

The nexus between executive compensation and performance: Case of Islamic Banks

Lama Al-kayed¹ and Khaoula Aliani²

ABSTRACT

The aim of this study is to investigate the nexus between executive compensation and performance in Islamic banks (IBs). The relationship was examined through the direct effect of performance and the joint effect of governance and performance on pay. This study used static and dynamic panel regressions. These models are applied to determine the impact of performance on executive compensation using two different approaches: traditional and dynamic. The generalized method of moments (GMM) model was employed to avoid endogeneity biases in the regression estimation. Econometric models use different performance measures. (Accounting and market-based measures). The results support a dynamic relationship between pay and performance. Executive pay in Islamic banks depends mainly on ROE as a performance measure. The results reveal that independent directors on the board perform a monitoring task, which lessens their reliance on pay to mitigate agency problems. This study confirms the hypothesis that larger IBs and those with high growth opportunities hire talented executives with higher compensation packages. This study provides the first comprehensive empirical study on the pay- performance relationship in Islamic banks through cross-country analysis. These findings contribute to a better understanding of the dynamic connectedness between pay and performance by incorporating the moderating effect of governance.

ملخص

يكمن الهدف من هذه الدراسة في التحقيق في العلاقة بين التعويض التنفيذي والأداء في البنوك الإسلامية (IBs). وجرى تناول العلاقة من خلال الأثر المباشر للأداء والأثر المشترك للحوكمة والأداء على الأجور. واستخدمت هذه الدراسة انحدارين جدولين ثابت وديناميكي، يتم تطبيقهما لتحديد تأثير الأداء على التعويض التنفيذي باستخدام نهجين مختلفين: التقليدي والديناميكي. كما تم استخدام نموذج أسلوب اللحظات المعمم (GMM) لتجنب التحيزات الداخلية في تقدير الانحدار.

¹ Finance Department, Prince Sultan University, Riyadh, Saudi Arabia.

E-mail: lkayed@psu.edu.sa

² Business Administration Department, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia. E-mail: alianikhaoula@yahoo.fr

وتستخدم نماذج الاقتصاد القياسي مقاييس أداء مختلفة. (المحاسبة والتدابير القائمة على السوق). وتدعم النتائج وجود علاقة ديناميكية بين الأجر والأداء. وتعتمد رواتب المسؤولين التنفيذيين في البنوك الإسلامية بشكل أساسي على حقوق الملكية كمقياس للأداء. وتكشف النتائج أن المديرين المستقلين في مجلس الإدارة يؤدون مهمة مراقبة، مما يقلل من اعتمادهم على الأجر للتخفيف من مشاكل الوكالة. وتؤكد هذه الدراسة الفرضية القائلة بأن البنوك الدولية الأكبر حجماً وتلك التي تتوفر على فرص نمو عالية توظف مديري تنفيذيين موهوبين مع حزم تعويضات أعلى. وتقدم هذه الورقة أول دراسة تجريبية شاملة عن العلاقة بين الأجر والأداء في البنوك الإسلامية من خلال التحليل عبر البلدان. وتسهم هذه النتائج في فهم أفضل للترابط الديناميكي بين الأجر والأداء من خلال دمج التأثير المعتدل للحكومة.

ABSTRAITE

L'objectif de cette étude est d'examiner le lien entre la rémunération des dirigeants et les performances des banques islamiques. La relation a été examinée à travers l'effet direct de la performance et l'effet conjoint de la gouvernance et de la performance sur la rémunération. Cette étude a utilisé des régressions statiques et dynamiques en panel. Ces modèles sont appliqués pour déterminer l'impact de la performance sur la rémunération des dirigeants en utilisant deux approches différentes : traditionnelle et dynamique. La méthode des moments généralisés (GMM) a été utilisée pour éviter les biais d'endogénéité dans l'estimation de la régression. Les modèles économétriques utilisent différentes mesures de la performance. (mesures comptables et mesures basées sur le marché). Les résultats confirment l'existence d'une relation dynamique entre la rémunération et la performance. La rémunération des dirigeants des banques islamiques dépend principalement du rendement des capitaux propres en tant que mesure de la performance. Les résultats révèlent que les administrateurs indépendants au sein du conseil d'administration exercent une fonction de contrôle, ce qui réduit leur dépendance à l'égard de la rémunération pour atténuer les problèmes d'agence. Cette étude confirme l'hypothèse selon laquelle les grandes banques d'investissement et celles qui offrent de grandes possibilités de croissance recrutent des cadres talentueux en leur versant des rémunérations plus élevées. Cette étude fournit la première étude empirique complète sur la relation entre la rémunération et la performance dans les banques islamiques par le biais d'une analyse transnationale. Ces résultats contribuent à une meilleure compréhension du lien dynamique entre la rémunération et la performance en intégrant l'effet modérateur de la gouvernance.

Keywords: compensation, performance, corporate governance, Islamic bank, GMM.

JEL Classification: G30, M12, G21, C33

1. Introduction

The topic of executive compensation has much debate in corporate finance. Some criticize executive pay as unrelated to performance and excessive, while proponents of the current executive compensation system argue that such high pay is due to the scarcity of successful executives who can efficiently run large corporations. The executive compensation topic is always of interest to the public because of general fascination with the huge sums of money involved. An executive who earns millions of dollars per year will certainly be criticized regardless of his efficiency. According to agency theory, executive pay is used as an incentive alignment mechanism when there is a separation between ownership and control. According to resource-based theory, companies can achieve better financial performance when there is effective and efficient use of human capital (Musibah and Alfattani, 2014).

