

THE FIRM'S STRATEGIC ORIENTATIONS AND ENVIRONMENTAL UNCERTAINTIES AS ANTECEDENTS OF ITS SUPPLY CHAIN AGILITY

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Abstract

Purpose: The main objective of the current study is exploring the impact of firm's strategic orientation on the supply chain agility. In addition to that the current study has examined the impact of environmental uncertainties on the agile supply chain. Therefore, the study is among the pioneering studies on the issues. This research study contributes to the existing literature.

Methodology: The research has worked on the need for analyzing the influence of supply chain and market orientation on supply chain agility of a firm so, current study has used hierarchical regression as statistical tool to answer the research questions raised in this study and research objectives envisaged in the current study.

Results: The findings of the current study have provided support to with the proposed. The results have shown that the along with customer focus approach the firms are also following the production focus approach. The findings of the study will be helpful for policy makers in understanding the issues related to integration supply chain management. In author knower this is among few pioneering studies on these issues.

Key words: *strategic orientation, environmental, supply chain.*

INTRODUCTION

In the current supply chain management, one of the prominent issues is referred to be Agility. Although the concept is of great importance but there is lack of theory development at firm level on supply chain agility. The history of supply chain agility defines it to be the capability of a firm to make changes in the operations and tactics of supply chain (Gligor and Holcomb, 2012; Inusah, 2018; Ipole *et al.*, 2018). At operational level, most of the research studies have addressed this issue (Swafford *et al.*, 2008; Chan *et al.*, 2017). The researchers (Gligor and Holcomb, 2012) have identified the need for more research on the concept of supply chain agility at strategic level for clear understanding.

The role of supply chain and market orientation is required to be investigated for the achievement of supply chain agility (Eckstein *et al.*, 2015). Working on the similar aspect, this research has extended the work of (Gligor *et al.*, 2015) in which the different managerial orientations have a key role in the achievement of supply chain agility. A direct impact is created by market orientation on supply chain agility of firm in this research. For achieving supply chain agility, it is not sufficient to be market oriented. However, it requires supply chain orientation as well (Braunscheidel and Suresh, 2009).

This research study contributes to the existing literature. The research has worked on the need for analyzing the influence of supply chain and market orientation on supply chain agility of a firm (Gligor *et al.*, 2015). The initial unit is provided by this contribution of the study in explaining the concept of supply chain agility at strategic level. One of the basic purposes of any research is to control interest for increasing or decreasing occurrences. Understanding the history of supply chain agility of a firm makes an organization able to control its competitive ability at desired level. Additional concepts related to marketing within the theory on supply chain management have been tested (Fawcett *et al.*, 2011). In this way, the traditional concepts related to these principles are expanded adding to literature as well. A more holistic framework for analysis is required for understanding the complex phenomenon of supply chain.

The importance of supply chain concepts within the marketing context is considered an established discipline. This supports in strengthening the supply chain management of a firm as a discipline and business function. The role of marketing cannot be neglected. Now a day, marketing has become an essential strategy to survive in the market. The role of marketing has been considered as a source of achieving competitive advantage by the researchers (Gligor *et al.*, 2016; Islam *et al.*, 2018; Jamal *et al.*, 2018). This claim has been supported by the examples from industry. Organizations having key focus on the customers such as Amazon and Apple have achieved competitive advantage over their competitors by working on customer satisfaction. Consumers are considered the party guests by the CEO of Amazon, Jeff Bezos. This signifies the importance of customers for the company. The founder claims to be host of the customers. Making customer experience better in every possible way is the responsibility of the company (Eikenberry, 2013). Several challenges in supply chain can exist by offering excessive amount of products and services. Volkswagen provided its polo brand to the customers of UK comprising of about 52.6 billion configurations in the auto industry (Hafeez *et al.*, 2018). A firm's supply chain has very crucial role in establishing the marketing strategies (Hafeez *et al.*, 2018). For successful implementation of market strategies, there is need for the market-oriented firms to establish or achieve a high level of agility in their supply chain.

