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DETERMINANTS OF FIRM PERFORMANCE: AN EMPIRICAL STUDY  
ON PAKISTAN BANKING SECTOR

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**ABSTRACT**

The performance is considered to be an important and integral part that could help to the organization for long term survival and achieve competitive advantage. If the performance could not be maintaining by the organization, then organization could not be a compete for a long term. To address this issue, there are various factors that could help to increase the performance. Among of the them knowledge management, tax policy, accounting records, internal audit is considered to be important factors that could help to increase the performance of the organization. Therefore, the current study purpose is to figure out the relationship among knowledge management, tax policy, accounting records, internal audit and firm performance of Pakistan banking sector. For this purpose, the data was collected from the 300 senior managers of the SMEs. The key findings had shown that knowledge management, internal audit, accounting records had a positive and significant relationship with the firm performance. While, tax policy did not significantly effect to the firm performance. The current study could have contributed a body of literature that could be helped to increase future research.

## INTRODUCTION

In the contemporary environment, the financial statements audit is considered to be an important for all the independent professionals' services which could help to improve the information quality to know about the importance whether the company financial statements had presented a true and fair view statements (Hamilton et al., 2014). Final goods of the audit are issuance of the audit view such as qualified/unqualified at financial reports of any public listed organizations. Audit service remain significantly valued for public as well as private entities, and operators of the "audited financial statements", further for the "financial capital market" the reason is that audit suppliers must be independent and apparent as existence free from any bias at that time when investigate an information. Moreover, private entities acknowledge that auditing is very essential activities which decrease costs of resource. Auditing also define as a useful implement in the management for the purpose of examination and make sure the fairness as well as truthfulness in the company financial statements. Therefore, audit serve in place of as the controlling device, and remain a part of combination of corporate governance (Lin & Liu, 2009).

The government also understood that without procedures of the qualified auditing the efficiency enhancements could not attained as well as problems of resource allocation could not solved. In the line with this auditors provide help to firms for attaining accountability and enhance operations and integrity through delivering unbiased, successfully to attain intended results and objective valuations of the public resources remain being responsibly managed (Nieuwland & Van Berkum, 2006). Furthermore, auditing is very essential for that users who wants to rely at the "audited financial statements" of the company such as financial institutions, investors, and tax authorities. Those who's remain responsible for decisions making search for the assurance service for enhancing reliability as well as significances of information which is utilized on the basis of their decisions at that place (Farouk & Hassan, 2014). In addition, auditing is defining as a keystone of the "capital market governance" which provide help to deal with worldwide financial crisis. Similarly, auditing is very essential for sound functioning, capital markets effectiveness, and integrity the reason is that it make stronger investor trust on financial information which is issued by organizations (Okpala, 2012).

An auditing is categorized as a most valuable knowledge-intensive organizational service which needs a higher level of the professional capability as well as knowledge. These professional service also connected by data processing and attainment delivering information about financial statement, financial records, and internal control of an organization, which in that way makes information in the procedure of an audit reports. So, auditing organizations delivers data- based professional services towards that administration of capabilities is very difficult to accomplishment (Davenport, 1997).

Along with the auditing process, the Knowledge management (KM) describe as a discipline which pay more attention at managing employees knowledge

and information. A successful KM in the knowledge economy measure as an essential resource for achieving higher level of competitive advantages as well as increase organizational performance (OP). Thus, KM is a caused of various heated discussion in place of as an innovative arena towards practical application and theoretical development (Ragab & Arisha, 2013). In this way this interest willingly apparent inside of organizations as they progressively search into the usage of information and technology for supporting dissemination as well as creation of knowledge related their global offices and between international clients (Fritz, Manheim, Sieber, & Griese, 1998). On the other hand, they pay more attention on the organizations for the purpose of increase its KM systems at current amendments towards increasing the firm performance. In addition, with the organization the proper utilization of the tax policy could also provide help to the organization to increase their performance in an integral way (Wu, Wu, Zhou, & Wu, 2012) because when the organization had a greater attention on the proper policies that could provide help to increase the organization performance (Reitenga, Buchheit, Yin, & Baker, 2002). Along with the tax policy, the accounting records are also considered to be a important for the performance of the organization because the proper recording of the transactions could be helped to the organization for increasing their performance (Abdul-Rahamon & Adejare, 2014).

