THE CONTRIBUTIONS OF STRATEGIC ZAKAT IN SUPPLY CHAIN AND PROFITABILITY OF THE NATIONAL ZAKAT AGENCY: A CASE STUDY FROM NATIONAL ZAKAT AGENCY INDONESIA

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Abstract

Purpose: The prime objective of the current study is investigating the nexus between organizational strategists, supply chain capabilities and organizational performance in Indonesia. In particular, the study is interested in examining the direct relationship between Zakat collection strategy of National Zakat Agency, Supply chain capability of National Zakat Agency Indonesia and the performance of National Zakat Agency Indonesia.

Results: In addition to that the current study is also interested in examining the moderating role Supply chain capability of National Zakat Agency Indonesia the relationship between Zakat collection strategy of National Zakat Agency Indonesia and the performance of National Zakat Agency Indonesia. The study is among the pioneering studies on the issue of supply chain in zakat management and on the performance of specialized firms in zakat collection industry. The study has employed hierarchical regression model to achieve the research objective of the current study. Apparently, several non-traditional and different supply chain management strategies have been witnessed since the past few years. These were developed for the effective utilization of resources and to improve cost savings, which would result in the competitive as well efficient flow of goods and services. The current study which in author knowledge is among few pioneering studies on this issue, will be helpful for supply chain experts, operation managers, academicians, researchers and other policy makers in formulating policies.

Keywords: National Zakat Agency, Zakat collection strategy, Supply chain capability, Indonesia.

INTRODUCTION

Since past few years, various difficulties and challenges have been faced by firms because of the rapidly changing customer needs, having its implications on the processes of supply chain management (SCM). The world has been experiencing unprecedented changes. Thus, in order to survive in the business market, the businesses and firms need to keep pace with the demands, life styles, and needs of their customers. In addition, supply chain management must also be considered to stay competitive in the market. Therefore, it has been an agreed fact that achieving competitive advantage is greatly influenced by the supply chain management. As a result, businesses and firms face high pressure to implement reliable and working strategies of supply chain management, which could help firms to better face these market challenges as well for the effective implementation of SCM practices. In the modern world, no universal strategy is available that can be applied on the global economy, covering all dimensions (Ab Rashid *et al.*, 2018; Khasandy and Badrudin, 2019). Thus, it is crucial to develop and implement appropriate and best suited strategies by the businesses, manufacturers, and firms operating in the market. Due to the Zakat collection agencies, the zakat collection in Indonesia has increased significantly as shown in table 1.

Table 1: Zakat Collection in Indonesia

Year	Zakat Collection in Million USD	Growth in Zakat collection (%)
2008	66.96	24.32
2009	87.34	30.43
2010	109.17	25.00
2011	125.84	15.30
2012	160.12	27.24
2013	196.51	22.23
2014	240.17	22.22
2015	269.29	21.21

Source: National Board of Zakat Indonesia

Apparently, several non-traditional and different supply chain management strategies have been witnessed since the past few years. These were developed for the effective utilization of resources and to improve cost savings, which would result in the competitive as well efficient flow of goods and services. Such as recycling, corporate social responsibility, and green supply chain management strategies. It is the economy's' unique nature which gave rise to the emergence of these

strategies (Abdullahi and Rouyan, 2018; Abosedra and Sita, 2018; Abdullahi, 2019). It is a widespread conception that non-traditional strategies are required for the smooth functioning of supply chain management processes. The current focus and concern of supply chain management researchhas majorly evolved to the social issues instead of the environmental or economic issues and are more interested to explore the relationshipbetween supply chain management practices and social issues.

Regardless of the considerable research in the area of successful supply chain management strategies, limited literature is available in connection with the Islamic Economics, in spite of its implementation and application in the financial development, banking systems, accounting, and corporate social responsibility. Islamic economics is referred to as the study of economics on the basis of Islamic Shariah or Islamic Law. It has been argued in the Islamic Economics, that its economic system functions on the notions of justice, fairness, and equitable distribution of wealth, which results in the economic progress and social welfare of countries and societies (Ahmed et al., 2018; Bukair, 2019).

Taking into consideration the emphasis of Islamic economic system to incorporate social issues, there is a lack of attention in this area regardless of the various opportunities that it provides as compared to the supply chain management. It has been presumed that the principles and social morality of Islamic economics is beneficial for developing new strategies and mechanisms for better supply management. The role of zakat cannot be ignored, although its optimal distribution has not been done by the Mosque (Ibrahim, 2015). As majority of the mosques have been using for religious speeches and praying in Indonesia. The zakat fitrah is collected and distributed by the mosques, once a year. The zakat fitrah is collected as 2.5 kg of rice, although it seems to be insufficient for satisfying the daily needs of the poor.

