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ABSTRACT

Following the increasing number of fold ups as well as mergers and acquisitions in service sector, a number of concerns as regard issues leading to their folding up have been speculated. It is believed by considering risk management in a holistic form through the adoption of enterprise risk management (ERM) to critical areas of business rather than relying on a silo-based risk management perspective, will increase both the organisation's short and long-term value to its stakeholders. Consequently, this study attempts to: investigate the level of ERM awareness in selected service firms by verifying the challenges affecting ERM adoptions; examine effect of enterprise risk management on business decision; investigate whether ERM adoption leads to operational efficiency; and examine the effect of ERM on organisation performance in selected service firms in Nigeria. A total of 74 firms including banks and insurance companies were considered. Data were collected from both the middle and top levels management of the selected firms in Lagos metropolis. Descriptive and non-parametric statistics were used to analyse the data. The findings revealed that service firms have good level of ERM awareness, even though its adoption poses serious challenges to the selected firms. The study also found that there is improvement in business decisions and operational efficiency of selected service firms following the adoption of ERM. Finally, most service firms are more likely to experience improved internal decision-making, and increased business performance due to good implementation of ERM. Based on these findings, the study concluded that there is strong level of ERM awareness and implementation among the selected firms but many of them still battle with implementation challenges such as difficulty in integrating risk management with other business process as well as lack of clarity on who is responsible for managing risk. All of these in turn have practically hindered them from operating at full capacity. In light of this, the study recommends that the selected service firms need to device means to integrate risk managements with other business processes and seek the necessary knowledge and skills within the organisations to effectively implement ERM in their firms.

Keywords: ERM awareness, business decision, risk management, service firms.

1.0 INTRODUCTION

Every business is faced with unpredictable risks that threaten its survival. This brings a fundamental concern in today's dynamic global environment where crucial events affecting organisation survival cannot be tackled headlong without recourse to sound risk management. In recent years, however, a paradigm shift has occurred regarding the way to view risk management. Instead of looking at risk management from a silo-based perspective, the trend now is to take a holistic view of risk management. This holistic approach toward managing an organisation's risk is commonly referred to as enterprise risk management (ERM) (Gordon, Loeb, & Tseng, 2009). ERM presents a fundamental shift in the way organisations identify, evaluate, prioritize, manage and monitor risks – moving away from silos to a holistic, integrated approach. In implementing formal risk management frameworks, organisations can be assisted to proactively manage threats that could frustrate the achievement of entity objectives while maximizing opportunities.

In the insurance industry, ERM has become a high-priority and interesting topic area of investment (DiSerafino, 2016). In many cases, the effort has been guided primarily by the need to meet new regulatory standards. The key considerations in meeting minimum requirements for Own Risk and Solvency Assessment (ORSA) are stress-testing programmes and concerns about being designated as a systemically important financial institution (SIFI) (DiSerafino, 2016), with a view to ensuring good

governance in business entity. **Good** governance is crucial to business survival because it assists organisation to efficiently implement strategy and making better decisions in the face of risk and uncertainty affecting companies (Deloitte, 2015). To balance risk and return, companies under go pressure in order to clearly articulate how they identify the principal risks to their business and how they ensure these are being managed within the risk appetite (Deloitte, 2015).

To some extent, ERM has become a standard part of the management infrastructure for large insurance companies and banks as well as other big hospitalities. More risk-informed thinking is now enshrined in the business to an unprecedented degree (DiSerafino, 2016). An increasing number of scholars view ERM as the fundamental paradigm for managing the portfolio of risks confronting organisations (Lam, 2003; Liebenberg & Hoyt, 2003; Nocco & Stulz, 2006; Beasley, Chen, Nunez, Wright & 2006; Hoyt & Liebenberg, 2009). Driving this trend is the belief that ERM offers companies a more comprehensive approach toward risk management than the traditional silo-based risk management perspective. By adopting a systematic and consistent approach (or process) to managing all of the risks confronting an organisation, ERM is presumed to lower a firm's overall risk of failure and thus increase the performance and, in turn, the value of the organisation (Gordon *et al.*, 2009).