Since 1970s there are various studies about the auditing, tax policy, accounting records and knowledge management has been appeared into the literature with different. There are various scholars disputes on that the knowledge is very essential factor for the organizations to know about the understanding about nature of knowledge making procedures in their prospective functions (Hammersley, 2011; Nunes & Abreu, 2020) and (Su, Lee, Tsai, & Lu, 2016). On the other hand, we not have various empirical studies which could be explain that how knowledge can making during the auditing procedures (Bouthillier & Shearer, 2002; Nguyen & Kohda, 2017; Nguyen, Umemoto, Kohda, & Blake, 2015) Moreover empirically, the previous studies had also discussed that tax policy had a relationship with the firm performance (Wu et al., 2012). Moreover, it is also discussed that internal audit had an association with the firm performance (Al-Matari, Al-Swidi, & Fadzil, 2014; Hutchinson & Zain, 2009; Talab, Manaf, & Malak, 2018). After seeking this significance, the previous studies are independently effect to the firm performance but there is not as per the researcher's best knowledge in which the combined effect of tax policy, internal audit, accounting records, and knowledge management on the firm performance. Moreover, the previous studies had also a major focus on the developed economies but had a little attention on the developing country especially on the Pakistan banking sector. After seeking the previous gap, the current study purpose is to investigate the relationship among the tax policy, internal audit, accounting records, knowledge management and firm performance of banks of Pakistan.

The current study was divided into the following sections, introduction, literature review, research methodology, data analysis and conclusions.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### *Knowledge management and firm performance*

There are various studies which is conducted for introducing the possible properties of KM inside an organization that has centered on the determining whether that have abilities to perform quantifiable enhancements. Davenport (1999) also indicated the associations among KM as well as performance indicators have been talk about the length (“exchange value, market value, balance sheet, etc.”), some organizations have an abilities to develop a causal association between activities of KM and organization performance (OP). In addition, Firestone (2001) suggested an intuitive method for the purpose of clarifying an association among KM, corporate advantages and objectives. He also recommended “an abstract model called “benefit global estimation”. For estimating advantages of the KM program, theoretical perspective is essential, and usage of approaches and tools, instead of ad hoc usage of analytical methods. In the direction for relate OP and KM programs, prior analysis of the corporate objectives as well as organizational procedures is essential. With the line in this, KM is defining as an organizational procedure which helps the organizations to attain their objectives.

Firestone (2001) disputes on that the KM programs are established the “tasks (T1, T2, Tn)”. Therefore, those tasks have an influence on the organizational procedures (P1, P2, Pn) as well as remain compounded through the various attributes which measure their current state. Main difference among objective state and current state helps the understanding about how can introduction of the KM programs effects OP. An excessive simplicity towards influences creating from introduction of the KM in an organization is an important issues of the presented model. There remain variables associated to the human capital (HC) this types of model not take in, for instance enhancement of its skills or abilities. Davenport (1999)discloses the KM activities in many intermediate activities which influence financial consequences. Development in the KM activities influences intermediate variables for example project performance capacities, employee’s capacity indicators which perform tasks connected towards knowledge, as well as finally, group of ideas as well as inventions.

A group of innovative ideas as well as innovations in an organization, because of better usage of knowledge, can have effects at the enhancement procedures. Similarly, enhancements in the procedures of perfects employee’s abilities. Furthermore, Wiig (1999) makes a cause as well as influence diagram depicting and influences of introducing the KM programs. An additional value of this model is lies in the introducing entire influences deriving towards a program which encourages the sharing and making f knowledge. DeCarolis and Deeds (1999) examine effects of the firm’s knowledge at OP. Firms knowledge is theorized by knowledge flows as well as stocks (Cool, Dierickx, & Jemison, 1989). Stocks of knowledge accumulate the knowledge assets these are inside of an organization. A flow also refers to entire elements capacity towards modifying knowledge stocks.