This study expands the research by focusing on the integration of demand and supply (Hafeez *et al.*, 2018). This has been done by signifying the association between the supply chain management constructs and the marketing constructs at strategic level. The marketing constructs include market orientation and the others include supply chain agility of firm and supply chain orientation. The study makes implications for the management as well (Felipe Scavarda *et al.*, 2010). This research study is based on the theoretical concepts of Strategy Structure Performance paradigm and Resource Based View (RBV). Based on the theoretical concepts, hypotheses have been developed in this research along with theoretical framework (Esper *et al.*, 2010). After stating the empirical approach, theoretical background and formulation of hypotheses has been done. Results of the research analysis are presented followed with its implications and limitations. New areas for research have been suggested as well.

LITERATURE REVIEW

The relation between Environmental Uncertainty and Strategic Orientations

The strategy of a firm developed by considering the external environmental factors is indicated by SSP. This leads to the establishment of organizational structure and business processes (Gligor, 2014). Environmental uncertainty refers to the degree of instability and rate of change in the environment, which has become a key concern for the researchers (Jüttner *et al.*, 2007). In the environment with low level of uncertainty, there is less need for agility as claimed by researchers (Jüttner *et al.*, 2007; Sebastiao and Golicic, 2008). In relation with SSP, the basic principle of this study is the indirect influence created by environmental uncertainty (ENVU) on strategic development of supply chain management of firm (FSCA) through the mediating role of strategic orientations of firm toward the external environment. In the next part, two types of orientations of firm have been discussed, which are relevant to the supply chain management.

The ability of a firm to disseminate, respond and make organization wide generation to the market intelligence is referred as Market Orientation (MO) (Basheer *et al.*, 2019). The needs and expectations of customers are tried to analyze by the market-oriented firms. In response, various solutions are made through strategic development for responding to the needs of customers. Different firms reflect different degrees of MO, which can be regarded as a continuum (Qrunfleh and Tarafdar, 2014). While selecting MO, the firms make a distinct choice from strategic perspective. The research also claims it to be a fit among the strategies and environment of businesses (Prajogo, 2016). According to (Fraj *et al.*, 2015) there is less need for market orientation by the firms who operate in the markets with low uncertainty. This is because of the fact that these firms respond to a fixed preference of customer (Qu and Ennew, 2008). The demands of customers are stable in such markets. Alternatively, when customers' demand is unstable, there is need for the firms to understand the changes linked with their behavior. In this way, adjustments can be made in product development and customer services as required. It is not claimed that an environment with low uncertainty does not need a MO (Altinay *et al.*, 2016). However, it is less essential. Empirical evidences have been provided by (Braunscheidel and Suresh, 2009) for positive association among MO and business environment. Considering the facts, the following research hypothesis has been developed:

Thus, it is proposed that:

H1: Firm's level of MO is directly associated with Firm's degree of ENVU in a direct way.

It has been demonstrated by research that in order to achieve market competitiveness, MO is not considered sufficient (Min *et al.*, 2007). However, Supply chain Orientation when used in combination with MO can result in the achievement of competitive advantage. Supply Chain Orientation is the use of strategic implications, system and well-devised activities by the organizations to manage the effective flow in supply chain.

The researchers, (Min *et al.*, 2007) have highlighted the need for implementing supply chain management and strategic awareness in a firm or organization. For effective management of supply chain, SCO emerges as an important concept. It has been revealed by the firms working in changing environment that supply chain management need to be done through strategic orientation with regard to the environmental distinctiveness (Sebastiao and Golicic, 2008). There is need for great emphasis on the high level of ENVU in order to respond towards market changes. The strategy and environment of a firm must fit with each other for its survival. The following research hypothesis has been developed:

H2: The degree of ENVU of a firm is directly associated with the SCO level of a firm in a positive manner.

