your firm's choice between short- and long-term debt?				
b. Matching the maturity of our debt with the life of our assets	33	81.8 [63.3] (54.0)	3.00 [2.60] (2.30)	
a. We issue short-term when short-term interest rates are low compared to long-term rates	33	60.6 [35.9] (29.4)	2.64 [1.89] (1.61)	Use of Islamic finance

Table VI.
Debt policy

(*continued*)

	n	%	Mean	Significant control variables
g. We issue long-term debt to minimize the risk of having to refinance in "bad times"	31	41.9 [48.8] (42.2)	2.13 [2.15] (1.89)	CEO tenure, foreign debt issue and convertible debt issue
c. We issue short-term when we are waiting for long-term market interest rates so decline	29	41.4 [28.7] (23.9)	2.07 [1.78] (1.39)	
d. We borrow short-term so that returns from new projects can be captured more fully by shareholders, rather than committing to pay long-term profits as interest to debt holders	32	34.4 [9.5] (8.8)	1.72 [0.94] (0.70)	Use of Islamic finance
e. We expect our credit rating to improve, so we borrow short-term until it does	30	23.3 [9.0] (7.5)	1.13 [0.85] (0.59)	Use of Islamic finance
f. Borrowing short-term reduces the chance that our firm will want to take on risky projects	31	22.6 [4.0] (6.4)	1.39 [0.53] (0.57)	Size, common stock issue and use of Islamic finance

Notes: The table presents the CFOs' responses to survey questions; *n* is the number of valid responses for each question; mean is the average score for each question (0-4 for Likert-scale questions); % is the percentage of scores 4 and 3 ("Always" and "Almost Always") for Likert-scale questions; significant control variables are the sample segments that presented significantly different means, using the Mann-Whitney *U*-test; Graham and Harvey (2001) North American survey results are within square brackets; Brounen *et al.* (2004) European survey results are within round brackets

Table VI.

relatively low support for many capital structure theories indicates that there is either a problem with the theories or that practitioners are ignoring them. We contend that the answer to this puzzle may be that no single theory is good enough, and that these theories are complementary rather than competing (Chazi, 2009). The results of one study offer support for the idea of three theories:

> Our results suggest that, although pecking-order considerations affect corporate debt ratios in the short-run, firms tend to make financing choices that move them toward target debt ratios that are consistent with trade-off models of capital structure. [. . .] In addition, we find that firms with higher current stock prices [. . .] are more likely to issue equity rather than debt and repurchase debt rather than equity (Hovakimian *et al.*, 2001, p. 3).

Also, Myers (2001) argues that capital-structure theories work better in some conditions and circumstances than in others.

6.4 Debt maturity

Risk management is at the heart of the debt policy for CFOs in the Middle East. Matching the maturity of the debt with the life of the assets is the main factor behind the choice between short- and long-term debt for 82 per cent of the respondents shown in Table VI (Panel B). This factor was also the same one named by CFOs in Graham and Harvey's (2001) study. The second factor affecting this choice is timing, with 60 per cent of the respondents claiming they issue short-term debt when short-term interest rates are low compared with long-term rates, and this result is particularly important for firms that use Islamic finance instruments.

The survey also asked two questions regarding the issuance of foreign and convertible debt. However, only between four and nine CFOs answered these questions. Therefore, we do not have enough observations to make reliable inferences about these topics.

7. Corporate governance and Islamic finance

As noted in our introduction, we extended Graham and Harvey's (2001) survey by adding two questions on corporate governance from the study used by Brounen *et al.* (2004) and also asked an additional question about the use of Islamic financial instruments in the Middle East.

7.1 Corporate governance

We asked CFOs which goals and stakeholders are important for their firms. Table VII (Panel A) shows that maximizing profits (e.g. ROA, ROE, or EPS) is the first priority for all CFOs, closely followed by market position, cost control (particularly important for growth firms), and maximizing shareholder wealth. Maximizing dividends and optimizing solvability are ranked last. The former is relatively more important for larger firms and those that calculate the cost of equity. Firms with a higher proportion of managerial ownership also are more likely to care about social responsibility, a result that suggests a link between social responsibility and long-term firm sustainability. Not surprisingly, regulated firms are more likely to optimize the working environment, and to prioritize independence and self-sufficiency, as are those that considered issuing common stocks.

On the other hand, Table VII (Panel B) shows that shareholders are the most important stakeholders for CFOs in the Middle East, a result in line with CFOs in Great Britain and The Netherlands (Brounen *et al.*, 2004), which may suggest that managers in the Gulf region are sympathetic to "shareholder capitalism" ideas. Customers are found in the third position, which contrasts with the opinion of CFOs in Europe who consider customers their most important stakeholders. Suppliers of goods and services are more important to unrated firms and those in the financial industry, while the general public appeals more to the larger firms. The latter may be explained by the fact that big firms are under more scrutiny from the media, government, and non-governmental organizations; therefore, making them more susceptible to public opinion.