A perfect background for investigating flows as well as stocks of firm's knowledge and also its association with OP is the dynamic business for the knowledge generation, thus authors remain utilizing a biotechnology subdivision on the behalf of empirical study. Moreover, DeCarolis and Deeds (1999) determine that by utilizing variables to establish flows of firm's knowledge functioning, just munificence of a geographical region is important. While, this means of geographical areas effects abilities for taking knowledge. In place of for variables utilized for determine stocks of knowledge, there are basically two types which positively and significantly influence OP: number of things which are developing by the organization as well as number of works duration making by an organization remain cited. Furthermore, stocks of firm's knowledge have more influence at OP after that knowledge flows. Based on above discussions, it is hypothesized that:

***H1:*** There is a significant relationship between the knowledge management and firm performance of banking sector in Pakistan.

### ***Internal audit and firm performance***

There are Bello, Ahmad, and Yusof (2018) into the research paper entitled "Auditors' Compliance with International Standards in Audit examined the degree of compliance of Jordanian auditors with ISA". It remained discovered that Indonesian auditors observed in whole audit standards because of strict environments as well as requirements of the Indonesian laws in which "audit profession should be assigned to a Certified Public Accountant (CPA) as well as imposing strict legal liabilities". Current study also suggested that there must be pay more attention through auditors as well as institution's regulating an audit profession inside of Indonesia in the direction compliance in audit standards, particularly those about inner audit as well as imposing at the responsibilities of auditors for detecting fraud in the financial statements as well as transactions at suitable time. Furthermore, Gamayuni (2018) in the article entitled, "An Empirical Study on Effectiveness of Internal Audit for Listed Firms in Taiwan" make an effort to recognize the aspects which influence the efficiency of the internal audit to listed organization in Indonesia. For this purpose, authors utilized a model of the 210 listed organizations. Data was collected by the questionnaire and that remained mailed towards administration, head department of audit as well as head department of internal audit of every firm. The discoveries indicated that controller's attitude, possible promotion of the internal auditors, administrations attitude, job description establishment, application of the performance assessment, and training as well as professional capabilities of an internal auditor remained aspects that influence management perceives efficiency. Furthermore, research indicated the aspects that influence an efficiency of audit head department. In this way these consists on professional abilities of the internal auditor, and mixture of firm's formalization as well as professional capabilities. As well, the present study further examined aspects which influence on development of the annual audit report. These remained: controller's attitude, possible promotion of the internal auditors, administrations attitude, job description establishment, application of the performance assessment, and training as well as professional capabilities of an

internal auditor remained aspects that influence management's perceiving efficiency.

Hadisantoso, Sudarma, and Rura (2017) in an article titled, "Internal audit perceptions and their impact on the performance of the internal audit function" studied the elements which causing of the negative perceptions of an internal audit as well as influence at the internal audit work performance. Data remained collected by the questionnaires that were distributed towards administrators, clerical staff, supervisors and section heads. Main causes of the negative perceptions are: auditor's bad reputation, auditor's failure about meeting expectation gap, audit staff capabilities, level of the professional competence as well as lack of objectivity or independence in the internal audits. On the other hand, research recommended that is very essential for the internal audit to adopt an innovative approach for the purpose of taking changing places in industrial environment, for correction of the errors in financial scandals, pay extreme attention at corporate governance.

Present study indicated that an internal audit could be enhanced through accomplishment. Taha (2017) emphasized on that an internal audit remain independent, assurance objective as well as designed consulting activities for adding value as well as enhancing operations of the firms. It is very helpful for an organization to attain its objectivities as well as enhance an efficiency of control, governance procedures and risk management. Moreover, researchers assessed influences of an internal audit at OP of listed banks of Indonesia. Model size of existing study remained 145 workers. Data remained collected by questionnaires as well as studied by the help of several linear regressions. Results of the present study indicated there are a significant influences of an internal audit at OP of listed banks. Based on above discussions, it is hypothesized that:

**H2:** There is a significant relationship between the audit policy and firm performance of banking sector in Pakistan.

### ***Internal audit and firm performance***

As said by the Ocheni (2015), economist's disputes on the resources of smaller businesses direct in the directions of tax compliance remain resources which can otherwise be utilized for reinvestment, and facilitating the future development. Consequently, there is a faith that taxes as well as a complicated tax system placed a disproportionate pressure at smaller companies. Minor taxpayers below the taxation regular system remain discriminated against, then the compliance necessities, compliance costs as well as tax rate remain same for dual small and big businesses. Increasing costs of compliance as well as tax rate enhances a micro businesses profit margin. This is also enhances "Government's tax revenue", meanwhile simplified a provision for small organizations that historically decrease the shadow economy size as well as number of the "non-complying registered taxpayers" (Ameyaw, Korang, Twum, & Asante, 2016). In addition, commonly banking sector have for work in the overbearing regulatory circumstances by "plethora of a regulatory agencies, multiple taxes,

cumbersome important process and high port charges that constantly exert serious burden on their operations”. Some banking must deal by myriad of the agencies on maximum cost. According to the previous discussion they remain heterogeneous as well as these differences on the basis of size or structure some in this way perform different rules for the purpose of record maintaining that influence on costs to the businesses of observing by (“and to the revenue authorities of administering”) alternate probable tax obligations. In this way tax law must be continuously simplified, basically for three major reasons, such as to lower dual compliance costs as well as management costs, to decrease uncertainty which is faced by the taxpayers; as well as to enhance voluntary compliance levels (Kasipillai & Mahenthiran, 2013). Based on above discussions, it is hypothesized that:

**H3:** There is a significant relationship between internal audit and firm performance of banking sector in Pakistan.

### *Accounting records and firm performance*

Organizational performance refers towards the capabilities of organization to attain required standards, enhance market share, make sure returns at profitability, enhance facilities, entire reduction as well as once this remain accomplished, and an organization is believed towards be carry out successfully (Abdul-Rahamon & Adejare, 2014). In the same way, performance refers towards an ongoing procedure that contains on managing criteria towards agency and institution could be held responsible (Duranti & Thibodeau, 2006). Characteristically, these criteria remain characterized as a component portion of the internal system as well as cover an institution’s capabilities to; employee’s satisfaction, control the financial expenses, deriver remain timely interventions as well as respond towards target group responses to interventions. Furthermore, Abdul-Rahamon and Adejare (2014) disputes on that organizations should enhance their products if they remain to successfully compete at the present era of faster changes in the technology and economy. Enhanced productivity which is necessary for the capital investment and staff that have flexibility towards obtaining innovative capabilities for newly generated jobs consequence from the structural changes in economy. Based on above discussions, it is hypothesized that:

**H4:** There is a significant relationship between the accounting records and firm performance of banking sector in Pakistan.

### **RESEARCH METHODOLOGY**

The current study purpose is to investigate the relationship among the knowledge management, tax policy, internal audit, accounting records and firm performance of banking sector in Pakistan. To attain this objective, the current study has used the quantitative research approach, cross sectional research design and study correlational in nature which shows that relationship among the variables. The study is consisting of primary data which was collected by using the self-administered questionnaires. These questionnaires were distributed to the 600 managers which were working in the banking sector of Pakistan. The questionnaire which were returned back 312, after

screening among of these 312 responses, there were 300 responses were valid for further analysis which yield a 50 percent response rate. The questionnaire of the current study was adopted from the previous studies, where these questionnaires were already testing, in this regards, the questionnaire reliability is more. All the questionnaires were measured by using a five point Likert Scale which is ranged from strongly disagree (1) to strongly agree (5). The tax policy was measured by six items which were adopted from the study (Ocheni, 2015). In addition, the internal audit was measured by four items which were adopted from the study of (Salameh, Al-Weshah, Al-Nsour, & Al-Hiyari, 2011). In addition, the accounting records were measured by eight items which were adopted from the study of (Abdul-Rahamon & Adejare, 2014). Furthermore, the firm performance was measured by 10 items which were adopted from the study of (Sharabati, Naji, & Bontis, 2010). Lastly, the knowledge management was measured by three dimension namely, knowledge acquisition that was being measured by 10 items, knowledge conversion that was measured by nine items, and knowledge application that was measured by 11 items. These following items were adopted from the study of (Kimaiyo, Kapkiyai, & Sang, 2015).