Relation between MO and FSCA

The way in which internal capabilities of a firm can be established to achieve competitive advantage has been provided by the RBV. Competitive advantage is achieved by the firms who have unique resources and capabilities that cannot be easily imitated by others. These valuable resources and capabilities result in the sustaining of competitive edge by the firms. One of the unique resources is MO, when combined with other resources such as SCO (Min *et al.*, 2007). Firms can achieve great advantages through this, FSCA has been regarded as a distinct resource arising from MO, in this research study. The development of dynamic capabilities is influenced by strategic orientation as suggested by previous research on dynamic capabilities (Armario *et al.*, 2008).

Considering MO to be the direct antecedent of FSCA, the theoretical support is provided by SSP (strategy-structure-performance) paradigm. Several capabilities and processes are involved in MO strategy that is required to respond to the

needs of customers. For this, MO is considered an important strategy (Taghian, 2010). Agility in supply chain is the ability, which can assist the firms in responding to the changing needs of customers. Firms attain greater capabilities for fulfilling the customer needs through increase in MO. This increases the FSCA capabilities. Additional support is offered through literature on supply chain agility for associating FSCA with MO. It is crucial to identify the changes against which a firm has to respond. Without proper recognition of the changes in the external environment, firm cannot devise an effective response strategy Demand of customers need to be recognized, which is mandatory for agility (Verhees and Meulenber, 2004). Market intelligence across the organization is required by MO. FSCA is influenced by MO because it supports the identification of environmental changes. The following research hypothesis has been developed.

H3: The MO level of a firm is directly associated with the level of supply chain agility in a positive manner.

Relation between SCO and FSCA

The structural and strategic aspects of SCO are differentiated by research on supply chain (Lu *et al.*, 2012). A system approach is stressed by SCO strategy to observe the supply chain from a perspective rather than constituent part. This view involves the synchronization, integration and convergence of inter and intra strategic and operational capabilities of the firm (Brusset, 2016). The development of processes and structure of organization is developed through SCO's strategic aspect within the paradigm of SSP It is determined through the structural development the way in which resource allocation develops the capabilities and then these are organized and coordinated (Li *et al.*, 2009). Additional theoretical support is provided by the paradigm of SSP to develop the capability of FSCA by considering SCO as an antecedent.

Supply chain agility cannot be achieved alone by the firms without the other supply chain members. Supply chain members need to possess the ability of aligning their capabilities to respond towards changes in consumer demand and market (Esper *et al.*, 2010). According to (Min *et al.*, 2007) an agile response is referred as inter-firm cooperation. A network of supply chain members should be formed. A high FSCA level is achieved by the firms who manage their supply chains. For management of supply chain, SCO is required. One of the supply chain management's elements is FSCA. The following research hypothesis has been formulated:

H4: The SCO level of a firm is directly related to the level of supply chain agility in a positive manner.

Relation between MO and SCO

In order to improve the explanatory power of the theoretical model in this research, the relation between MO and SCO has been analyzed. However, it is not the focus of current research study. Organizational learning as part of MO can be achieved through distributors, suppliers and customers, which are the external partners (Min *et al.*, 2007). The information, which is not available to the competitors, is tried to gain by the partners in alliances. The relation with the customers and suppliers cannot be eliminated from MO. This leads to the development of a collective approach for a system. Other than customers, the supply chain members as well as other exogenous elements are included in markets. These factors influence the preferences and needs of customers. The behavior of consumers needs to be understood by the firms who are market oriented.

Firms who are market-oriented firms need to be encouraged for acquiring information from their partners in supply chain and to become more oriented (Verhees and Meulenber, 2004). Literature has found that commitment, trust of partners and cooperative norms are influenced through MO. (Li *et al.*, 2009) have conceptualized these factors to be SCO elements. A base of knowledge is acquired by the market-oriented firms for effective flow of strategies and information across the supply chain. Moreover, the positive influence created by MO on SCO is empirically supported by (Esper *et al.*, 2010). The following research hypothesis has been developed:

H5: the MO level of a firm is directly associated with the level of SCO in a positive manner.

