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Staffing Level, Wages and Banks Financial Performance

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Abstract

Overstaffing has always been synonyms with bureaucracy, low productivity and poor financial performance. While understaffing has always been associated with high work load, tension, and high level of dissatisfaction. This study is set to examine the effect of staffing level and workers compensations, measured by cost per employee, on the financial performance of Kuwaiti banks. Using the data of 10 banks listed at Kuwait stock exchange (KSE) over the period 2008-2018, results shows that there was no statistically significant relation between staffing level and the financial performance of Kuwaiti banks. Rather the results showed that there was a direct relation between workers compensations and the financial performance of banks in terms of return on assets (ROA). This would indicate that banks who attracts talented and efficient workers with high compensation packages tend to be more profitable than those how are not.

Keywords: Overstaffing, Staffing Level, Kuwait Banks, Financial Performance, Panel Regression Analysis, Compensation, Wages

Introduction

Overstaffing is associated with higher staff cost which affects the overall profitability of the bank, while on the other hand understaffing would lead to underutilization of bank resources and a higher work stress resulting in a decrease in productivity and thus lower profitability. Due to overstaffing effect on the bank financial performance, determining the optimal staffing level has always been a concern to bank management. The level of staffing in banks has seen a decline in the past years due to the introduction of technology aided banking, such as electronic-banking and mobile-banking, (AlAli and AlAli, 2020).

Literature divides the staffing level into 4 categories or conditions which are highly overstaffed, moderate overstaff, highly understaffed, and moderate understaffing. Wicker (1984) defines understaffing condition as "*lack of enough people to carry out smoothly the essential program and maintenance tasks in a setting*". Treville and Antonakis (2006) sees that moderate understaffing would yield a better performance since the employees in this condition would likely be more efficient and experience higher motivation. Staff in this condition are more likely to be involved in a wide range of tasks, they are compelled to find ways to combine similar tasks which in turn reduces wasted time from redundant activities. On the other hand, such high work pressure might lead to a higher stress and higher emotional exhaustion resulting in reduced motivation, lower productivity, poor performance and a higher human error rates (Ahmed, 2007; Rafferty et al., 2007; and Rochefort and Clarke, 2010). Another downfall for understaffing is the replacement cost, since according to Treville and Antonakis (2006) staff in understaffed organizations tend to be more skilled than those in overstaffed organizations, finding a replacement worker would not be an easy task. Adding to that, understaffed

organizations tend to have a higher employees turnover rate due to the work stress they encounter and for that higher compensation for their work should be made by the organization in order to keep them in job. According to Gralla and Kraft (2012) employees in understaffed organizations tend to receive more compensation for their work compared to employees in overstaffed organizations.

In slightly overstaffed condition employees tend to suffer less from burnout, have higher job satisfaction, and to have better work–life balance. As result they would be more productive and provider of higher quality services (Rafferty et al, 2007). Tran and Davis (2012) also concluded that slightly overstaffing would not affect the organization profitability but understaffing and too much overstaffing conditions would have a great effect on organization profitability. Study conducted by Tran and Davis (2011) also concluded that organizations with slight overstaff tend to be the most profitable. A highly overstaffed organizations can be contributed to many factors, but the main two factors are government officials' political agendas and labor unions. Gralla and Kraft (2012) found that strength of the labor unions directly affects overstaffing, while Madzikanda and Njoku (2008) found that public organizations and organization that Kuwaiti government owns large stakes in were extremely overstaffed due to politically influenced hiring by top officials and parliament members.

A well-compensated workers tend to work harder to maintain such income and are more reluctant to leave the job resulting in a lower staff turn-over ratio. These two factors would result in a more stable work place and better financial performance for the organization. Dong (2016) used the data of 48 nonprofit hospitals in Maryland to examine the relationship between employee wage dispersion and hospital financial performance. The study found a statistically significant direct relation between workers compensation and the financial performance of these hospitals. AlAli (2020) examined staff efficiency effect on the financial performance of Kuwaiti banks over the period 2010-2018. Using OLS panel regression model, the research showed a statistically significant direct relation between staff compensation and the financial performance of Kuwaiti banks in terms of return on assets (ROA) and return on equity (ROE).