Despite the increased interest in ERM by academics and practitioners and the

abundance of survey evidence on the prevalence and characteristics of ERM programs, there is an absence of empirical evidence regarding the impact of such programs on firm value (Hoyt & Liebenberg, 2006). A general argument gaining attention in the literature is that the implementation of an ERM system improves firm performance (Lam, 2003; Nocco & Stulz, 2006; Hoyt & Liebenberg, 2009). The findings by Hoyt and Liebenberg (2009) on a study carried out on data from the insurance industry support this argument. Meanwhile, Gordon et al (2009) has criticized it on the ground that this empirical evidence was not based on a robust measure of ERM.

Following the increasing number of fold ups as well as mergers and acquisitions in many big companies especially banks and insurance, a number of concerns as regard issues leading to their folding up have been speculated but no evidence of any empirical studies in respect of ERM that have been carried out in Nigeria to address why large companies are folding up on a regular basis. Many studies on how to effectively manage risks threatening the survival of these companies have relied on a silo approach to risk management (e.g. see Adeyele & Osemene, 2018; Adeyele & Omorokunwa, 2017; Isimoya, 2004). Although these studies provide useful approach to risk management but the lack of empirical research on how ERM should be used to reduce organisation exposures to risks justified the need for the present study.

It is believed by considering risk management in a holistic form through the adoption of enterprise risk management (ERM) to critical areas of business rather

than considering risk management from a silo-based perspective, will reduce their exposures to risks that threaten their survival thereby increasing both the organisation's short- and long-term value to its stakeholders. Consequently, this study attempts to: **investigate the level of ERM awareness in selected service firms in Nigeria; verify the challenges affecting ERM adoptions among the selected service firms; identify effect of enterprise risk management on business decision in selected service firms; find out whether ERM adoption leads to operational efficiency of selected service firms; and examine the effect of ERM on organisation performance in selected service firms. The outcome of this study will no doubt assist service firms in finance sectors and other hospitality companies to reduce their risk exposures that affect their performance.**

2.0 L I T E R A T U R E REVIEW

Strategic risk management (SRM) is a term used in actuarial parlance to imply enterprise risk management (ERM) and does not mean strategic management as used in other disciplines. In this study, the terms SRM and ERM are used interchangeably. SRM is gaining traction in a range of industries largely because it is delivering results (Gordon, Loeb & Tseng, 2009). The relation between a firm's ERM and its performance is contingent on the proper match between a firm's ERM and the following five firm-related variables: environmental uncertainty, industry competition, firm size, firm complexity and board of directors' monitoring (Gordon, Loeb & Tseng, 2009). One of the most popular definitions of ERM used in the literature is the one provided by COSO

(2004) and it defines ERM as a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives. Unlike traditional risk management where individual risk categories are managed differently in risk 'silos', ERM enables firms to manage a wide array of risks in an integrated, holistic fashion (Hoyt & Liebenberg, 2006). Proponents argue that ERM assists firms to reduce earnings and stock-price fluctuation, external capital costs, capital efficiency, and create synergies between different risk management activities (Miccolis & Shah, 2000; Cumming & Hirtle, 2001; Lam, 2001; Meulbroek, 2002). Lam (2000) cited in Niralia (2017) defines ERM as an integrated structure which involves managing of all business related risks such as market risks, credit risk, economic capital, operational risk, and risk transfer so as to upgrade the value of the firm as defined. ERM has been adjudged to promote sound risk management awareness that leads to better operational and strategic decision-making. This becomes inevitable following the global financial crisis that started in September, 2008.

As the impacts of the global financial crisis further recede, more stakeholders are seeking the next horizon, where risk management is truly and deeply integrated into the business. That is where strategic risk management (SRM) comes in. Strategic risk management is gaining

traction in a range of industries largely because it is delivering results. Companies outside insurance and financial services are also winning with strategic risk management (DiSerafino, 2016). Strategic risk management programs are most concerned with deeper understanding of corporate risk appetite relative to a complex set of risks and interdependencies; and employing strategies for determining the right key risk indicators, based on the complex and sophisticated risk appetite statement, with upper and lower limits stipulated for each indicator (DiSerafino, 2016).