METHODOLOGY

The research method adopted for this study is based on primary research approach. A questionnaire survey has been used in this research as a way of collecting primary data. The questionnaire was distributed through email and directly. The questionnaire was developed with a set of well-designed questions. The questionnaire was attached with a letter in which the objectives and reasons for conducting the research were stated. Research objectives were directly conveyed when the questionnaire was distributed through hands. For statistical data analysis, SPSS 20 was used. For summarizing the information collected through primary research, descriptive statistics were generated.

Quantitative analysis was conducted. In order to achieve the desired results, several statistical tools were used such as correlation analysis, multiple regression, frequency distribution, etc. Pearson correlation coefficient was estimated for hypothesis testing. This gave the relationship direction among the variables. The variables having greater effects as compared with the other variables in the model are identified. The range of association is usually -1 to +1 reflecting the relation between the dependent and explanatory variables. A perfectly negative relation is reflected when value is -1 and a perfect positive relation when it is 1. When the value comes out to be 0, there is not association among the variables

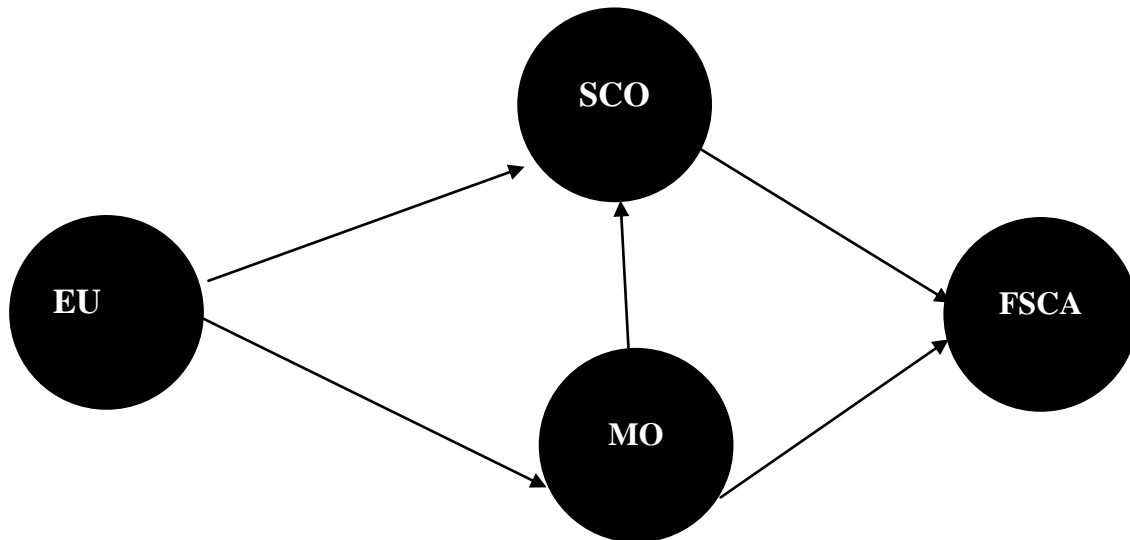


Figure 1: Conceptual framework

RESULTS

For statistical analysis, SPSS 20 was used. The hypotheses were tested. For identifying any outliers in the data, data screening was done. A normality test was conducted to check the normality of data. In case of missing value, it is exchanged with the mean value. For collected responses, t-test is performed. For determining the structure of association and strength among the variables of mode, factor analysis was used. Factor analysis can be used for estimating the validity of the variables. The basic step for factor analysis is to have sufficient size of sample that need to be about 100 or greater than this. If the sample size is lesser, it can give unreliable results. This research study has taken a sufficient sample size. The data has been minimized to manageable size through factor analysis.

Cronbach alpha values have been estimated for checking the reliability of variables. In order to validate that all the measured items have high factor loadings and reliability, validity test was performed. The ability of an item to estimate what it should estimate is referred as validity.

