

## Contents lists available at **Journal IICET**

## JPPI (Jurnal Penelitian Pendidikan Indonesia)

ISSN: 2502-8103 (Print)ISSN: 2477-8524(Electronic)

Journal homepage: <a href="https://jurnal.iicet.org/index.php/jppi">https://jurnal.iicet.org/index.php/jppi</a>



# The effect of supply chain management on competitive advantage and organizational performance: evident from MSME in food sector

Budi Suprapto\*), Deonosius Ari Wisnu Wijaya

Atma Jaya University Yogyakarta, Indonesia

#### **Article Info**

#### Article history:

Received Mar 08<sup>th</sup>, 2022 Revised May 21<sup>st</sup>, 2022 Accepted Sep21<sup>st</sup>, 2022

#### Keyword:

Supply Chain Management Competitive Advantage Organizational Performance

#### **ABSTRACT**

This study was conducted to determine the effect of supply chain management on competitive advantage and organizational performance. The sample of this study is the owner or manager of micro, small and medium enterprises (MSMEs) in the food industry sector in Magelang Regency. Data was collected by distributing questionnaires directly to 330 respondents. The research framework and hypotheses are tested by using regression analysis. The results of this study indicate that there is an effect of supply chain management on competitive advantage and organizational performance, and there is an effect of competitive advantage on organizational performance. However, the effect of supply chain management on organizational performance shows the effect directly or without intervening variables.



© 2022 The Authors. Published by IICET.

This is an open access article under the CC BY-NC-SA license (https://creativecommons.org/licenses/by-nc-sa/4.0)

## **Corresponding Author:**

Budi Suprapto, Atma Jaya University Yogyakarta Email: budi.suprapto@uajy.ac.id

#### Introduction

In the current era of globalization, competition in the business and economic world is increasingly competitive and tight. In the face of such increasingly fierce competition, organizations need to move quickly in manufacturing, assembly, distribution and supply (Fathian at all, 2007; Chaghooshi et al, 2015; Bowersox et al, 2019; Richey et al, 2022). Along with the development of the business world, the supply chain approach began to develop and change (Dolgui, A., & Ivanov, D., 2021; Delbufalo, E. 2022). Meanwhile, the one way to deal with these global challenges and pressures is to develop competitive advantage (Azar et al, 2010; Chaghooshi et al, 2015; Flöthmann et al, ;2018; Gökalp, E., Gökalp and Çoban, 2022).

Competitive advantage is basically a process where the organization can create a defensive position that allows the organization to have a difference or advantage over competitors (Karimi and Rafiee, 2014; Heizer and Render, 2021; ). There are at least four dimensions of competitive advantage, namely price or cost, quality, delivery reliability, and flexibility. Another element that companies must pay attention to in global business competition is organizational performance. According to Karimi and Rafiee (2014), organizational performance is how well the organization can achieve market-oriented goals and financial goals (Anwar and Abdullah, 2021, Jacobs and Chase, 2021).

The practice of supply chain management itself is very much needed in increasing the effectiveness and efficiency of the company (Bowersox et al, 2019; Habib et al, 2021). Supply chain management is an

important field in business because it is directly related to the entire production process from beginning to end of product creation. Supply chain management according to Jacobs and Chase (2021) is the design, operation, and improvement of systems with the aim of creating and creating the company's main products and services. Well-integrated supply chain management can have a direct impact on competitive advantage and organizational performance (Li et al 2006, Chaghooshi et al, 2015, Min et al, 2019). Effective and efficient performance can be created if the organization has a good supply chain strategy planning (Tracey, 2005, Duong, 2019, Tarigan 2019).

#### **Supply Chain**

Supply Chain Management is a complex process that requires the coordination of many activities so that the delivery of goods and services from suppliers to customers is carried out efficiently and effectively for all parties involved (Min et al, 2019; Tracey, 2005; Delbufalo, 2022; Dolgui an Ivanov, 2021). Supply Chain Management is the central idea of supply chain management to manage the flow of information, materials, and services from raw material suppliers through factories and warehouses to final consumers (Dolgui an Ivanov, 2021). In addition, Supply Chain Management (SCM) is all the efforts involved in different entrepreneurial processes that create value in the form of products and services for end consumers (Uddin, 2019; Habib, 2021).

Supply chain management describes all supply chain activities, starting from raw materials and ending with customer satisfaction (Heizer and Render, 2021). Supply chain management practice is a set of activities undertaken by an organization to promote more effective management of its supply chain (Li et al., 2006, Thatte, at al., 2013; Dolgui and Ivanov, 2021).

#### Competitive advantage

Competitive advantage exists when a company has a product or service that its target market customers perceive as better than its competitors. (Delbufalo, 2022). Competitive advantage consists of the results of managerial actions and decisions that result in superior organizational performance when compared to their competitors. (De Guimaraes et al, 2018). Competitive advantage can be built through product differentiation, cost leadership, and rapid response (Heizer and Render, 2021).