There is a longstanding and largely understandable perception that any type of risk management is equivalent to “playing defense,” or protecting the business from a range of threats (Gordon, Loeb & Tseng, 2009). This is a myth that very much needs to be retired within insurance, and strategic risk management may be the most effective means for doing that (Gordon, Loeb & Tseng, 2009). This in other words implies that the effective practice of strategic risk management may lead companies to determine that they are not taking enough risk to meet their growth goals, expand their customer base or otherwise improve performance (DiSerafino, 2016; Gordon, Loeb & Tseng, 2009). COSO (2004), note that an effective ERM system is dependent on active participation by an organisation's board of directors. Kleffner et al (2003) found that adoption of an ERM strategy is associated with encouragement from the board of directors.

ERM provides a structure that combines all risk management activities into one integrated framework that facilitates the identification of such interdependencies (Hoyt *et al*, 2006). By improving risk management disclosure, ERM is likely to reduce the expected costs of regulatory scrutiny and external capital (Meulbroek, 2002). Also, for insurers the major ratings agencies have put increasing focus on risk management and ERM specifically as part of their financial review. This is likely to provide additional incentives for insurers to consider ERM programmes, and also suggests a potential value implication to the existence of ERM programs in insurance companies (Hoyt *et al*, 2006). As an example of this interest from the rating agencies in the implications of ERM, in October 2005 Standard & Poor's announced that with the emergence of ERM, risk management will become a separate discipline. Makomaski (2008) refers to ERM as a tool for decision-making in cases of companies holding varied business goals. Similarly, Walker, Shenkir and Barton (2003) define ERM as an integrated and a disciplined method which exists in organizations and facilitates systematic managing of firm related risks in an organisation and helps in achieving the objectives of an enterprise.

In developing its ERM framework, COSO (2004) recognizes that the appropriate ERM system will likely vary from firm to firm. In essence, COSO suggests a contingency perspective toward the appropriate ERM system for a particular organisation. Nocco and Stulz (2006) also emphasized the adoption of ERM in an organisation creates value for

stakeholders. Beyond improving internal decision-making (Nocco & Stulz, 2006), ERM can also lead to more efficient capital allocation (Myers & Reed, 2001), better capital structure decisions, and better risk management decisions (Cummins, Phillips & Smith, 2001).

3.0 METHODOLOGY

This study relies on primary data which were sourced from employees occupying the middle and top levels management including managers, and executive directors of the selected organisations. Permission was sought from the selected firms to respond to questionnaire sent to them through e-mail and in some cases hard copies of questionnaire were sent to some firms depending on the respondents preferences. A total of 74 companies responded to distributed questionnaire in the following distribution: hospitality, 28; insurance companies, 34; and banks, 12. These companies were purposively selected due to their size and network of customers. Both descriptive and non parametric statistics such as Monte Carlo test were used to analyse the data collected. For clarity of decision making in respect of data, the following basis of decision rules were adopted:

- Accept if significant is greater than P-value of 0.05,
- Reject if significant is less than P-value of 0.05

The criteria for determining agreement of variables are given as:

1= extremely weak, 2 = very weak, 3 = weak, 4 = moderate, 5 = strong, 6 = very strong, and 7 = extremely strong. From this scale of 1 to 7, if the mean weight (MW) < 1.5 it means extremely weak; if

the mean weight (MW) is within 1.5 $\leq MW \leq 2.49$ it means very weak; if the mean weight (MW) is within 2.5 $\leq MW \leq 2.49$ it implies weak; if the mean weight (MW) is within 3.5 $\leq MW \leq 2.49$ it implies moderate; if the mean weight (MW) is within 4.5 $\leq MW \leq 2.49$, it means strong; if the mean weight (MW) is within 5.5 $\leq MW \leq 2.49$, it means very strong while mean weight $MW \leq 6.49$ means it is extremely strong.