The LembagaAmil Zakat (LAZ) has been operating in Indonesia, involving other government bodies i.e. BadanAmil Zakat Daerah (BAZDA) and BadanAmil Zakat Nasional (BZANAZ). Two limitations are faced by these LAZ, i.e. the receivers' data is not available online, so the payer might not be able to choose who they want to send their Zakat, and the receivers' data is not Mosque based as well. Briefly, there is huge potential of Zakat in Indonesia, but unfortunately, it has not been optimally managed so far. This is the reason that potential of Zakat was not optimal to adopt for empowering communities. In order to deal with it, developmental efforts are needed which could encourage the improvement in the zakat collection and its distribution (Hakim et al., 2019).

This paper is an extension of the corporate social dimensions of supply chain management, since it aims to transverse the existing gap between Islamic economics and supply chain management through exploring the effectiveness of almsgiving or Zakat under SCM (Wong et al., 2015). It is assumed that Zakat can be employed as a reliable strategy for proper functioning of SCM strategies in Islamic countries, as it has significantly contributed in the economic and social development of people and countries through reduction in poverty. It is not necessary to keep Zakat limited for helping needy and poor people. However, it can be extended to all the society and for satisfying overall economic objectives and goals (Doktoralina et al., 2018). Thus, this distinctive nature of Islamic economies calls for the establishment of non-traditional SCM strategies which must be suitable and fit in terms of Islamic concepts. Therefore, the following research questions are designed for this study:

LITERATURE REVIEW

Numerous researches have been conducted regarding the functions and concepts of Zakat both from the conventional and Islamic economic viewpoints. Under the religion of Islam, it is obligatory for the Muslims to take out Zakat i.e. a specific sum of wealth, as per the condition and principles of Zakat, indicating the Islamic concern for social and economic justice in the society. In accordance with the Islamic principles, Muslims are obligated to annually take out 2.5% of their total accumulated wealth for the needy and poor members of the Muslim society, in order to maintain balance among the different classes that are part of the community (Shinsuke, 2014). It is not solely imposed on the wealth rather on silver, gold, farm products, goods and animals as well. However, Zakat is somehow similar to the taxation system in a way that both are collected with different economic and social perspective and purposes. Thus, it has always been considered as a different concept from tax that is generally imposed by the government to its citizens. In the context of Islamic Economics, taxation and Zakat systems are two distinct concepts in terms of both socialistic and capitalistic economies, as Zakat is exercised to serve with the purpose of morality and maintaining balance among the needs of individuals and community on equal grounds. Traditionally, the concept of Zakat has confined to the way of providing help to the needy and poor people. The collection of Zakat has been done by government bodies and volunteers for many years, who are appointed to collect money or any other forms of Zakat from the rich to the poor class. It somehow explains why several Westerner researchers mentioned this concept as a faith-based payments or financial worship, which acts as a tool for squeezing the gap among poor and rich Muslims community. Therefore, this perception of Westerners clearly signifies their understanding of the classic Islamic term of Zakat (Ntabe et al., 2015).

With the increasing complexities that have been occurring in the global political and economic world as well as in modern life, has given rise the need to reconsider several concepts of Islam such as Zakat. As a consequence of the neo-modernist and modernist implications about the Islamic concepts, which have influenced the literature since the end of the 20th century, the concept of Zakat has transposed as a basic instrument to achieve economic and social growth and to alleviate poverty. The concept of Zakat has previously taken as an obligatory ritual of Islamic religion. However, the recent approaches have been emphasizing more upon the comprehensive mechanism of Zakat which significantly plays its role

for the economic and social development of the economies. Different schools of Islamic rules and principles have extended the role of Zakat while analyzing and interpreting Zakat's role in modern times (Shinsuke, 2014). These functions include initiating small businesses, provision of health and education facilities to the poor, assisting in disaster relief activities both nationally and internationally, and initiating training and hiring programs. The change in Zakat's conceptual understanding indicates an immeasurable concern regarding its economic and social implications and effects. Consequently, Zakat has been linked with various economic practices and theories. No research study is available in the literature covering the relation among supply chain management and Zakat (Li *et al.*, 2019). However, it will not be wrong to state that there exists a gap in the Islamic literature particularly on the relation among Zakat and the supply chain management. Thus, this study aims to bridge the existing gap through exploring means to extend the functions of Zakat, so it could be used as a reliable form of supply chain management strategy.