The mean and standard deviation of the data is estimated is descriptive analysis. Several advantages are linked with descriptive study. The method can determine the variables and statistical techniques along with sample characteristics. It is also estimated whether the variables address the research questions or objectives without violating any assumption. For determining the interconnectedness among the variables, the correlation among the variables is estimated. The value of correlation comes out to be 0.9 or above, this directs towards the issue of multicollinearity. For determining direct relation among the variables, bivariate correlations are obtained. The unbiased relation among the dependent and independent variable are determined through multiple regression. The relative important of multiple independent variables is obtained through values of regression coefficients. To identify any variance, the independent and control variables were regressed. The degree of change in the dependent variable caused by the independent variable is determined through the size of variable in regression or coefficient value.

Hierarchical multiple regressions were employed hypothesis testing. This method has estimated the moderation of dependent and independent variable. Data linearity, error terms and data normality were also checked. The technique works for theoretical variables. Therefore, it can be used as a significant technique for predicting the dependent variable with one or more explanatory variables.

Table 1. Reliability

	CR	AVE	Cronbach Alpha
EU	0.702	0.737	0.924
SCO	0.960	0.871	0.893
MO	0.802	0.832	0.916
FSCA	0.891	0.801	0.993

There are four steps involved in hierarchical multiple regression. These steps are used to analyse the percentage change in one variables caused by percentage change in the other variable, when the variables are systematically added to the model. The steps performed for variable testing of trust as a mediating factor have been explained. The effect of control variables has been examined. The direct effects of the explanatory variables have been checked (Hair Jr et al., 2014). The mediating variable of Trust has been added to the model. It has been checked whether the mediating factor creates a significant impact on the dependent variable or not. The dependent variable is Individual Performance. When the value of R² increases with the changes in F-value, the variable exhibits moderating impact. When the value of R² increases significantly, the

moderating effect of variable is estimated. The presence and absence of the mediating effects of a variable are assessed by the t and p values of regression coefficients.

Factor analysis involves the reduction of data for summarising the structure of variable. The other two categories of factor analysis are explanatory and confirmatory factor analysis. The correlation structure against the set structure is analyzed in the confirmatory factor analysis. It is estimated whether the criterion of goodness of fit is satisfied or not. The correlation structure of the data is assessed in exploratory factor analysis. It is also regarded as reduction process for the data. The variables supportive in the estimation of factors included in the model are also identified. It is observed in confirmatory factor analysis whether there exists any correlation among the observed variables and the factors are reliable. Moreover, the estimation of every factor is supported by the observed variables. For internal reliability and discovering the structuring factors, EFA can be used. However, the method is not good for theory testing. The association among the variables can be simplified and described through this analysis. For theory testing, CFA approach is considered effective.

When the p-value for Bartlett Sphericity is less than 0.05, it reflects that the factor analysis is effective. The value needs to be above 0.6 for Kaiser Meyer-Oklin case. When the value is above 0.6, it reflects there is need to add more variables in the model or collect more data. The sampling adequacy measure should be greater than 0.50. It is suggested to eliminate the variables having item loadings lesser than 0.05. In measuring the reliability of an item, it is estimated whether there is any error or bias. It is ensured through reliability test that the estimating items are stable at a given time. The value lies within 0-1. Higher internal consistency is indicated through the high value of Cronbach alpha. Therefore, the internal consistency among the variables is determined through Cronbach alpha. The low range value of reliability test came 0.717 and high range as 0.917. To observe the value of consistency, a rule of thumb is used. According to rule of thumb, the acceptable value is considered to be 0.50 or above. When the value is below 0.05, it is not accepted. The desired range of value for reliability is 0.5-0.6 (Nunally, 1967).