The relationship between executive compensation and performance has been studied thoroughly by finance scholars, both for industrial firms and conventional banks, but not yet for Islamic firms. Islamic banks (IBs) still lack scholarly research investigating the pay-performance relationship. In Islam, skills, qualifications, and performance are the bases for higher wages. Thus, executive pay should be linked to their performance, particularly in IBs, since they are governed by Islamic Sharia. IBs need talented and well-qualified executives who can manage the fast growth of these banks and keep them competent compared to conventional ones. However, if compensation plans are not properly structured, bank executives can act in their best interests, rather than shareholders. Therefore, it is of great importance for executives to carefully structure compensation packages to mitigate agency problems.

Wage differential in the labor market is permitted in Islam, as Allah says in the Quran:

“Gracious is God to His servants: He gives sustenance to whom He pleases. He has power and can carry out His Will”. (Al-Shura 19)

Differences in wages are important as a tool for a balanced economic society, although inequality is rejected in Islam in all its forms as it creates barbarism in society (Abbas, 2006). Free-market forces are determinants of wages and prices in Islam to ensure the purity of economic dealings,

and state intervention in wages is not allowed. Thus, wages in Islam are highly linked to employee performance and effort.

The research question of this study is to answer the question of whether executive pay is driven by bank performance in the Islamic banking industry. The main objective of this study is to examine an unanswered question in the literature, as the topic of executive compensation in Islamic banking is untouched so far. This paper tries to fulfill the existent gap by starting to add research in the compensation literature for Islamic banks.

The next section reviews the pay-performance literature. The data are discussed in the third Section and the empirical results are presented in Section four. The paper ends with the conclusions and implications derived from the results.

2. Executive pay and Performance Theory, Literature and Hypotheses Development

The phenomenon of agency costs, which arises from principal-agent separation in corporations, has led to many attempts to align the interests of management (agents) with those of the owners (principal). One method of mitigating the agency problem is to arrange management incentives to motivate them to act in the best interest of owners. The remuneration of executives is linked as closely as possible to the wealth of shareholders and hence to stock performance (Main, 1991). The question of whether these executive pay incentives actually result in better performance and alignment of principal-agent interests has been studied empirically in the finance literature, resulting in mixed findings. Most of these studies were conducted in developed countries and non-financial firms, while only a few studies have been conducted on the conventional banking industry (Barro and Barro, 1990; Hubbard and Palia, 1995; Akhigbe, Madura and Ryan, 1997; Magnan and St-Onge, 1997; Gregg, Jewell and Tonks, 2012) and the Islamic banking industry remains unexamined. Most studies on the banking industry have found positive pay-performance sensitivities (PPS hereafter).

There are two contrasting theories in the pay-performance literature: the managerial power hypothesis (MPH) and optimal contracting theory (OCT). According to the managerial power hypothesis, managers can use

their power to determine their pay which results in an expropriation of the wealth of shareholders, and thus predict the PPS to be small (Bebchuk, Fried and Walker, 2002; van Essen, Otten and Carberry, 2015). The OCT on the other hand, predicts that if executives' incentive contracts are well designed, they can improve performance by better alignment of manager-owner interests and thus, minimizing agency problems (Edmans and Gabaix, 2009). In OCT, the board is viewed as maximizing shareholder wealth and designing a compensation scheme to serve this objective. The MPH contrasts this theory, arguing that executive compensation approved by boards often deviates from optimal contracting either because board members are influenced or sympathetic to management, or they are simply ineffectual in overseeing executive compensation. Practically, the two theories have been examined for financial and non-financial companies, but without definite proof of one.

In the early work of Barro and Barro (1990), it was found that changes in compensation for CEOs of large commercial banks were dependent on performance using both stock and accounting returns, and PPS diminishes with experience. Hubbard and Palia (1995) investigated the effect of deregulating the banking industry on corporate control. They found higher pay levels in competitive markets and a strong PPS in deregulated interstate banking markets. Magnan and St-Onge (1997) investigated the effect of executives' managerial discretion on bank PPS, finding that higher managerial discretion causes executive compensation to be more related to bank performance. Akhigbe et al. (1997) found a positive relationship between CEOs total compensation and bank size, and a positive relationship between bank accounting and market performance proxies with CEO compensation level for all time horizons. John and Qian (2003) studied PPS in the banking industry as compared to manufacturing firms and regulated utilities, hypothesizing that banks should have lower PPS as they are regulated and highly leveraged, which is consistent with this hypothesis. Gregg et al. (2012) examined the pay-performance relationship in the UK banking industry and investigated whether it was the cause of the 2007/08 financial crisis. They conclude that the PPS in the banking industry was not significantly higher than that in other industries, and thus, it was not responsible for the crisis.