4.0 DATA ANALYSIS AND INTERPRETATION OF RESULTS

Enterprise risk management awareness among service firms as well as their willingness to implement it in these firms is expected to enhance decision making process thereby increasing the organisation value. In this section, the extent of ERM awareness, implementation strategies, adoption challenges and strategic risk management are considered.

Table 1: Enterprise risk management awareness in selected service firms in Nigeria

		N	Mean	Std. Deviation	Minimum	Maximum	Coefficient of variation	Monte Carlo Sig.
EA1	There is a formal structure in place for monitoring risk and response	74	4.6757	1.44401	1.00	7.00	0.3088337	.000 ⁿ
EA2	We have the necessary information to manage risk at an enterprise-wide level	74	4.6216	1.33142	2.00	7.00	0.2880848	.000 ⁿ
EA3	We have a common terminology, methodology and set of standards for managing risk	74	4.5405	1.45423	1.00	7.00	0.3202759	.000 ⁿ
EA4	Company objectives, policies and tolerance for risk are clearly communicated through the organization	74	5.0811	1.57686	2.00	7.00	0.3103394	.000 ⁿ
	ERMANES	74	4.7297	1.17680	2.25	6.75	0.2488091	.000 ⁿ

Source: Authors' computation, 2019.

Table 1 shows the enterprise risk management in selected service firms in Nigeria. In all the four criteria used for the assessment, there are respondents who extremely disagreed with them as well as those who extremely agreed with all of them. In the first and second criteria, many respondents agreed there is a formal

structure in place for monitoring risk and response (EA1: Mean/std dev. = 4.6757/1.44401, coefficient of variation = 0.3088337, $p < 0.05$), and they have the necessary information to manage risk at an enterprise-wide level (EA2: mean/std dev. = 4.6216/1.33142, coefficient of variation = 0.2880848, $p < 0.05$). Also, many

respondents agreed they have a common terminology, methodology and set of standards for managing risk (EA3:mean/std dev. = 4.5405/1.45423, coefficient of variation = 0.3202759, $p < 0.05$), since their companies' objectives, policies and tolerance for risk are clearly communicated through the organisation (EA4:mean/std dev. = 5.0811/1.57686, coefficient of variation = 0.3103394, $p < 0.05$). In all of these criteria, the most significantly reliable of them all is criterion EA2 in which many agreed that they have

the necessary information to manage risk at an enterprise-wide level. All of these results aggregately lead to general agreement (5point out of 7) (ERMANES: mean/std dev. = 4.7297/1.17680, coefficient of variation = 0.2488091, $p < 0.05$) indicating the extent of enterprise risk management awareness among the service firms .Based on the respondents' score on the scale of 1 to 7, it can be concluded that service firms have good level of awareness about enterprise risk management.

Table 2: Strategy implementation of ERM strategy in service firms

		N	Mean	Std. Deviation	Minimum	Maximum	Coefficient of variation	Monte Carlo Sig.
ESI1	Policy is supported at board of director or executive level	74	4.5946	1.27052	1.00	7.00	0.2765246	.000 ^a
ESI2	Having an enterprise risk data infrastructure in place	74	4.9189	1.15577	3.00	7.00	0.234964	.000 ^a
ESI3	Adequate employee training	74	4.9459	1.40344	1.00	7.00	0.2837554	.000 ^a
ESI4	Hiring qualified staff	74	5.3243	1.07408	2.00	7.00	0.2017307	.000 ^a
ESI5	Ability for organisation to adapt to changes in business environment	74	5.4054	1.18112	2.00	7.00	0.2185068	.000 ^a
	ERMIMP	74	5.0315	.95391	2.50	6.67	0.1895871	.014 ^a

Source: Authors' computation, 2019.