Table 2. Direct Effect

	(β)	SD	T-value	P-Values
H1	0.211	0.135	3.211	0.000
H2	0.357	0.152	3.678	0.000
H3	0.321	0.178	3.321	0.000
H4	0.342	0.165	3.234	0.000
H5	0.357	0.152	3.678	0.000

CONCLUSION

This study expands the research by focusing on the integration of demand and supply (Johar *et al.*, 2017; Hafeez *et al.*, 2018; Jennifer and Chi, 2018; Jraid and Alhanaqta, 2018). This has been done by signifying the association between the supply chain management constructs and the marketing constructs at strategic level. The marketing constructs include market orientation and the others include supply chain agility of firm and supply chain orientation. The study makes implications for the management as well (Felipe Scavarda *et al.*, 2010). This research study is based on the theoretical concepts of Strategy Structure Performance paradigm and Resource Based View (RBV). Based on the theoretical concepts, hypotheses have been developed in this research along with theoretical framework (Esper *et al.*, 2010). After stating the empirical approach, theoretical background and formulation of hypotheses has been done. Results of the research analysis are presented followed with its implications and limitations. New areas for research have been suggested as well. A firm's supply chain has very crucial role in establishing the marketing strategies (Hafeez *et al.*, 2018). For successful implementation of market strategies, there is need for the market- oriented firms to establish or achieve a high level of agility in their supply chain. For effective management of supply chain, SCO emerges as an important concept. It has been revealed by the firms working in changing environment that supply chain management need to be done through strategic orientation with regard to the environmental distinctiveness. The main objective of the current study is exploring the impact of firm's strategic orientation on the supply chain agility. In addition to that the current study has examined the impact of environmental uncertainties on the agile supply chain. Therefore, the study is among the pioneering studies on the issues. This research study contributes to the existing literature. The research has worked on the need for analyzing the influence of supply chain and market orientation on supply chain agility of a firm So, current study has used hierarchal regression as statistical tool to answer the research questions raised in this study and research objectives envisaged in the current study. The findings of the current study have provided support to with the proposed. The results have shown that the along with customer focus approach the firms are also following the production focus approach. The findings pf the study will be helpful for policy makers in understanding the issues related to integration supply chain management. In author knower this is among few pioneering studies on these issues. Three different environmental dimensions are suggested by this study, that imparts in environmental changes or uncertainty namely; complexity, munificence, and dynamism. Where dynamism accounts for the unpredictability and volatility of business situations resulting from changes in customer preferences, changes in demand for product or supply, and technology .Industries having high demand uncertainty are said to be more dynamic, which gives rise to inefficiencies in supply chain, and, However, environmental munificence explores a degree of sustained growth which is supported by the environment. In these environments, companies strive to implement structures and strategies that could help firms to avail growth opportunities. Little guidance

has been provided by the literature regarding how growth capacity of environment affects the relation between performances.