Practically, the performance-pay relationship has mixed findings. Some studies find a positive relationship (Herdan and Szczepanska, 2011; Rahman, 2016; Elsayed and Elbardan, 2018; Kirsten and Du Toit, 2018;

Al Farooque, Buachoom and Hoang, 2019; Blanes, de Fuentes and Porcuna, 2020) found a simultaneous performance-pay relationship in the Thai stock market in which executive compensation leads to improved performance. Other studies however found a negative or weak performance-pay relationship (Luo and O.Jackson, 2012; Gigliotti, 2013; Luo, 2015; Olaniyi and Obembe, 2017; Sheikh, Shah and Akbar, 2018; Al'azhary, Suherman and Buchdadi, 2022). (Romer, 2006) found smaller banks to show stronger linkages to pay compared to larger ones. (Olaniyi and Obembe, 2017) found that previous CEO pay, bank size and CEO tenure to have a positive influence on executive pay for Nigerian banks, while bank performance, board composition and Tobins Q to have a negative impact. (de Andrés, Reig and Vallelado, 2019) reviewed if the updated European regulation of bank executive compensation could affect Europe's banking industry's future. They found that new regulations have unintended effects of adverse selection at European banks which resulted in a reduced number of performing managers available for European banks. (Chen, Jeter and Yang, 2015) investigated the Sarbanes-Oxley Act (SOX) impact on PPS, they found an increased PPS using either market based or accounting based measures of performance following the act. (Luo, 2015) examined executive compensation in Chinese banking industry and found no significant positive pay-performance relationship suggesting that the government might ensure efficient monitoring functions as the pay incentive is ineffective. In the Islamic banking industry, the PPS is still unexamined, and this study tries to fill this gap.

2.1 Research Hypotheses

Several variables have been found to affect executive compensation. The first variable is performance. From agency theory, it is well known that managerial pay should be used to align the motives of executives with the wealth maximization goal of shareholders, and the use of pay for this objective is even more important in the banking industry. Because hostile bids are rare in the banking industry and because extensive regulation banks are subject to, executive compensation should be carefully designed to ensure that bank managers act in the best interests of shareholders. Thus, compensation should be more directly tied to performance compared to other firms with reasonable control and monitoring mechanisms. Most studies in the banking industry have found a positive relationship between pay and performance (Barro and Barro,

1990; Akhigbe, Madura and Ryan, 1997; Magnan and St-Onge, 1997; Chen, Jeter and Yang, 2015). In Islam, wages are dependent on managers' skills and performance. Thus, in the Islamic banking industry, pay should be tied to performance. Therefore, our hypothesis is as follows:

H1: Executive pay is dependent on performance for IBs.

Since executives' performance-related pay is supposed to align the interests of management with those of shareholders, the ratio of total shareholder returns is used. Other alternative accounting and market measures, such as earnings per share and annual stock returns, are also used. The second variable tied to compensation was company size. The competitive nature of the labor market causes larger companies to attract more talented executives (Hubbard and Palia, 1995; Herdan and Szczepanska, 2011; Gigliotti, 2013; Rahman, 2016; Olaniyi and Obembe, 2017). Thus, we hypothesize:

H2: Larger IBs (in terms of total assets) pay higher compensation to executives.

Corporate governance structure has also been found to affect compensation. A larger board size might signal the complexity of the firm and, thus, the need to hire highly qualified directors who would demand higher pay. Larger boards can have less monitoring efficacy, resulting in excessive executive pay compared with smaller boards, which can hold more efficient discussions and monitoring, resulting in an enhanced PPS. More independent directors on the board might result in less pay for executive directors because of greater monitoring. Independent directors want to protect their reputations in the labor market, are less subject to management influence, and are paid much less than executive directors on the board. Thus, a larger number of independent directors would result in lower total board pay (Banghøj *et al.*, 2010; Gregg, Jewell and Tonks, 2012; Al-Najjar, 2017; Ntim *et al.*, 2017). Our hypotheses are as follows:

H3: There is a positive relationship between board size and pay.

H4: There is a negative relationship between the number of independent directors on a board and pay.

3. Data and Methodology

The sample of our study includes 44 Islamic banks from nine countries (Saudi Arabia, the UAE, Kuwait, Malaysia, Qatar, Bahrain, Indonesia, Egypt, and Turkey) from 2010 to 2020. The selected Islamic banks are

categorized as the strongest according to the Asian Banker platform. We collected data from the Bloomberg terminal and the annual reports of banks. The sample is restricted to 44 banks with available data.

This study explores the connectedness between executive pay and performance. We consider total executive compensation as a proxy for pay. Bank performance is measured using accounting and market indicators. The ROE and (EPS) are accounting-based measure of bank performance. Annual stock return (StockRet) is considered a market-based measure of firm performance. Further, we consider governance variables, such as board independence and board size. We added firm characteristic variables that could influence the pay–performance relationship, such as size, leverage, and growth opportunities. a detailed description of the variables.

Table 1: Variable definition and measurement

Variable	Definition
Executives 'Pay	EXPAY: Log of total executive compensation in bank i in year t
Performance	ROE: return on equity and measured by Net income/ Total equity EPS: Earnings per share and measured by Net income/ Total shares outstanding StockRet: Yearly stock return for bank bank i in year t
Corporate governance variables	BSIZE: board size measured by total number of directors on the board IND: Independent non-executive directors divided by the total number of directors on the board of the bank
Control variables	SIZE: is the bank size and measured by the log of total assets of bank i in year t Tobin'Q: Growth opportunities LEV: total liabilities/total assets

3.1 Methods

The focus of this study is to investigate executives 'pay and develop a model that controls for other factors that may explain the variation in executive pay across banks. The following panel regression is employed to estimate the performance-pay nexus.

$$\ln(\text{ExPay}_{it}) = \alpha_i + \beta_{it} * \text{Performance}_{it} + \delta_{it} * \text{Governance}_{it} + \pi_{it} * \text{Controls}_{it} + \varepsilon_{it} \quad (1)$$

ExPay_{it} is executive pay and is measured using the natural logarithm. Performance_{it} is measured by book value measures (return on equity and earnings per share), as well as market value measures (yearly stock return). Governance_{it} vector includes board size and percentage of independent directors. Controls_{it} includes different variables, such as bank size, leverage, and growth opportunities (Tobin's Q).