The concept of SCM has emerged in the 1960s and has been a part of literature since 1982 (Silvestre, 2015), and gained enough attention by the research (Taticchi *et al.*, 2015). Since 2000, considerable attention has been given to the SCM by the practitioners and academics (Leng and Zailani, 2012). The significant impact of the concept of supply chain management has been highlighted over the past several years. In the modern times, instead of focusing on organizational performance, firms are required to focus more on the supply chain performance during a competitive business market. Numerous studies have suggested that firms need to be attentive towards supply chain performance, as it greatly affects the performance of an organization (Green Jr *et al.*, 2012; Hussain, 2019).

The supply chain management incorporates the system perspective within the firms and operates like an absolute system of coordination of processes. Thus, the supply chain value can only be made possible through association between the firms. However, firms can connect with each other through structural collaboration and exchange of information, where information exchange involves delivery and forecasting techniques, and inventory supervision, whereas structural collaboration involves outsourcing, vendor-controlled inventory, just-in-time, and co-location of factories. According to (Soosay and Hyland, 2015) demand change collaboration is described as a lifelong relationship among partners along the downstream supply chain, for adding value to the end-user. Adding of value to the customers is signalized by operations, information exchange, shared planning along the downstream partners, and cross-firm forecasting. Meanwhile, it is indicated that outsourcing provides paths for exercising SCM practices as business tools and also acts as a useful tool for making SCM practices to become more efficient and effective (Saad *et al.*, 2014).

Under supply chain management, upstream management and downstream management in order to provide services to the clients, directly coordinate with the supplier and the distributors, respectively (Olaogbebikan and Oloruntoba, 2017). This is generally provided in the form of capital, labor, information technology, financial assets, and other material resources through the process of SC. Keeping in view the profit maximization goal of an organization, the companies are required to keep its costs at the minimum level and draw benefits within the SC However, physical logistics are found to be relied on the information technologies (Ahi and Searcy, 2013), which further encourages cooperative arrangements. According to Power (2005) firms face shared fortune and inter-dependence when an extended organization develops a system of relationships, technologies, and processes. SCM environment becomes evident for firms with successful adoption of dynamic environment, involving increased risks. However, it also greatly influences the decision-making processes of business management (Tipu *et al.*, 2019).

A supply chain is referred to as a dynamic process which accounts for the constant flow of materials, resources, and information across different operational areas i.e. within and between the associates of supply chain (Ahi and Searcy, 2013). The associates are required to work cooperatively with their partners for the maximization of profits and satisfying the needs of their customers (ZareMehrjerdi and Alipoor, 2016). Nevertheless, managing different collaboration within a supply chain is a challenging task as several firms having their own objectives and resources operate within a supply chain (Hafeez *et al.*, 2018). The linkage among the multistage operations require decision making regarding functional areas and various tasks for handling problems and variabilities across the concurrent operations and organizational boundaries. However, the intentional moves of emphasis towards quick response, mass customization, and high-quality service are hard to attain without dynamic structures and multidimensional cooperation of supply chains (Gong *et al.*, 2019).

A supply chain includes downstream and upstream connections in the network of organizations, providing goods and services to the end users, and using various activities and processes that adds value to the customers (Srinivasan and Swink, 2018). Thus, a SC involves many firms including downstream connections, upstream connections, and the consumer. The nature of competition is increasing due to the present complex, unpredictable, and uncertain business environment. Increased competition signifies that companies are faced with greater challenges to minimize cost and to become more responsive towards the changing customer needs. Thus, with the rising competition and complexity, the SCM concept has appeared as an important issue in the business world. SCM serves to explore and implement strategies that improves flexibility while reducing cost under a competitive and complex market (Li and Wang, 2017; Basheer *et al.*, 2019).

In recent times, considerable attention has been gained by the SCM concept among the organizations, as the current business patterns sculpt the global businesses by delivering various opportunities for firms to become multinational organizations, consequently, increase the SC complexity. According to (Ivanov and Sokolov, 2013), supply chain is a

system of complete chain which is expected to undertake all SC partners in the chain of competitiveness. In todays' world, the competition does not solely exist among firms rather between the supply chains. Hence, the SCM became a well-known tool of management to assist firms in enhancing their level of competitiveness. It is a vital concept in the field of apparel and textile industry (Bryman and Cramer, 2012). Therefore, it enables the management to employ the SCM operations to control, coordinate, and plan the flow of capital, knowledge, and logistic operations of businesses. It also enhances the speed of response and uncertainty within the SC (Beske *et al.*, 2014).