Methodology

This study aims to firstly identify which Kuwaiti banks suffer from overstaffing. In order to estimate the number of staff needed in the bank a panel regression is conducted using formula 1, as follow;

$$\widehat{lnSt_t} = \alpha + \beta_1 ROA_t + \beta_2 lnTA_t + \beta_3 Lev_t + \beta_3 lnBr_t \quad (1)$$

Where $\widehat{lnSt_t}$ is the natural logarithm of the estimated number of staff required by the bank, *ROA* is the return on assets, *TA* is the total assets of the bank, *Lev* is the bank leverage, and *Br* is the number of branches the bank has. In order to examine if the bank is overstaffed or understaffed, the difference between the estimated number of staff is deducted from the actual number of staff as shown in equation 2;

$$\triangle St_t = St_t - \exp \widehat{lnSt_t} \quad (2)$$

Examining the effect of under or overstaffing and the cost per employee (*Sxp*) on the financial performance of the bank, equation 3 is performed;

$$ROA_t = \alpha + \beta_1 \triangle St_t + \beta_2 lnSxp_t + \varepsilon \quad (3)$$

Data and Empirical Results

This research is based on the financial data of 10 Kuwaiti banks that are listed at Kuwait stock exchange (KSE) over the period 2008-2018. The data for this research were downloaded from Kuwait Institute of Banking Studies (KIBS).

Descriptive analysis of the data is shown in table 1, it can be seen that the average number of staff per bank is 1152, the average return on assets is 0.8% and the average number of branches per bank is 39 branches. By looking at skewness and kurtosis, it can be seen that they fall within the acceptable range of ± 1.96 and ± 10 respectively indicating normality in the distribution.

Table 1: Descriptive Analysis

	Staff	***ROA***	***TA***	***Lev***	***Branches***
Mean	1152.64	0.80	6346.35	8.12	38.79
Median	823.50	0.97	4109.64	6.15	37.00
Standard Deviation	682.67	1.17	6182.61	0.07	18.09
Kurtosis	-0.53	8.36	2.39	9.13	-1.15
Skewness	0.91	-1.66	1.73	1.84	0.09
Count	104	104	104	104	104

Results of equation 1, is presented in table 2. Results show that the model can be labeled as a "good fit" since *Sig F* is less than 0.05. The model also has a good explanatory power with an adjusted *R* square of 0.878 indicating that the model was able to capture 87.8% 0f the variation in the number of staff.

Table 2: OLS Regression Output

	Coefficients	***Standard Error***	***t Stat***	***P-value***
Intercept	1.724	0.477	3.613***	0.000477
ROA	-0.044	0.0183	-2.413**	0.017633
Ln TA	0.284	0.0413	6.858***	6.09E-10
Lev	0.711	0.3176	2.239**	0.02733
Ln Br	0.571	0.0665	8.583***	1.33E-13
Adj *R* Sq	0.878			
Standard Error	0.203		*Sig F*	3.73E-45
Observations	104			

From the OLS regression results presented in table 2, the number of staff needed in the bank can be estimated by;

$$\widehat{lnSt}_t = 1.724 + 0.044\ ROA_t + 0.284\ lnTA_t + 0.711\ Lev_t + 0.571\ lnBr_t \quad (4)$$

In plotting formula 4, it can be seen from table 3, that six bank suffer from overstaffing while the remaining four show understaffing. Burgan bank was the most understaffed bank in Kuwait while Kuwait finance house was the most overstaffed bank.