This study employs static and dynamic estimations of the aforementioned model. A dynamic approach is used to explore whether executives' pay in Islamic banks depends on lagged pay and other factors that affect the variation in pay.

3.2 Executive Pay Static Model

Static estimation was employed for three models with different measures of performance. Model 1(a) estimates the pay-ROE relation, Model 2(a) includes EPS as a performance measure, and Model 3(a) measures the impact of StockRet on pay.

$$\ln(\text{ExPay}_{it}) = \beta_1 \text{ROE}_{it} + \beta_2 \text{BSIZE}_{it} + \beta_3 \text{IND}_{it} + \beta_4 \text{SIZE}_{it} + \beta_5 \text{Tobin's Q}_{it} + \beta_6 \text{LEV}_{it} + \mu_{it} \quad 1(a)$$

$$\ln(\text{ExPay}_{it}) = \beta_1 \text{EPS}_{it} + \beta_2 \text{BSIZE}_{it} + \beta_3 \text{IND}_{it} + \beta_4 \text{SIZE}_{it} + \beta_5 \text{Tobin's Q}_{it} + \beta_6 \text{LEV}_{it} + \mu_{it} \quad 2(a)$$

$$\ln(\text{ExPay}_{it}) = \beta_1 \text{StockRet}_{it} + \beta_2 \text{BSIZE}_{it} + \beta_3 \text{IND}_{it} + \beta_4 \text{SIZE}_{it} + \beta_5 \text{Tobin's Q}_{it} + \beta_6 \text{LEV}_{it} + \mu_{it} \quad 3(a)$$

3.3 Executive Pay Dynamic Model

At the time of the contract signature, the remuneration level of executives is set based on their expected performance. Later, the employer's knowledge of the executives' skills and capabilities improved. The employer will have a closer and more explicit view of executives' real performance and outcomes. Although past experience and qualification levels provide information on executives' profiles, subsequent unobservable characteristics may condition their performance. The cumulative knowledge of employers on executives' potential and talent

will affect the equilibrium level of the pay initially set. (Canyon & He, 2012). Based on the above arguments, pay is subject to dynamic adjustment related to unobservable factors that will be revealed during executives' careers.

Models 1(b), 2 (b), and 3 (c) estimate the dynamic pay-performance relation using three performance measures: ROE, EPS, and StockRet.

$$\ln (ExPay_{it}) = \alpha ExPay_{it-1} + \beta_1 ROE_{it} + \beta_2 BSIZE_{it} + \beta_3 IND_{it} + \beta_4 SIZE_{it} + \beta_5 Tobin's Q_{it} + \beta_6 LEV_{it} + \mu_{it} \quad 1(b)$$

$$\ln (ExPay_{it}) = \alpha ExPay_{it-1} + \beta_1 EPS_{it} + \beta_2 BSIZE_{it} + \beta_3 IND_{it} + \beta_4 SIZE_{it} + \beta_5 Tobin's Q_{it} + \beta_6 LEV_{it} + \mu_{it} \quad 2(b)$$

$$\ln (ExPay_{it}) = \alpha ExPay_{it-1} + \beta_1 StockRet_{it} + \beta_2 BSIZE_{it} + \beta_3 IND_{it} + \beta_4 SIZE_{it} + \beta_5 Tobin's Q_{it} + \beta_6 LEV_{it} + \mu_{it} \quad 3(b)$$

3.4 Moderating effect of corporate governance

The following model explains how governance variables moderate the relation pay-performance.

$$ExPay_{it} = \beta_1 ROE_{it} + \beta_2 ROE_{it} * BSIZE_{it} + \beta_3 ROE_{it} * IND_{it} + \beta_4 SIZE_{it} + \beta_5 Tobin's Q_{it} + \beta_6 LEV_{it} + \mu_{it} \quad 1(c)$$

$$ExPay_{it} = \beta_1 EPS_{it} + \beta_2 EPS_{it} * BSIZE_{it} + \beta_3 EPS_{it} * IND_{it} + \beta_4 SIZE_{it} + \beta_5 Tobin's Q_{it} + \beta_6 LEV_{it} + \mu_{it} \quad 2(c)$$

$$ExPay_{it} = \beta_1 StockRet_{it} + \beta_2 StockRet_{it} * BSIZE_{it} + \beta_3 StockRet_{it} * IND_{it} + \beta_4 SIZE_{it} + \beta_5 Tobin's Q_{it} + \beta_6 LEV_{it} + \mu_{it} \quad 3(c)$$