REFERENCES

- Altinay, L., M. Madanoglu, G. De Vita, H. Arasli and Y. Ekinici, 2016. The interface between organizational learning capability, entrepreneurial orientation, and sme growth. *Journal of Small Business Management*, 54(3): 871-891. <https://doi.org/10.1111/jsbm.12219>
- Armario, J.M., D.M. Ruiz and E.M. Armario, 2008. Market orientation and internationalization in small and medium-sized enterprises. *Journal of Small Business Management*, 46(4): 485-511. <https://doi.org/10.1111/j.1540-627X.2008.00253.x>
- Basheer, M., M. Siam, A. Awn and S. Hassan, 2019. Exploring the role of tqm and supply chain practices for firm supply performance in the presence of information technology capabilities and supply chain technology adoption: A case of textile firms in pakistan. *Uncertain Supply Chain Management*, 7(2): 275-288. <https://doi.org/10.5267/j.uscm.2018.9.001>
- Braunscheidel, M.J. and N.C. Suresh, 2009. The organizational antecedents of a firm's supply chain agility for risk mitigation and response. *Journal of operations Management*, 27(2): 119-140. <https://doi.org/10.1016/j.jom.2008.09.006>
- Brusset, X., 2016. Does supply chain visibility enhance agility? *International Journal of Production Economics*, 171: 46-59. <https://doi.org/10.1016/j.ijpe.2015.10.005>
- Chan, A.T., E.W. Ngai and K.K. Moon, 2017. The effects of strategic and manufacturing flexibilities and supply chain agility on firm performance in the fashion industry. *European Journal of Operational Research*, 259(2): 486-499. <https://doi.org/10.1016/j.ejor.2016.11.006>
- Eckstein, D., M. Goellner, C. Blome and M. Henke, 2015. The performance impact of supply chain agility and supply chain adaptability: The moderating effect of product complexity. *International Journal of Production Research*, 53(10): 3028-3046. <https://doi.org/10.1080/00207543.2014.970707>
- Eikenberry, K.W., 2013. The limits of counterinsurgency doctrine in afghanistan: The other side of the coin. *Foreign Aff.*, 92: 59.
- Esper, T.L., C. Clifford Defee and J.T. Mentzer, 2010. A framework of supply chain orientation. *The International Journal of Logistics Management*, 21(2): 161-179. <https://doi.org/10.1108/09574091011071906>
- Fawcett, S.E., C. Wallin, C. Allred, A.M. Fawcett and G.M. Magnan, 2011. Information technology as an enabler of supply chain collaboration: A dynamic-capabilities perspective. *Journal of Supply Chain Management*, 47(1): 38-59. <https://doi.org/10.1111/j.1745-493X.2010.03213.x>
- Felipe Scavarda, L., A. Reichhart, S. Hamacher and M. Holweg, 2010. Managing product variety in emerging markets. *International Journal of Operations & Production Management*, 30(2): 205-224. <https://doi.org/10.1108/01443571011018716>
- Fraj, E., J. Matute and I. Melero, 2015. Environmental strategies and organizational competitiveness in the hotel industry: The role of learning and innovation as determinants of environmental success. *Tourism Management*, 46: 30-42. <https://doi.org/10.1016/j.tourman.2014.05.009>
- Gligor, D.M., 2014. The role of demand management in achieving supply chain agility. *Supply Chain Management: An International Journal*, 19(5/6): 577-591. <https://doi.org/10.1108/SCM-10-2013-0363>
- Gligor, D.M., C.L. Esmark and M.C. Holcomb, 2015. Performance outcomes of supply chain agility: When should you be agile? *Journal of Operations Management*, 33: 71-82. <https://doi.org/10.1016/j.jom.2014.10.008>
- Gligor, D.M. and M.C. Holcomb, 2012. Understanding the role of logistics capabilities in achieving supply chain agility: A systematic literature review. *Supply Chain Management: An International Journal*, 17(4): 438-453. <https://doi.org/10.1108/13598541211246594>
- Gligor, D.M., M.C. Holcomb and J. Feizabadi, 2016. An exploration of the strategic antecedents of firm supply chain agility: The role of a firm's orientations. *International Journal of Production Economics*, 179: 24-34. <https://doi.org/10.1016/j.ijpe.2016.05.008>
- Hafeez, M.H., M.F. Basheer, M. Rafique and S.H. Siddiqui, 2018. Exploring the links between tqm practices, business innovativeness and firm performance: An emerging market perspective. *Pakistan Journal of Social Sciences (PJSS)*, 38(2): 485-500.
- Hair Jr, J.F., M. Sarstedt, L. Hopkins and V.G. Kuppelwieser, 2014. Partial least squares structural equation modeling (pls-sem) an emerging tool in business research. *European Business Review*, 26(2): 106-121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Inusah, N., 2018. Toda-yamamoto granger no-causality analysis of stock market growth and economic growth in ghana. *Journal of Accounting, Business and Finance Research*, 3(1): 36-46. <https://doi.org/10.20448/2002.31.36.46>
- Ipole, P.A., A.O. Agba and J.T. Okpa, 2018. Existing working conditions and labour unions agitations in cross river state