## DATA ANALYSIS AND DISCUSSIONS

### *Measurement Model*

This study has used the Partial Least Square (PLS)-Structural Equation Modeling (SEM) for the model testing. In the procedure of the model assessment, the first step is consisting of attain the reliability and validity acceptance level through the model assessment. For this purpose, the Smart PLS version 3 used which is being used the measurement model evaluation. In the assessment of the path modeling, composite reliability (CR) and Cronbach's alpha utilize to evaluate variables reliability. Measurement model is used for the valuation of validity and internal consistency of scale items (Hair, Hult, Ringle, & Sarstedt, 2014). Cronbach's alpha and CR are usually used to evaluate the internal consistency of construct. CR used to check the internal consistency of the construct and it also emphasis on the construct reliability valuation. The CR is based on the individual indicators reliability of the estimated model which suppose that all the items have different factor loadings, while Cronbach's alpha tells composite reliability of construct (Hair et al., 2014; J. F. Hair, Hult, Ringle, & Sarstedt, 2017). The minimum value recommended value is 0.7, for Cronbach alpha is 0.7, for factor loading is 0.5 and for average variance extracted (AVE) is 0.5 (J. F. Hair et al., 2017; Hair Jr, Hult, Ringle, & Sarstedt, 2016). On the other hand, for the discriminant validity, the Fornell Lacker and HTMT are recommend by (Yao et al., 2015). For the Fornell Lacker, all the diagonal values should be greater than from below values. As per the Hair Jr, Hult, Ringle, and Sarstedt (2017) instructions comparison was established among the AVE square roots for each variable and correlations of the latent constructs. In addition, for the HTMT the correlation among the two construct should be less than 0.85 (Yao et al., 2015). All of the convergent and discriminant validity results are predicted in the Table 1, 2 and 3 below.



**Table 1:** Reliability and validity of the model

<b>Construct</b>	<b>Item</b>	<b>Loadings</b>	<b>Cronbach's Alpha</b>	<b>CR</b>	<b>AVE</b>				
<b>Tax Policy</b>	TP1	0.821	0.761	0.799	0.504				
	TP2	0.825							
	TP3	0.902							
	TP4	0.840							
	TP5	0.883							
	TP6	0.673							
<b>Internal Audit</b>	IA1	0.893	0.893	0.890	0.672				
	IA2	0.783							
	IA3	0.780							
<b>Accounting records</b>	AR1	0.897	0.787	0.811	0.521				
	AR2	0.813							
	AR3	0.819							
	AR4	0.813							
	AR6	0.792							
	AR7	0.834							
	<b>Knowledge Acquisition</b>	KA1				0.725	0.787	0.855	0.545
KA2		0.887							
KA3		0.894							
KA4		0.781							
KA5		0.904							
KA7		0.782							
KA9		0.673							
<b>Knowledge conversation</b>		KC1	0.916	0.913	0.929	0.766			
		KC2	0.903						
	KC3	0.910							
	KC5	0.898							
	KC6	0.785							
	KC7	0.921							
	KC8	0.765							
	<b>Knowledge application</b>	KNA1	0.702				0.702	0.833	0.625
KNA2		0.756							
KNA3		0.812							
KNA4		0.897							
KNA5		0.910							
KNA6		0.863							
KNA8		0.871							
KNA9		0.783							
KNA11		0.562							
<b>Firm Performance</b>		FP1	0.567	0.934	0.967	0.654			
		FP2	0.783						

	FP3	0.921			
	FP4	0.780			
	FP5	0.859			
	FP6	0.753			
	FP7	0.892			
	FP8	0.784			
	FP9	0.687			
	FP10	0.904			

**Note:** TP-tax policy, IA-internal audit, AR-accounting records, KA-knowledge acquisition, KC-knowledge conversation, KNA-knowledge application, FP-firm performance.