4. Results

4.1 Descriptive Statistics

Table 2 presents the descriptive statistics of all variables. The standard deviation of the pay variable was low (< 1). This indicates that executives receive compensation around the overall pay, and that IBs in the sample countries pay their executives nearly the same compensation packages. Table AI in the appendix shows that Kuwait pays the highest compensation packages with 19,077,410 million USD for their

executives, and Egypt pays the lowest, with an average of 1,205,467 million USD for their bank executives. Figure I in the Appendix shows that executive compensation rose steadily since 2010 but had a major decline in 2018 and again declined in 2020, probably due to the Covid-19 crisis. It is worth noting that financial reporting varies widely among the sample banks. Some countries, such as Saudi Arabia, report compensation pay in detail, while other countries, like Egypt, have very weak reporting of their executives' compensation packages, which makes data collection more difficult. ROE represents a mean value of 0.08. It reaches 0.502 for some banks. The standard deviations of the EPS and StockRet variables are very high (73.654 and 59.876, respectively), which means that these two important metrics vary considerably among the IBs. The minimum EPS and StockRet show negative values that reflect periods of crisis and loss in bank value. This high variation in variables affects the reliance on the two measures as an indication of performance. The BSIZE variable has the lowest standard deviation, and the IBs of our sample have boards of eight members on average. The percentage of independent directors represents an average of 46.9. The mean value and standard deviation of the size variable show consistency in the data spread during the study period. The average Tobin's Q is superior to 1, which mirrors the high growth opportunities in IBs. Banks have high share prices, and investors are encouraged to invest in capital as they get more than they pay. On average, the ratio of total debt to total assets is 85.3%.

Table 2: Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
PAY	6.716	0.614	3.513	7.780
ROE	0.080	0.240	-3.588	0.502
EPS	3.708	73.654	-0.720	1522.129
StockRet	11.873	59.876	-56.86	615.347
BSIZE	0.887	0.133	0.477	1.113
IND	0.469	0.286	0	0.888
SIZE	3.984	0.576	1.107	5.096
TOBIN'Q	1.096	0.192	0.8349	2.777
LEV	0.853	0.151	0	1.478

4.2 Multicollinearity

Table 3 presents the results of the correlation. The coefficients were acceptable and within norms. collinearity was nonexistent among the variables in this study. Table 4 corresponds to the variance inflation factor result, where a VIF equal to one indicates that multicollinearity does not exist.

Table 3: Correlation Matrix

Variables	Pay	ROE	EPS	StockRet	BSIZE	IND	SIZE	TOBIN's Q	LEV
Pay	1								
ROE	0.105**	1							
EPS	-0.151**	0.018	1						
StockRet	-0.019	0.029	-0.031	1					
BSIZE	0.173**	0.159**	0.041	-0.070	1				
IND	0.001	0.017	0.059	0.078*	-0.277	1			
SIZE	0.488**	0.237**	0.052	0.016	0.421**	0.108**	1		
TOBIN'Q	0.204**	0.088	0.025	0.288**	-0.116**	0.104**	0.140**	1	
LEV	-0.091	-0.022	0.030	0.066	-0.017	0.105**	0.194**	-0.124**	1

Table 4: Variance Inflation Factor (VIF)

Variables	VIF
ROE	1.19
EPS	1.41
StockRet	1.06
BSIZE	1.43
IND	1.20
SIZE	1.52
TOBIN's Q	1.17
LEV	1.07

4.3 Regression Results

Tables 5, 6, and 7 present the estimation results for the static and dynamic panel models for the three different performance variables (ROE, EPS, and StockRet). The study used OLS and GMM approaches to measure the effect of performance and governance variables on executives' pay for Islamic banks.

The GMM approach improves the estimation power of variables and reduces the endogeneity effect of governance variables on performance measures. This approach solves the problem of reverse causality between performance and pay variables. Model 1 (Table 5) demonstrates that pay is driven by dynamic adjustments to past pay and related factors.

The ROE variable has a significant positive effect on the pay variable for the OLS and GMM methods. These results confirm our theoretical hypothesis. The effect of performance is stronger when using a dynamic model, which proves that executives' compensation is dynamic and varies according to unobservable factors throughout their carriers. A 1% increase in ROE would increase pay by 8% (as estimated by the static model) and by 15.9% (as estimated by the dynamic model). This result is consistent with the findings of (Barro and Barro(1990) , Akhigbe et al. (1997), and Magnan and St-Onge (1997) for conventional banks.

The impact of governance variables on executive compensation differs in terms of estimation techniques. Board size (BSIZE) has a positive and significant effect only for the dynamic model and has no effect in the static model. As large boards may face communication and coordination problems, they will be inefficient in controlling and monitoring executive pay, and executives will have more power to influence their pay settings. Governance mechanisms should be sound to reduce managerial opportunism and block the command of power shifting from the board to executives.

The results related to the board independence variable (IND) differed according to the estimation technique. The static panel estimation shows that this variable contributes positively and significantly to executive compensation. However, dynamic panel estimation did not demonstrate any effect. This result indicates that the existence of independent directors on the board would lessen the reliance on pay to align executives' interests with those of shareholders, which is consistent with Gregg et al. (2012) and Ntim *et al.* (2017).

The size variable shows a positive and significant effect for both static and dynamic panel regressions. Larger banks tend to appoint talented executives. Growth opportunities, as measured by Tobin's Q, also show a positive and significant effect on pay in both models, which implies that rapidly growing IBs tend to be more talented executives with higher

compensation packages. IBs with a higher leverage would pay less to their executives. The results show that the leverage variable has a negative and significant impact on both the static and dynamic panels.