Since the previous few decades, important decisions have been extended by the SCM, representing the growth of this field as a result of various researches. Benefits of SCM have been under discussion for years, indicating prerequisites to achieve certain benefits of SCM, i.e. process orientation, cross-functionality process management, information sharing, and customer-based satisfaction (Rikalović *et al.*, 2018; Gursoy, 2019). Supply chain management also poses several problems because of the nature of industry for instance, fragmentation of the whole SC process between its members, and specialization of work dynamic changes on the suppliers' side, and increased dependence on the performance of suppliers. Firms are required to adopt effective strategies of supply chain management, in order to stay competitive in the corporate global economy (Hazen *et al.*, 2018). Consequently, organizational performance is not exclusively dependent upon the actions and decisions that are taken within an organization.
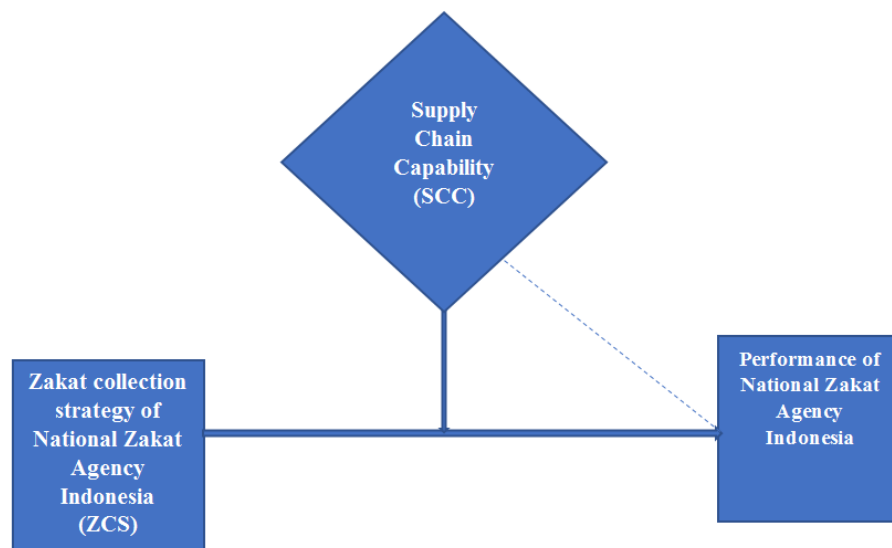

Figure 1: Conceptual framework

Based on the literature revived the study has drawn the following hypothesis

H1: Zakat collection strategy of National Zakat Agency Indonesia has significant impact on the performance of National Zakat Agency Indonesia.

H2: Supply chain capability of National Zakat Agency Indonesia has significant impact on the performance of National Zakat Agency Indonesia.

H3: Supply chain capability of National Zakat Agency Indonesia moderate the relationship between Zakat collection strategy of National Zakat Agency Indonesia and the performance of National Zakat Agency Indonesia.

The theoretical framework of the current study is shown in figure 1. The coordination theory along with the resource-based view are used as underpinning theories of the current study. These theories have been widely used to explain the factors and phenomena in explaining the issues related to supply chain management

METHODOLOGY

A survey method is employed for the present study, which is one of the common techniques of generating data for business research. The data is gathered by hand and through email. A cover letter is attached with the questionnaires that were sent through email, containing the purpose and objectives of current research, whereas respondents are explained and guided directly in case of direct questionnaires. Statistical Package for the Social Science (SPSS) v19 was used to analyze the data through employing quantitative technique. Descriptive method is employed for the assembling and interpretation of raw data. The data was further processed into a concise form. Several statistical methods were employed including correlation, multiple regression, and frequency distribution, for empirical testing of the data. For testing of hypothesis, multiple regression and Pearson correlation coefficient were used which reflect the direction as well as strength of the relation among independent and dependent variables. It also indicates the most significant factors among all the variables involved in the model.Pallant states that the relation among variables is represented by a value which lies between -1 to 1. In

addition, it also describes the degree of association among the variables, where 1 represents perfect positive association and -1 represents a perfect negative association, and 0 represents no association between the variables.

RESEARCH ANALYSIS AND DISCUSSION

The initial step in data analysis is to determine the validity and reliability of the instruments that are employed in the study. Thus, confirmatory factor analysis (CFA) was employed in this regard. In accordance with the rule of thumb, it is suggested that the value of the factor loadings must be higher than 0.50. For the present study, the sample size is chosen to be 276, as the sample size greatly determines the factor loading value. Therefore, all items exhibited greater than 0.40 factor loadings. According to researchers, a sample size that lies within the range of 30-150 are considered as normal and acceptable. However, the greater the sample size the greater the normality of data. Thus, data normality improves by increasing the sample size. Therefore, the next step is to check data normality through a test.