- civil service, nigeria. *Global Journal of Social Sciences Studies*, 4(1): 39-51.
<https://doi.org/10.20448/807.4.1.39.51>
- Islam, S., T. Nahar, J. Begum, M. Khatun and M. Hossain, 2018. Marketing and financial analysis of milk production-a value chain perspective. *Asian Development Policy Review*, 6(1): 32-40.
<https://doi.org/10.18488/journal.107.2018.61.32.40>
- Jamal, S.H., S. Amat, N. Subhi and M.F.M. Ghazali, 2018. Competency of counsellors in handling gay and lesbian clients in malaysia. *International Journal of Asian Social Science*, 8(9): 638-650.
<https://doi.org/10.18488/journal.1.2018.89.638.650>
- Jennifer, C. and Y.N. Chi, 2018. Profiling saltwater recreational anglers toward the threats of marine environment. *International Journal of Management and Sustainability*, 7(2): 72-82. <https://doi.org/10.18488/journal.11.2018.72.72.82>
- Johar, M., M.T. Hidayat and R.A. Latif, 2017. An invention of baton dance? Exercise regime on obesity diagnosis among sedentary adults. *International Journal of Asian Social Science*, 7(1): 54-62.
<https://doi.org/10.18488/journal.1/2017.7.1/1.1.54.62>
- Jraid, O. and M. Alhanaqta, 2018. Cultural diversity in western asia: Econometric modeling of trust and ranking by homogeneity. *Asian Journal of Economic Modelling*, 6(2): 121-134.
<https://doi.org/10.18488/journal.8.2018.62.121.134>
- Jüttner, U., M. Christopher and S. Baker, 2007. Demand chain management-integrating marketing and supply chain management. *Industrial marketing management*, 36(3): 377-392.
<https://doi.org/10.1016/j.indmarman.2005.10.003>
- Li, X., T.J. Goldsby and C.W. Holsapple, 2009. Supply chain agility: Scale development. *The International Journal of Logistics Management*, 20(3): 408-424. <https://doi.org/10.1108/09574090911002841>
- Lu, Y., S. Ramamurthy and G. Goszczynski, 2012. An aging assessment on ex-service alloy 800 steam generator tubing. *Nuclear engineering and design*, 242: 91-99. <https://doi.org/10.1016/j.nucengdes.2011.09.040>
- Min, S., J.T. Mentzer and R.T. Ladd, 2007. A market orientation in supply chain management. *Journal of the Academy of Marketing Science*, 35(4): 507. <https://doi.org/10.1007/s11747-007-0020-x>
- Prajogo, D.I., 2016. The strategic fit between innovation strategies and business environment in delivering business performance. *International Journal of Production Economics*, 171: 241-249.
<https://doi.org/10.1016/j.ijpe.2015.07.037>
- Qrunfleh, S. and M. Tarafdar, 2014. Supply chain information systems strategy: Impacts on supply chain performance and firm performance. *International Journal of Production Economics*, 147: 340-350.
<https://doi.org/10.1016/j.ijpe.2012.09.018>
- Qu, R. and C.T. Ennew, 2008. Does business environment matter to the development of a market orientation? *Journal of Travel & Tourism Marketing*, 24(4): 271-283. <https://doi.org/10.1080/10548400802156745>
- Sebastiao, H.J. and S. Golicic, 2008. Supply chain strategy for nascent firms in emerging technology markets. *Journal of Business Logistics*, 29(1): 75-91. <https://doi.org/10.1002/j.2158-1592.2008.tb00069.x>
- Swafford, P.M., S. Ghosh and N. Murthy, 2008. Achieving supply chain agility through it integration and flexibility. *International Journal of Production Economics*, 116(2): 288-297.
<https://doi.org/10.1016/j.ijpe.2008.09.002>
- Taghian, M., 2010. Marketing planning: Operationalising the market orientation strategy. *Journal of marketing Management*, 26(9-10): 825-841. <https://doi.org/10.1080/02672571003683813>
- Verhees, F.J. and M.T. Meulenbergh, 2004. Market orientation, innovativeness, product innovation, and performance in small firms. *Journal of small business management*, 42(2): 134-154.
<https://doi.org/10.1111/j.1540-627X.2004.00102.x>