The second part of table 5 shows the results of the moderating effects of governance variables on the relationship between the performance measure (ROE) and executives 'pay. Board independence (IND) strengthens the negative relationship between ROE and pay. Therefore, ROE has a negative effect on pay in the presence of independent directors, who are more intended to align the interests of managers and shareholders. Independent directors contribute to tightening executive pay through accounting performance measures. However, the ROE variable did not have any significant effect on pay. The BSIZE variable has a positive and significant effect on Pay for the dynamic regression only. The moderating role of board size in the Pay-ROE relationship is not significant.

Table 5: Model 1 -Static and Dynamic panel estimation (ROE as performance measure)

Variables	Model 1		Moderating effect of governance on ROE	
	OLS (RE)	L-GMM	OLS (RE)	L-GMM
PAY (L1)		-0.067** (0.118)		-0.056 (0.182)
ROE	0.080 (0.244)	0.159*** (0.079)	0.604 (0.314)	-0.209 (0.822)
BSIZE	-0.094 (0.555)	0.346* (0.069)	-0.029 (0.861)	0.564** (0.037)
IND	0.143** (0.037)	0.008 (0.938)	0.156** (0.029)	-0.098 (0.412)
SIZE	0.692*** (0.000)	0.664*** (0.000)	0.707*** (0.000)	0.715*** (0.000)
LEV	-0.866*** (0.000)	-0.762*** (0.004)	-0.828*** (0.000)	-0.480* (0.070)
TOBIN's Q	0.222** (0.029)	0.266** (0.015)	0.243** (0.020)	0.300 (0.005)
ROE*BSIZE			-0.941 (0.195)	-1.615 (0.103)
ROE* IND			-0.242 (0.537)	-1.386* (0.068)
R-2	0.60		0.604	
Sargan p-value		0.580		0.301
Arellano Bond p-value		0.453		0.0105

Table 6 displays the results of the static and dynamic panel regressions for Model 2. The performance measure was EPS. The effect of EPS is negative and significant for both static and dynamic models. The negative impact was stronger in the dynamic model. This finding demonstrates that EPS is not incorporated into the compensation of IBs' executives. This result contradicts the assumption of agency theory, which states that executives' pay schemes align with the interests of executives and shareholders and have a positive impact on firm performance. The size variable has a positive and significant impact on static and dynamic estimations. Tobin's Q contributes positively and significantly to executive compensation for the dynamic regression only. Governance variables did not show any significant effect. Rapidly growing IBs also pay higher compensation because of their need for talented executives.

The second part of table 6 presents the results of the moderating effects of the governance variables on the pay-EPS relationship. EPS have a positive and strong effect on executive remuneration. The moderating effect of the governance variables on the nexus between pay and performance is negative. This effect was verified by board size and board independence. Although the significance of the statistical results with respect to econometric models is different, the moderating effect of these governance variables is highlighted. The relationship between EPS and pay is negative in the presence of a large board size. The executive compensation of Islamic banks with larger boards will have less power in their remuneration. The presence of expert directors creates an alignment of interests and solves the agency's problems.

Board independence has a negative and significant impact on pay in dynamic regression. However, the moderating effect of IND on the relationship EPS-Pay is positive. Independent directors contribute to the increase in executive compensation, which is tied to an interest in increasing bank performance.

Table 6 -Model 2: Static and Dynamic panel estimation (EPS as a performance measure)

Variables	Model 2		Moderating effect of governance on EPS	
	OLS (RE)	L-GMM	OLS (RE)	L-GMM
PAY (L1)		-0.068 (0.115)		-0.381 (0.406)
EPS	-0.311** (0.005)	-0.710** (0.012)	2.035* (0.066)	2.774 (0.317)
BSIZE	-0.016 (0.921)	-0.315 (0.211)	0.0431 (0.796)	0.428 (0.123)
IND	0.111 (0.107)	-0.107 (0.358)	0.056 (0.469)	-0.198* (0.001)
SIZE	0.717*** (0.000)	0.664** (0.000)	0.706*** (0.000)	0.648*** (0.000)
LEV	-0.843*** (0.000)	-0.587** (0.028)	-0.789*** (0.000)	-0.517* (0.056)
TOBIN's Q	0.226 (0.026)	0.221** (0.046)	0.263 (0.011)	0.224** (0.044)
EPS *BSIZE			-2.590*** (0.026)	-3.957 (0.152)
EPS * IND			0.658 (0.152)	1.240** (0.029)
R-2	0.609		0.615	
Sargan p-value		0.28		0.270
Arellano Bond p-value		0.44		0.640

Table 7 shows the results of the static and dynamic panel estimations for Model 3. The performance measure for this model was StockRet. The yearly stock return has a negative and significant effect on executive pay. This finding contradicts the assumption of agency theory and confirms the hypothesis of the managerial power approach, which states that compensation is an instrument that could induce managerial risk aversion and, in some situations, managers will not disclose the growth options. Only the board independence variable (IND) had a positive and significant effect on executive compensation in the static model. However, no such effect was observed in the dynamic model. LEV, SIZE, and TOBIN's Q showed the same effects as those demonstrated in Models 1 and 2.