Table 2 deals with strategy implementation of ERM in selected service firms. From the range of 1 to 7 level of agreement, there are those who extremely disagreed (1) as well as those who extremely agreed (7) with the listed criteria. In the first and second criteria, many respondents agreed that policy in respect of enterprise risk management is supported at board of director or executive level (ESI1:mean/std dev. = 4.5946/1.27052, coefficient of variation = 0.2765246, $p < 0.05$), by having

an enterprise risk data infrastructure in place (ESI2:mean/std dev. = 4.9189/1.15577, coefficient of variation = 0.234964, $p < 0.05$). Many respondents also agreed with third and forth criteria that their firms ensure adequate training of employees (ESI3:mean/std dev. = 4.9459/1.40344, coefficient of variation = 0.2837554, $p < 0.05$), and hiring of qualified staff (ESI4:mean/std dev. = 5.3243/1.07408, coefficient of variation = 0.2017307, $p < 0.05$) for purposes of

effective ERM implementation in their respective firms. Similarly, many respondents agreed that their organisations have capacity to adapt changes in business environment (ESI5: mean/std dev. = 5.4054/1.18112, coefficient of variation = 0.2185068, $p < 0.05$). All of these results on

the average suggest that implementation strategy within the scale of measurement of 1 to 7 is good (5) (ERMIMP: mean/std dev. = 5.0315/0.95391, coefficient of variation = 0.1895871, $p < 0.05$). Hence, it can be said that implementation strategy for ERM in selected firms is good.

Table 3: ERM adoptions and challenges in selected service firms

		N	Mean	Std. Deviation	Minimum	Maximum	Coefficient of variation	Monte Carlo Sig.
EAS1	Embedding risk management within company culture	74	4.6757	1.49985	1.00	7.00	0.3207763	.000 ⁿ
EAS2	Difficulty in quantifying risks	74	4.3784	1.50527	1.00	7.00	0.3437955	.000 ⁿ
EAS3	Timeliness and quality of information	74	4.7297	1.41709	1.00	7.00	0.2996134	.000 ⁿ
EAS4	Difficulty in integrating risk management with other business processes	74	4.7455	1.23556	2.00	7.00	0.2603663	.000 ⁿ
EAS5	Lack of necessary knowledge and skills within the organization	55	4.4364	1.54876	1.00	7.00	0.3491054	.000 ⁿ
EAS6	It's not clear who is responsible for managing risk	55	4.4727	1.57356	1.00	7.00	0.3518124	.000 ⁿ
	ERMADPCH	55	4.6303	1.04216	2.17	6.17	0.2250743	.284 ⁿ

In Table 3, ERM adoptions and challenges in selected service firms are shown. Within the range of 1 to 7, many respondents agreed that risk management is embedded within company culture (EAS1: mean/std dev. = 4.6757/1.49985, coefficient of variation = 0.3207763, $p < 0.05$), though many are indifferent as to whether there is any difficulty for them to quantify risks (EAS2: mean/std dev. = 4.3784/1.50527, coefficient of variation = 0.3437955, $p < 0.05$). Another challenge in which many respondents agreed with in adoption of ERM is timeliness and quality of information (EAS3: mean/std dev. = 4.7297/1.41709, coefficient of variation = 0.2996134, $p < 0.05$). However, many

respondents are indifferent as to whether difficulty in integrating risk management with other business processes (EAS4: mean/std dev. = 4.7455/1.23556, coefficient of variation = 0.2603663, $p < 0.05$), lack of necessary knowledge and skills within the organisation (EAS5: mean/std dev. = 4.4364/1.54876, coefficient of variation = 0.3491054, $p < 0.05$), and lack of clarity of who is responsible for managing risk (EAS6: mean/std dev. = 4.4727/1.57356, coefficient of variation = 0.3518124, $p < 0.05$). In all of these ERM risks, the one that significantly affect them most is EAS4 which implies that difficulty in integrating risk management with other business

processes is major challenge to ERM adoption. Meanwhile the overall weight of ERM risk adoption poses serious challenge to the selected firms (ERMADPCH:

mean/std dev. = 4.6303/1.04216, coefficient of variation = 0.2250743, $p < 0.05$).