Table 3: Banks Under/Overstaffing

	Actual Staff	**Estimated Staff**	**Under/Overstaff***	**%**
AlAhli Bank	790	850	-60	-7.60%
Burgan Bank	697	901	-205	-29.38%
Commercial Bank	947	1195	-248	-26.16%
Gulf Bank	1506	1370	136	9.01%
National Bank of Kuwait	2215	2148	67	3.04%
Ahli United Bank	753	888	-135	-17.92%
Boubyan Bank	893	729	164	18.34%
Kuwait Finance House	2421	1873	549	22.67%
Kuwait International Bank	610	567	43	7.03%
Warba Bank	319	315	4	1.32%

*(-) indicate understaffing

When looking at the annual expense per employee, as seen in table 4, it can be seen that Kuwait finance house has the most expensive staff in Kuwait followed by Burgan bank. On the other hand, the staff in Commercial bank receive the least compensation for their work in Kuwait. One explanation for why Kuwait finance house has the highest overstaffing and the highest expense per employee is the ownership of the bank where the government owns 48.05% of the bank shares.

Table 4: Banks Staff Expenses and Government Ownership

	ROA	**Annual Staff Exp (per employee)**	**% Over/Under Staffing**	**Government Ownership***
AlAhli Bank	1.152%	31,869.25	-7.60%	10.13%
Burgan Bank	0.892%	56,159.64	-29.38%	8.43%
Commercial Bank	0.940%	21,130.08	-26.16%	0%
Gulf Bank	-0.143%	24,059.15	9.01%	5.10%
National Bank of Kuwait	1.684%	53,162.73	3.04%	5.60%
Ahli United Bank	1.168%	26,116.44	-17.92%	12.01%
Boubyan Bank	0.252%	22,089.36	18.34%	0%
Kuwait Finance House	0.975%	61,055.77	22.67%	48.05%
Kuwait International Bank	0.917%	22,444.78	7.03%	8.04%
Warba Bank	-0.053%	26,297.60	1.32%	33.5%

* As of August 2020.

Pearson correlation matrix is used to examine the relation strength and direction between variables. Using the matrix to examine the relation between financial performance, staffing level, and employees' compensations. It can be seen from table 5 that there is an inverse relation between ROA and staffing level, while there was a direct relation between ROA and workers compensations. The matrix also shows that there is an inverse relation between staffing level and workers compensation level, which indicates that workers in understaffed banks get more compensation for their work than workers in overstaffed banks.

Table 5: Pearson Correlation Matrix

	ROA	***Over/Understaffing***	***Annual Staff Exp (per employee)***
ROA	1		
△St	-0.00376	1	
Annual Staff Exp (per employee)	0.239309	-0.08064	1

In examining the validity of Pearson correlation matrix findings, a panel OLS regression is performed. From the OLS regression results presented in table 6, it can be seen that the relation between the financial performance of the bank and the staffing level is not statistically significant indicating that the staffing level does not have any effect on the financial performance of Kuwaiti banks which contradicts Treville and Antonakis (2006), Tran and Davis (2011), and Tran and Davis (2012) findings. On the other hand, there was a statistically significant direct relation between workers compensation and bank financial performance which supports Gralla and Kraft (2012) findings.

Table 6: Panel OLS Regression Output

	Coefficients	***Standard Error***	***t Stat***	***P-value***
Intercept	0.237	0.254	0.931	0.354
△St	-0.092	0.569	-0.161	0.872
Ln Sxp	16.265	6.553	2.482**	0.015
Adj *R* Sq	0.039			
Standard Error	1.149		*Sig F*	0.050
Observations	104			

Conclusion

This research was set to examine the relation between staffing level and workers compensation packages on the financial performance of Kuwaiti banks over the period spanning from 2008 to 2018. Using panel regression analysis, results revealed that there was no relation between staffing level and the financial performance of banks. On the other hand, results showed a statistically significant direct relation between workers compensation packages and the financial performance of Kuwaiti banks measured by return on assets (ROA). Results suggests that well-paid employees are more efficient and productive which in turn yields to a better financial performance.

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