The second part of Table 7 presents the results of the moderating effects of the governance variables on the nexus of executive pay-stock returns. The results do not show any significant moderating effects. The independent variable has a significant and positive effect on the pay variable. The signs of SIZE, LEV, and TOBIN's Q variables are the same as those demonstrated by using the first model

Table 7: Static and Dynamic panel estimation (StockRet as performance measure)

Variables	Model 2		Moderating effect of governance StockRet	
	OLS (RE)	L-GMM	OLS (RE)	L-GMM
PAY (L1)		-0.089 (0.034)		-0.088* (0.046)
StockRet	-0.030 (0.361)	-0.064** (0.045)	-0.007 (0.854)	0.008 (0.885)
BSIZE	-0.111 (0.501)	0.211 (0.337)	-0.109 (0.516)	0.220 (0.393)
IND	0.152** (0.029)	0.027 (0.783)	0.150** (0.035)	0.016 (0.884)
SIZE	0.691*** (0.000)	0.653*** (0.000)	0.690*** (0.000)	0.651 (0.000)
LEV	-0.767*** (0.001)	-0.648* (0.059)	-0.766*** (0.01)	-0.632** (0.020)
TOBIN's Q	0.228 (0.039)	0.300*** (0.000)	0.232** (0.038)	0.322*** (0.006)
StockRet *BSIZE			0.001 (0.973)	-0.002 (0.653)
StockRet * IND			0.003 (0.822)	0.060 (0.823)
R-2	0.601		0.601	
Sargan p-value		0.640		0.86
Arellano Bond p-value		0.693		0.78

5. Conclusion

This study examines the direct effect of performance and the joint effect of corporate governance performance on the pay of executives among IBs. The connectedness between variables was investigated through static and dynamic regressions. Using a sample of 44 Islamic banks from nine different countries over the period 2010-2020, the study found strong evidence that executives' compensation in IBs is tied to performance, as measured by ROE. The presence of independent directors on the board is found to lessen reliance on pay to align executives' interests with those of shareholders, and the control exerted by independent directors mitigates agency problems and decreases managerial opportunism.

The findings confirm that larger IBs and IBs with higher growth opportunities pay higher compensation packages to attract talented executives. IBs with higher leverage pay lower compensation to their executives.

The study provides several policy implications for IBs. IBs should either lower the size of their boards as larger boards are found to increase executives' compensation, indicating inefficiency in the control and monitoring of these boards. Second, IBs should consider appointing more independent directors to their boards. The existence of independent directors lowers agency problems and reliance on pay to align managers' interests with those of shareholders. We also strongly suggest that IBs improve the reporting of executive compensation packages as it is an important corporate governance measure. Some countries are found to report compensation data more efficiently than others, which limits our study to the number of IBs included. Further studies in this field should include executive traits to investigate the dynamic relationship between pay and performance.

References

- Abbas, K. S. K. (2006), "Wage Differential in an Islamic Framework," *The Quarterly Journal of Islamic Economics Research Bureau*, 16(1), 47-53.
- Akhigbe, A., Madura, J. and Ryan, H. (1997), "CEO Compensation and Performance of Commercial Banks," *Managerial Finance*, 23(11), 40-55.
- Al-Najjar, B. (2017), "Corporate governance and CEO pay: Evidence from UK Travel and Leisure listed firms", *Tourism Management*. Pergamon, 60, 9-14.
- Al'azhary, A., Suherman and Buchdadi, A. (2022). "Determinants of Executive Compensation", *Jambura Science of Management*, 4(1), 1-9.
- de Andrés, P., Reig, R. and Vallelado, E. (2019), "European banks' executive remuneration under the new European Union regulation", *Journal of Economic Policy Reform*. Routledge, 22(3), 208-225.
- Banghøj, J. *et al.* (2010), "Determinants of executive compensation in privately held firms", *Accounting & Finance*. John Wiley & Sons, Ltd, 50(3), pp. 481-510.
- Barro, J. R. and Barro, R. J. (1990), "Pay, Performance, and Turnover of Bank CEOs", *Journal of Labor Economics*, 8(4), 448-481.
- Bebchuk, L. A., Fried, J. M. and Walker, D. I. (2002), "Managerial power and rent extraction in the design of executive compensation", *University of Chicago Law Review*, 69(3), 751-846..
- Blanes, F., de Fuentes, C. and Porcuna, R. (2020), "Executive remuneration determinants: New evidence from meta-analysis", *Economic Research*. Routledge, 33(1), 2844-2866.
- Chen, H., Jeter, D. and Yang, Y. W. (2015), "Pay-performance sensitivity before and after SOX", *Journal of Accounting and Public Policy*. Elsevier, 34(1), 52-73.
- Edmans, A. and Gabaix, X. (2009), "Is CEO pay really inefficient? A survey of new optimal contracting theories", *European Financial Management*, 15(3), 486-496.