Table 4: Strategic risk management in the selected firms.

		N	Mean	Std. Deviation	Minimum	Maximum	Coefficient of variation	Monte Carlo Sig.
SRI1	ERM enables firms to manage a wide array of risks in an integrated, holistic fashion	55	4.7636	1.26145	2.00	7.00	0.2648073	.000 ^a
SRI2	ERM benefits firms by decreasing earnings and stock - price volatility	55	4.9636	1.26145	1.00	7.00	0.2541375	.000 ^a
SRI3	ERM increases capital efficiency, and creating synergies between different risk management activities	55	5.0000	1.17063	2.00	7.00	0.2341256	.000 ^a
SRI4	ERM promotes increased risk management awareness that translates into better operational and strategic decision-making	55	5.1636	1.13470	2.00	7.00	0.2197481	.000 ^a
SRI5	ERM creates synergies between different risk management activities	55	5.1636	1.16688	2.00	7.00	0.2259809	.000 ^a
	STRISKMG	55	5.0109	.94862	2.00	7.00	0.1893108	.000 ^a

Source: Authors' computation, 2019.

Table 4 reveals the level of agreement of respondents to strategic risk management in the selected firms. Within the range of 1 to 7, many respondents significantly agreed that ERM enables firms to manage a wide array of risks in an integrated, holistic fashion (SRI1: mean/std dev. = 4.7636/1.26145, coefficient of variation = 0.2648073, $p < 0.05$) and it benefits firms by decreasing earnings and stock-price volatility (SRI2: mean/std dev. = 4.9636/1.26145, coefficient of variation = 0.2541375, $p < 0.05$). Similarly, many respondents also agreed that ERM increases capital efficiency, and creating synergies between different risk management activities (SRI3: mean/std

dev. = 5.0000/1.17063, coefficient of variation = 0.2341256, $p < 0.05$) as well as promotes increased risk management awareness that translates into better operational and strategic decision-making (SRI4: mean/std dev. = 5.1636/1.13470, coefficient of variation = 0.2197481, $p < 0.05$). They also agreed that ERM creates synergies between different risk management activities in the selected firms (EAS5: mean/std dev. = 5.1636/1.16688, coefficient of variation = 0.2259809, $p < 0.05$). The overall mean also implies that the selected service firms do have good strategic risk management in place (STRISKMG: mean/std dev. = 5.0109/0.94862, coefficient of variation =

0.1893108, $p < 0.05$). Evaluating all the criteria in Table 4 suggests that the selected service firms have good strategic risk

management in place to deal with unforeseen circumstances.

Table 5: Effect of enterprise risk management on business decision in selected service firms

		N	Mean	Std. Deviation	Minimum	Maximum	Coefficient of variation	Monte Carlo Sig.
EBD1	Enterprise risk management is used to support our business decisions	55	5.1455	1.35289	2.00	7.00	0.2629286	.000 ^a
EBD2	Our risk management process is fully integrated within the business planning process	55	5.1091	1.30061	2.00	7.00	0.2545675	.000 ^a
EBD3	Risk management is fully integrated across all functions and business units	55	5.0364	1.53916	2.00	7.00	0.30561	.000 ^a
EBD4	Everyone in our organisation understands the role they play and their level of accountability with regards to managing risk	55	5.2364	1.47778	2.00	7.00	0.2822152	.000 ^a
	BUSDECISN	55	5.1318	1.26185	2.25	7.00	0.2458868	.000 ^a

Source: Authors' computation, 2019.