Table 2: CFA

	CR	AVE	Cronbach Alpha
ZCS	0.915	0.812	0.982
SCC	0.895	0.772	0.972
OP	0.932	0.617	0.876

The multicollinearity test indicates the presence of correlations among all the variables present in the model. However, it has been assumed that independent variables exhibit correlation with the dependent variable, to some extent. Thus, the correlation among the variables must not be high enough as this could lead to the occurrence of multicollinearity in the data. Multicollinearity is referred as the high degree of correlation among the two or more independent variables in the model. Researchers should take possible measures to avoid multicollinearity, as it can possibly affect the analysis of data and can result in impractical and misleading interpretations about the data. Multicollinearity for the present study is checked through regression technique, results exhibited no multicollinearity in the data.

Table 3. Discriminant Validity

	1	2	3
ZCS	**0.948**		
SCC	0.731	**0.798**	
OP	0.518	0.550	**0.801**

In past, researchers have also observed the non-response bias in several studies. Non-response bias occurs due to poor handling of questionnaires such as respondents having less time to respond properly to the survey, or lack of cooperation, unable to provide required information, or inability to get the response from the potential respondent. Thus, the selection of the prospective respondents needs to be ascertain for overcoming the non-response bias. In addition, a well-structured questionnaire should be developed during the designing process. Improperly filled questionnaires must be discarded during the process of data assembling. Factor analysis was employed to determine the validity of the construct. This is done by minimizing data for improved visibility, and to make it more manageable, and straightforward as well to make sure the suitability of each items of the model for each dimension. Two things must be considered while testing factor analysis, i.e. the interrelationships between the factors and the sample size, where the sample size must be greater than 150. However, Bartlett's Sphericity test was conducted to check the interrelationship among the items, which becomes suitable and significant if its p value comes out to be less than 0.5 (Akhir *et al.*, 2018; Aldulaimi and Abdeldayem, 2018; Ale, 2018; Hameed *et al.*, 2018). The direct relation between independent and dependent variables are shown in table 4.

Table 4. Direct Effect

	(β)	SD	T-value	P-Values
H1	0.111	0.035	3.161	0.002
H2	0.207	0.043	4.810	0.000

Moreover, Table 5 highlights the moderating effect of customer response in the relationship between the agile supply chain and external supply chain performance. These results of moderation show that for both moderation hypothesis, the t-value is above 1.96 and p-value is below 0.05 which accept H3 hypotheses

Table 5. In-Direct Effect through Moderation

	(β)	SD	T-value	P-Values
H3	0.321	0.051	3.161	0.000

The results of the study are in agreement with our proposed findings.

CONCLUSION

Regardless of the considerable research in the area of successful supply chain management strategies, limited literature is available in connection with the Islamic Economics, in spite of its implementation and application in the financial development, banking systems, accounting, and corporate social responsibility. Islamic economics is referred as the study of economics on the basis of Islamic Shariah or Islamic Law. It has been argued in the Islamic Economics, that its economic system functions on the notions of justice, fairness, and equitable distribution of wealth, which results in the economic progress and social welfare of countries and societies. The prime objective of the current study is investigating the nexus between organizational strategists, supply chain capabilities and organizational performance in Indonesia. In particular, the study is interested in examining the direct relationship between Zakat collection strategy of National Zakat Agency, Supply chain capability of National Zakat Agency Indonesia and the performance of National Zakat Agency Indonesia. In addition to that the current study is also interested in examining the moderating role Supply chain capability of National Zakat Agency Indonesia the relationship between Zakat collection strategy of National Zakat Agency Indonesia and the performance of National Zakat Agency Indonesia. The study is among the pioneering studies on the issue of supply chain in zakat management and on the performance of specialized firms in zakat collection industry. The study has employed hierarchical regression model to achieve the research objective of the current study. Apparently, several non-traditional and different supply chain management strategies have been witnessed since the past few years. These were developed for the effective utilization of resources and to improve cost savings, which would result in the competitive as well efficient flow of goods and services. The current study which in author knowledge is among few pioneering studies on this issue, will be helpful for supply chain experts, operation managers, academicians, researchers and other policy makers in formulating policies. As the study has revealed the fact that in todays' world, the competition does not solely exist among firms rather between the supply chains. Hence, the SCM became a well-known tool of management to assist firms in enhancing their level of competitiveness. It is a vital concept in the field of apparel and textile industry.

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