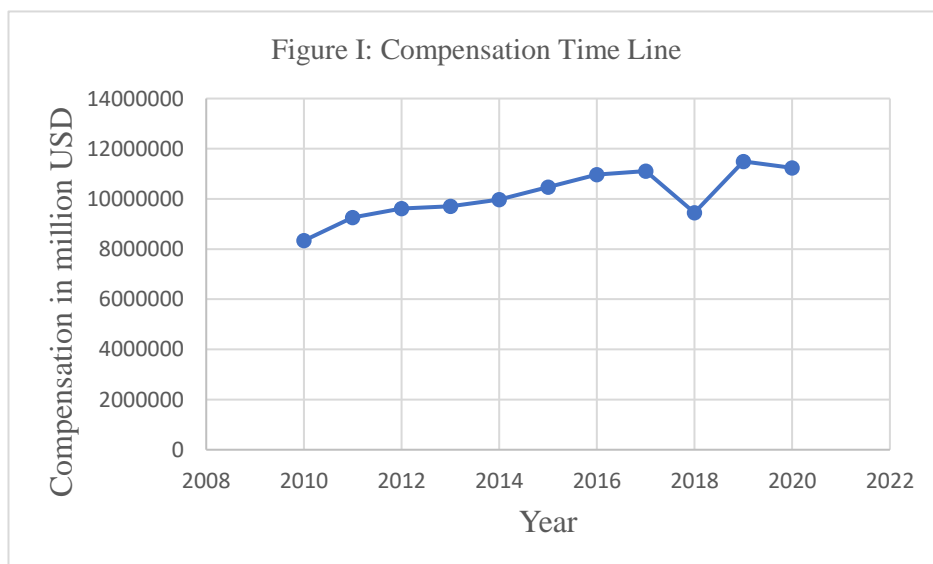
- Elsayed, N. and Elbardan, H. (2018), “Investigating the associations between executive compensation and firm performance: Agency theory or tournament theory”, *Journal of Applied Accounting Research*. Emerald Group Publishing Ltd., 19(2), 245–270.
- van Essen, M., Otten, J. and Carberry, E. J. (2015), “Assessing Managerial Power Theory: A Meta-Analytic Approach to Understanding the Determinants of CEO Compensation”, *Journal of Management*, 41(1), 164–202.
- Al Farooque, O., Buachoom, W. and Hoang, N. (2019), “Interactive effects of executive compensation, firm performance and corporate governance: Evidence from an Asian market”, *Asia Pacific Journal of Management* 2019 36:4. Springer, 36(4), pp. 1111–1164.
- Gigliotti, M. (2013), “The compensation of top managers and the performance of Italian firms”, *International Journal of Human Resource Management*, 24(4), 889–903..
- Gregg, P., Jewell, S. and Tonks, I. (2012), “Executive Pay and Performance: Did Bankers’ Bonuses Cause the Crisis? ”, *International Review of Finance*, 12(1), 89–122.
- Herdan, A. and Szczepanska, K. (2011), “Directors Remuneration and Companies’ Performance the Comparison of Listed Companies in Poland and UK”, *Foundations of Management*, 3(2), 41–54
- Hubbard, R. G. and Palia, D. (1995), “Executive pay and performance Evidence from the U.S. banking industry”, *Journal of Financial Economics*, 39(1), 105–130.
- John, K. and Qian, Y. (2003), “Incentive features in CEO compensation in the banking industry”, *Economic Policy Review*, (April), 109–121.
- Kirsten, E. and Du Toit, E. (2018), “The relationship between remuneration and financial performance for companies listed on the Johannesburg Stock Exchange”, *South African Journal of Economic and Management Sciences* . AOSIS Publishing, 21(1),–10.
- Luo, Y. (2015), “CEO power, ownership structure and pay performance in Chinese banking”, *Journal of Economics and Business*, 82, 3–16.
- Luo, Y. and O.Jackson, D. (2012), “Executive Compensation, Ownership Structure and Firm Performance in Chinese Financial Corporations”, *Global Business and Finance Review*, 17(1), 56–74.

- Magnan, M. L. and St-Onge, S. (1997), "Bank performance and executive compensation: A managerial discretion perspective", *Strategic Management Journal*, 18(7), 573–581.
- Main, B. G. M. (1991), "Top executive pay and performance", *Managerial and Decision Economics*, 12(3), 219–229.
- Musibah, A. S. and Alfattani, W. S. B. W. Y. (2014), "The mediating effect of financial performance on the relationship between shariah supervisory board effectiveness, intellectual capital and corporate social responsibility, of islamic banks in gulf cooperation council countries", *Asian Social Science*. Canadian Center of Science and Education, 10(17), pp. 139–164.
- Ntim, C. G. *et al.* (2017), "Executive pay and performance: the moderating effect of CEO power and governance structure", *International Journal of Human Resource Management*. Routledge, 30(6), 921–963.
- Olaniyi, C. O. and Obembe, O. B. (2017), "Determinants of CEO pay: empirical evidence from Nigerian quoted banks", *International Journal of Business Performance Management*. 18(3), 327.
- Rahman, M. (2016), "Determinants of CEO compensation: Empirical Evidence from listed banks of Bangladesh", *Special International Edition*, 127–161.
- Romer, D. (2006), "*The determinants of executive compensation in the commercial banking industry*", *Doctoral Dissertations*. Available at: <https://digitalcommons.latech.edu/dissertations/564> (Accessed: 17 May 2022).
- Sheikh, M. F., Shah, S. Z. A. and Akbar, S. (2018), "Firm performance, corporate governance and executive compensation in Pakistan", *Applied Economics*. Routledge, 50(18), 2012–2027.

Appendix

Table A: Average compensation per country (million USD)

Saudi	12,719,511
UAE	7,050,505
Kuwait	19,077,410
Malaysia	1,956,323
Qatar	10,883,990
Bahrain	18,664,768
Indonesia	12,503,865
Egypt	1,205,467
Turkey	1,358,785



Source: authors analysis