7.2 Islamic finance

The last question in our survey asked CFOs how often they used any Islamic financial instruments. Islamic finance is based on *Sharia* law, which prohibits usury. Its use has been growing at an average of 15 per cent per year with a presence in 75 countries worldwide, and it has assets of $200-500 billion.

The main Islamic financial instruments are the following:

- *Murabaha*: a sales contract that fixes the price of any goods required by a customer including a pre-agreed-upon profit.
- *Ijarah*: lease agreement.

	n	%	Mean	Significant control variables
Panel A: which goals are important for your firm?				
a. Maximize profits (e.g. ROA, ROE or EPS)	34	100.0	3.88 (3.00)	
d. Market position, service, quality	34	91.2	3.65 (3.21)	
e. Cost control, productivity, efficiency	34	91.2	3.50 (3.12)	P/E
h. Maximize shareholder wealth	33	90.9	3.70 (2,28)	
c. Maximize sustainable growth (book value and sales)	33	87.9	3.58 (2.85)	
i. Continuity	32	87.5	3.50 (3.03)	
f. Knowledge	32	84.4	3.34	
j. Independence and self-sufficiency	31	80.6	3.10	Regulated and common stock issue
l. Social responsibility/environment	33	75.8	3.18	Managerial ownership
k. Optimize working environment	33	72.7	3.12	Regulated
b. Maximize dividends	32	65.6	3.09 (1.65)	Size and estimated cost of equity
g. Optimize solvability	32	59.4	2.66 (2.00)	
Panel B: which stakeholders are important for your firm?				
f. Shareholders	33	90.9	3.61 (2.62)	
d. Management	33	87.9	3.39 (3.37)	
a. Customers	34	85.3	3.44 (3.78)	
c. Employees	34	79.4	3.35 (3.46)	
b. Suppliers of goods/services	33	72.7	2.82 (1.22)	Rating and industry
g. Suppliers of debt	33	72.7	2.85 (2.35)	
e. The general public	33	69.7	2.82 (2.09)	Size

Notes: The table presents the CFOs' responses to survey questions; *n* is the number of valid responses for each question; mean is the average score for each question (0-4 for Likert-scale questions); % is the percentage of scores 4 and 3 ("Always" and "Almost Always") for Likert-scale questions; significant control variables are the sample segments that presented significantly different means, using the Mann-Whitney *U*-test; Brounen *et al.* (2004) European survey results are within round brackets (where available)

Table VII.
Corporate governance

- *Sukuk*: asset-backed bonds giving the owner proportionate beneficial ownership in the underlying asset.
- *Musharaka*: represents a partnership between the customer and the Islamic bank in the financing and returns of a given project.
- *Mudaraba*: represents a partnership between a company and the Islamic bank for a given period of time.
- *Istisna*: the Islamic bank finances customers who wish to acquire an asset being constructed and who will either defer the payment in the future or pay by installments.

Table VIII reveals that, although about three-quarters of the CFOs in our sample use Islamic financial instruments on occasion, less than one-fifth claim to use such instruments always or almost always. Therefore, although the use of Islamic financial contracts seems to be pervasive among listed firms in the region, their use as a regular financial instrument is still not prevalent. We investigated our database to determine whether the firms that claimed to make regular use of such instruments belonged to the financial sector (i.e. banks) but that turned out to not be the case.

17. How often does your firm use the following Islamic financial instruments?	*n*	%	Mean
a. Al Murabaha	29	20.7	1.07
d. Al Ijarah	28	14.3	0.79
b. Al Sukuk	28	10.7	0.82
e. Al Musharaka	26	7.7	0.58
f. Al Mudaraba	26	3.8	0.38
c. Al Istisna	27	3.7	0.15

Table VIII.
Use of Islamic finance instruments

Notes: The table presents the CFOs' responses to survey questions. *n* is the number of valid responses for each question; mean is the average score for each question (0-4 for Likert scale questions); % is the percentage of scores 4 and 3 ("Always" and "Almost Always") for Likert scale questions

Murabaha is the most popular Islamic financial instrument. This result comes as no surprise, since Murabaha has become the most common means of Islamic financing in all Islamic banks. It is believed that of all forms of Islamic financing, 80-90 per cent use Murabaha. In fact, not only firms but individual investors also prefer to use this financing instrument, especially when they are purchasing a house or a car.

8. Concluding remarks

This paper reports on the administration of an amended Graham and Harvey (2001) survey in six Middle Eastern countries (Bahrain, Kuwait, Oman, Saudi Arabia, Qatar and UAE). Besides the well-known aspects of capital budgeting, cost of capital, capital structure and corporate governance, this study also surveyed CFOs regarding their use of Islamic finance instruments. We received 38 questionnaires out of 479 that were sent, resulting in a return rate of 7.9 per cent.

Preferred capital budgeting methods are the NPV and the IRR, a result similar to the North American survey but slightly different from the European study. Regarding the cost of capital, our sample CFOs favor a single company-wide discount rate instead of country- or project-specific ones, a result similar to that of previous studies in developed countries. In contrast to earlier findings from North America and Europe, most Gulf CFOs claim to adjust either the discount rate or the cash flow for specific risks in project valuation.