**Table 2:** Fornell and Lacker for Discriminant validity

	TP	IA	AR	KA	KC	KNA	FP
TP	<b>0.710</b>						
IA	0.568	<b>0.721</b>					
AR	0.267	0.258	<b>0.738</b>				
KA	0.010	0.040	0.237	<b>0.875</b>			
KC	0.504	0.515	0.313	0.194	<b>0.820</b>		
KNA	0.030	0.040	0.237	0.125	0.125	<b>0.934</b>	
FP	0.604	0.115	0.113	0.194	0.104	0.415	<b>0.906</b>

**Note:** TP-tax policy, IA-internal audit, AR-accounting records, KA-knowledge acquisition, KC-knowledge conversation, KNA-knowledge application, FP-firm performance.

**Table 3:** HTMT for Discriminant Validity

	TP	IA	AR	KA	KC	KNA	FP
TP							
IA	0.168						
AR	0.167	0.258					
KA	0.110	0.040	0.237				
KC	0.304	0.515	0.313	0.194			
KNA	0.130	0.040	0.237	0.125	0.125		
FP	0.304	0.415	0.213	0.394	0.204	0.315	

**Note:** TP-tax policy, IA-internal audit, AR-accounting records, KA-knowledge acquisition, KC-knowledge conversation, KNA-knowledge application, FP-firm performance.

### **Structural model**

After the assessment of the structural model of the study, the structural model of the study by using a bootstrap 500 resampling technique applied by using a Smart PLS. The structural model of the study tests the study hypothesis. The direct effect of the study has shown that Knowledge management (KM) had a positive and significant relationship with the firm performance (FP). In

addition, the accounting records are also significantly and positively effect to the FP. In the same vein, the internal audit also significantly and positively effect to the FP. These above three following findings had supported to the proposed hypothesis of the study. Therefore, these findings could be considered that these following variable are considered to be a significant indicator that could help to increase the performance of banking sector in Pakistan. In other words, the tax policy is not significantly and positively associated with the firm performance that is not being supporting to the proposed hypothesis. These findings have shown that banking sector in Pakistan has played an important role on the above discussed indicators to increase their FP. The results are formulated in the following Table 4.

**Table 4:** Hypothesis results

Hypothesis	Beta	S.D	T Statistics	P Values	Results
KM -> FP	0.657	0.059	11.08	0.000	Supported
TP -> FP	0.103	0.063	1.634	0.083	Not Supported
AR -> FP	0.743	0.028	26.418	0.000	Supported
IA>FP	0.177	0.065	2.723	0.018	Supported

**Note:** KM-knowledge management, FP-firm performance, TP-tax policy, AR-accounting records, IA-internal audit.

## CONCLUSION

The performance is considered to be an important and integral part that could help to the organization for long term survival and achieve competitive advantage. If the performance could not be maintaining by the organization, then organization could not be a compete for a long term. To address this, there are various factors that could help to increase the performance. Among of the them, knowledge management, tax policy, accounting records, internal audit is considered to be important factors that could help to increase the performance of the organization. Therefore, the current study purpose is to figure out the relationship among knowledge management, tax policy, accounting records, internal audit and firm performance of banking sector in Pakistan. For this purpose, the data was collected from the senior managers of the banking sector of Pakistan. The key findings had shown that knowledge management, internal audit, accounting records had a positive and significant relationship with the firm performance. While, tax policy did not significantly effect to the firm performance. The findings could be contributing a body of knowledge that could help to increase the empirical research in future. The findings could also provide help to provide guidelines to the policy makers, regulatory bodies, and owners to know about the significance of the tax policy, internal audit, accounting records and knowledge management to increase their organization performance. In addition, the findings could also increase the collaboration within the researchers and owners to increase the organization performance. Along with these significant contributions, the current study still had some limitations. Firstly, the study was limited on Pakistan that is a developing country. Therefore, the findings could not be generalized on developed economies. In this regards, a future study could be

done on developed economies to increase the research generalizability. Secondly, the study had only a direct effect, there are also some other variables that could moderate or mediate among their relationship. Therefore, a future study could be done along with the moderating or mediating variable. Thirdly, the current study had used the cross sectional research design in which data had collected only one time. Therefore, a future research could be done longitudinal research design to increase the research generalizability.

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