Table 5 shows business decision as a result of enterprise risk management. In the first and second criteria, within the range of 1 to 7, many respondents agreed that enterprise risk management is used to support business decisions decision in their companies (EBD1: mean/std dev. = 5.1455/1.35289, coefficient of variation = 0.2629286, $p < 0.05$), and that risk management process is fully integrated within the business planning process (EBD2: mean/std dev. = 5.1091/1.30061, coefficient of variation = 0.2545675, $p < 0.05$). Many respondents also agreed that management is fully integrated across all functions and business units (EBD3: mean/std dev. = 5.0364/1.53916, coefficient of variation = 0.30561, $p <$

0.05), in such a way that everyone in organisation understands the role they play and their level of accountability with regards to managing risk (EBD4: mean/std dev. = 5.2364/1.47778, coefficient of variation = 0.2822152, $p < 0.05$). Assessing the overall business decision in term of performance, many respondents came to conclusion that business decision embarked upon in their respective companies is good (BUSDECISN: mean/std dev. = 5.1318/1.26185, coefficient of variation = 0.2458868, $p < 0.05$) and the most significant of these criteria is EBD2 which reveals that risk management process is fully integrated within the business planning process.

Table 6: Influence of enterprise risk management on operational efficiency of selected service firms

		N	Mean	Std. Deviation	Minimum	Maximum	Coefficient of variation	Monte Carlo Sig.
EOF1	ERM improves internal decision-making	55	5.3455	1.10919	2.00	7.00	0.2075016	.000 ⁿ
EOF2	ERM leads to more efficient capital allocation	55	5.4182	1.19708	1.00	7.00	0.2209373	.000 ⁿ
EOF3	ERM leads to better capital structure decisions, and better risk management decisions	55	5.0727	1.18407	2.00	7.00	0.2334187	.000 ⁿ
EOF4	Adoption of ERM has increased the operational efficiency in our companies	55	5.1091	1.22735	2.00	7.00	0.2402294	.000 ⁿ
EOF5	ERM has also reduces the cost of doing business	55	5.0364	1.29047	2.00	7.00	0.256231	.000 ⁿ
EOF6	ERM enhances management efficiency	55	5.2364	1.18577	2.00	7.00	0.2264499	.000 ⁿ
	OPRNEFF	55	5.2030	1.00241	2.00	7.00	0.1926589	.000 ⁿ

Source: Authors' computation, 2019.

Table 6 is concerned with the influence of enterprise risk management on operational efficiency of selected service **firms**. In the first to sixth criteria, the least of agreement is 2 (strongly disagreed) with the exemption of EOF1 which is 1 (extremely disagreed) while the upper bound is 7 (extremely agreed). Analysing the first to third criteria together, many respondents agreed that ERM improves internal decision-making (EOF1: mean/std dev. = 5.4182/1.19708, coefficient of variation = 0.2075016, $p < 0.05$), leads to more efficient capital allocation (EOEOF2: mean/std dev. = 5.1250/0.90902, coefficient of variation = 0.2209373, $p < 0.05$), and better capital structure decisions, and better risk management decisions (EOF3: mean/std dev. =

5.0727/1.18407, coefficient of variation = 0.2334187, $p < 0.05$). Also, many respondents agreed that the adoption of ERM has increased the operational efficiency in their respective companies (EOF4: mean/std dev. = 5.1091/1.22735, coefficient of variation = 0.2402294, $p < 0.05$), thereby reducing the cost of doing business (EOF5: mean/std dev. = 5.0364/1.29047, coefficient of variation = 0.256231, $p < 0.05$). Lastly, many respondents agreed that ERM enhances management efficiency (EOF6: mean/std dev. = 5.2364/1.18577, coefficient of variation = 0.2264499, $p < 0.05$). Assessing the most stable of all, EOF1 is found to be more reliably stable which means that most service firms are more likely to experience improves internal

decision-making. Be that as it may, the overall result indicates the adoption of enterprise risk management leads to

efficiency (OPRNEFF: mean/std dev. = 5.2030/1.00241, coefficient of variation = 0.1926589, $p < 0.05$).