The majority of the survey focused on capital structure. The survey shows that firms in the Middle East, on average, finance 20 per cent of their total assets with long-term debt, as opposed to an average of 30 per cent in the USA. However, as the results of Graham and Harvey (2001) were inconclusive, so, too, are our results with regard to either the information asymmetry pecking-order or the trade-off theories. The results offer mixed support as to which theory better explains the debt-to-ratio level in the Middle East. The results also failed to provide support the market-timing theory that posits capital structure is merely an accumulation of past attempts to time the equity market. Graham and Harvey (2001) argue that the relatively low support for these capital structure theories indicates that there is either a problem with the theories or that practitioners are ignoring them. We conjecture that the reason for these discrepancies may be that no one theory is good enough and that these theories are complementary rather than competing.

With regard to other debt policy issues, the respondents to the survey indicated that the main factor affecting their choice between short- and long-term debt was risk management through matching the maturity of the debt with the life of the assets.

When asked about the most important goals and stakeholders for their firms, CFOs indicated that maximizing profits was their first priority, and that shareholders and managers were the most important stakeholders for their firms.

Overall, our results show that, despite unique institutional features of the Gulf countries, the practice of corporate finance is largely similar among CFOs in North America, Europe, and the Middle East. One possible reason behind this uniformity in behavior may be that most of CFOs surveyed are either from North America/Europe or were educated there[12]. To some extent, the results challenge the view that the agents' behavior is molded by the institutions and, in particular, that the legal system is preponderant over the financial system regarding external finance (La Porta *et al.*, 1997). Our results fail to identify meaningful differences in executives' practices, despite the unique legal system of the six Gulf countries, a system that is a mix of Islamic law and secular law. Similarly, our results show that the unique cultural environment of the Arab Gulf countries does not affect corporate finance practices. La Porta *et al.* (1999) found that countries with a predominance of Catholics and Muslims exhibit inferior government performance. This opens an intriguing question: why is government performance negatively affected – at least according to these authors – but corporate practices are not? Is it possible to obtain such divergent outcomes for government and corporate practices? Our results suggest that there are possibly more factors to be considered, presenting an opportunity for further study.

North (1990) defines institutions as the "rules of the game," or formal and informal constraints to human interaction. The author stresses the distinctive characteristics between institutions (rules of the game) and organizations (players). It is undisputable that institutions affect organizations or, as commonly stated, that the rules of the game affect the players. Thus, it seems that in corporate finance, organizations – firms and CFOs, or the players – are not passive *vis-à-vis* their diverse institutional environment, but tend to react, generally, in similar ways. Institutions do rule but, from the perspective of a Middle Eastern financial manager, not that much. Our study of the interrelationships between institutions and finance and the theory and practice of corporate finance raises additional important questions inviting further research in this area.

Notes

1. *Sharia* law is based on the *Koran* and on *Sunna*, i.e. the traditions of the Prophet Muhammad. Thus, *Sunna* may be considered as the initial Islamic law that is rooted in custom.
2. *Riba* means usury and is condemned in several passages of the *Koran* and the *Sunna*, as well as other Muslim religious and legal documents.
3. There is an extensive literature on Islamic financial practices; two good sources are Vogel and Hayes (1998) and Warde (2000).
4. Amin (1985) provides a detailed account of these legal traditions in the Arab (or Persian) Gulf region.
5. Previous survey research includes: Lintner (1956), Gitman and Forrester (1977), Moore and Reichert (1983), Stanley and Block (1984), Baker *et al.* (1985, 2007), Poterba and Summers

(1995), Pinegar and Wilbricht (1989), Wansley *et al.* (1989), Sangster (1993), Donaldson (1994), Epps and Mitchem (1994), Billingsley and Smith (1996), Shao and Shao (1996), Bodnar *et al.* (1998), Bruner *et al.* (1998), Block (1999), Arnold and Hatzopoulos (2000), Brav *et al.* (2005), Dhanani (2005), Beattie *et al.* (2006), Aabo (2007) and Coleman (2007).

6. We waited three months, because the Gulf region is subject to a socio-cultural idiosyncrasy, due to the hot summer. During the months of July and August, temperatures can reach as high as 50° Celsius (122 degrees Fahrenheit), leading to a considerable part of the population traveling abroad in search of cooler temperatures.
7. Graham and Harvey (2001): 392 firms for 9 per cent return rate; Bancel and Mittoo (2004): 58 firms for 8 per cent return rate; Brounen *et al.* (2004): 313 firms for 5 per cent return rate.
8. We thank an anonymous referee for this comment.
9. Although the survey was addressed to CFOs, the demographic questions asked about CEOs characteristics (age, tenure, and education). Such odd research design is present in the original Graham and Harvey (2001) instrument presumably because of the belief that the CEO is the key decision maker of the firm. We maintained the same design in this study in order to allow its comparison with the North American and European surveys.
10. However, these results are available from the authors upon request.
11. Additional results of the European survey are found in Brounen *et al.* (2005) and de Jong *et al.* (2004), as well as available at: http://web.eur.nl/fbk/dep/dep5/research
12. We thank an anonymous referee for this comment.

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