Table 7: Effect of enterprise risk management on organisation performance in selected service firms

		N	Mean	Std. Deviation	Minimum	Maximum	Coefficient of variation	Monte Carlo Sig.
EOP1	Implementation of ERM has increased the investment performance of our company	55	5.0182	1.62721	1.00	7.00	0.3242628	.000 ⁿ
EOP2	Implementation of ERM has increased the financial performance	64	5.0938	1.41105	1.00	7.00	0.2770166	.000 ⁿ
EOP3	Implementation of ERM has increased the market performance	55	4.9818	1.43360	2.00	7.00	0.2877671	.000 ⁿ
EOP4	Implementation of ERM has increased our company productivity	55	4.8727	1.49139	1.00	7.00	0.3060687	.000 ⁿ
EOP5	Implementation of ERM has created value for firms survival	55	4.8364	1.38462	2.00	7.00	0.2862935	.000 ⁿ
EOP6	ERM leads to quality of services to customers	55	5.0182	5.0182/1.32624	1.00	7.00	0.2642877	.000 ⁿ
	ORGPREF	55	4.9667	1.28156	1.67	6.83	0.2580315	.000 ⁿ

Source: Authors' computation, 2019.

Table 7 reveals the outcome of enterprise risk management implementation on organisation performance in selected service firms. In the range of assessment, there are respondents who extremely disagreed (EOP1:1), strongly disagreed (EOP2:2) for the lower bound while there are also those who extremely agreed (EOP1-G7: 7) for the upper bound of the listed criteria. In the first and second criteria, many respondents on the average agreed that implementation of ERM in their respective companies have increased

investment performance (EOP1: mean/std dev. = 5.0182/1.62721, coefficient of variation = 0.3242628, $p < 0.05$), and as well increased financial performance (EOP2: mean/std dev. = 5.0938/1.41105, coefficient of variation = 0.2770166, $p < 0.05$). Similarly, many respondents agreed that implementation of ERM has increased the market performance of their respective companies (EOP3: mean/std dev. = 4.9818/1.43360, coefficient of variation = 0.2877671, $p < 0.05$) as well as increasing their companies' productivity (EOP4:

mean/std dev. = 4.8727/1.49139, coefficient of variation = 0.3060687, $p < 0.05$). In the fifth and sixth criteria, many respondents also agreed that ERM implementation has created value for their firms (EOP5: mean/std dev. = 4.8364/1.38462, coefficient of variation = 0.2862935, $p < 0.05$), due to quality of services to customers (EOP6: mean/std dev. = 5.0182/1.32624, coefficient of variation = 0.2642877, $p < 0.05$). Rating the reliability of each criterion, the most stable of all is EOP6 which reveals that ERM leads to quality of services to customers. The second and third most stable are EOP2 and EOP5 that respectively reveals that implementation of ERM has increased the financial performance and has created value for firms survival. The overall mean weight indicates that organisation.

5.0 SUMMARY AND RECOMMENDATIONS

Enterprise risk management awareness level among companies particularly in finance sector is critical and crucial for their survival. This is so because if there is no any awareness, there is no how it can be adopted and subsequently implemented. In this study, we examined among other things companies' level of awareness and implementation strategies. One of the findings revealed that most companies have necessary information to manage risk at enterprise-wide level which translates to good awareness level among enterprise risk management.

Also, using the scale of 1 to 7 for implementation level, all the criteria end

up being 5 which signifies that there are at least good implementation strategies put in place for ERM. Meanwhile, two of these five parameters used to access strategies for ERM implementation turn out to be the more effective than others which include hiring of qualified staff and adapting to changes in business environment. One of the most significant challenges faced among service firms in ERM adoption is difficulty in integrating risk management with other business processes.

Even though the selected service firms have good strategic risk management in place to deal with unforeseen circumstances, it is more glaring that ERM promotes increased risk management awareness that translates into better operational and strategic decision-making. In respect of performance of business decision as a result of enterprise risk management implementation, the study reveals that business decision embarked upon in their respective companies is good due to the fact that risk management process is fully integrated within the business planning process.

The study also revealed that ERM has positive and significant influence on organisation efficiency. As a result, there is a strong level of agreement that most service firms are more likely to experience improved internal decision-making. Rating the reliability of each criterion, the most stable of all is that ERM leads to quality of services to customers and implementation of ERM has increased the financial performance and has created value for firms' survival.

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