Competitive advantage is a distinctive competence that distinguishes an organization from its competitors, thereby giving the organization an edge in the market (Tracey et al., 1999, Tracey et al., 2005. Thatte, at al., 2013). According to Li et al., (2006), Chaghooshi et al., (2015), competitive advantage is a position that can be maintained by an organization over its competitors.

#### **Organizational Performance**

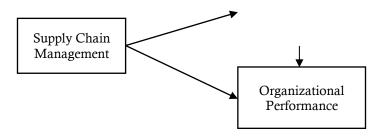
Performance is defined as the ability (both physical & psychological) to carry out certain tasks in a certain way that can be measured on a high, medium or low scale (Uddin et al., 2013). Organizational performance refers to how well an organization achieves its financial and market-oriented goals (Qrunfleh and Tarafdar, 2014 and Habib et al, 2021).

Karimi and Rafiee (2014) and Anwar and Abdullah (2021) explain that organizational performance refers to how well the organization achieves its market-oriented goals and financial goals. Basically, organizational performance can also be measured through supply chain management practices and performance (Koh et al., 2007, Pertheban and Arokiasamy, 2019, Anwar and Abdullah, 2021).

Chaghooshi, et.al. (2015) and Li, S., et.al. (2006) and Habib et al. (2021) studies indicated that supply chain management influences competitive advantage, supply chain management influences organizational performance and competitive advantage influences organizational performance. Thus, the proposed hypotheses for this study are as follows:

- H1: Supply chain management effects on competitive advantage
- H2: Supply chain management effects on organizational performance
- H3: Competitive advantage effects on organizational performance.

Competitive Advantage



**Figure 1.** Research Framework.

(Source: Adaptation from Chaghooshi, et.al. (2015) Li, S., et.al. (2006) and Habib et al. (2021)

# Method

The author distributed 330 questionnaires directly to the owners or managers of the food industry SMEs in Magelang Regency. The questionnaire consists of 33 question items related to the variables to be studied. The questionnaire was measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Testing the instrument is done by testing the validity and reliability using SPSS software version 25. Then proceed with classical assumption test and hypothesis testing consisting of multiple linear regression test, F test, and t test.

Table 1. Company' Year of establishment

Company's Year of Establishment	Frequency	Percentage
< 10 Year	84	25 %
11 – 15 Year	89	27 %
16 – 20 Year	64	19 %
> 20 Year	93	28 %
Total	330	100 %

## **Results and Discussions**

## Supply Chain Management Affects Competitive Advantage

The results of the data analysis show that there is a significant effect of supply chain management toward competitive advantage in accordance with previous research conducted by Chaghooshi et al. (2015), and several other studies. The application of various supply chain management practices, such as supplier partnership strategies, customer relations, and information sharing with partners can give organizations a competitive advantage (Li et al., 2006, Chaghooshi et al., 2015).

Table 2. Results of Single Regression.

Ind	lependent Variable		ndardized fficients Standart Error	Standardized Coefficients Beta	t	Significant
a	(Constant)	28,895	2,064		14,002	0,000
X1	Supply Chain Management	0,215	0,039	0,293	5,559	0,000
		Depen	dent Variable	: Competitive Adva	ıntage	

# Supply Chain Management Effects Organizational Performance

The results of the analysis show that there is a significant effect of supply chain management toward organizational performance in accordance with previous research conducted by Li et al., (2006); Pertheban, (2019) and several other studies. Supply chain management indirectly affects organizational performance (Karimi & Rafiee, 2014; Habib at al, 2021).

 Table 3. Results of Multiple Regression

Independent Variable	Unstandardized Coefficients	Standardized Coefficients	t	Significant

		В	Standard Error	Beta			
a	(Constant)	28,758	2,799		10,273	0,000	
X1	Supply Chain Management	0,119	,043	0,155	2,750	0,006	
X2	Competitive Advantage	0,131	0,059	0,124	2,207	0,028	
		Depende	nt Variable: Or	ganizational Po	erformance		

## Competitive Advantage Effects Organizational Performance

The results of the analysis show that there is a significant effect of competitive advantage toward organizational performance in accordance with previous research conducted by Chaghooshi et al. A high level of competitive advantage has a positive impact on organizational performance (Chaghooshi et al., 2015).

#### **Conclusions**

Based on the research conducted, the researcher can conclude that the results of data analysis show that there is a significant influence of supply chain management on competitive advantage, there is a significant influence of supply chain management on organizational performance, there is a significant influence between competitive advantage on organizational performance. Because of the pandemic covid 19, Questionnaires in this study were distributed directly to respondents so that strict health procedures were needed, and they had to keep their distance. In obtaining respondents, this study only used three food industry center villages as research samples. Several other villages refused or did not give permission to distribute the questionnaires because they were hindered by the Covid-19 pandemic.

#### References

- Anwar, G., & Abdullah, N. N. (2021). The impact of Human resource management practice on Organizational performance. International journal of Engineering, Business and Management (IJEBM), 5.
- Azar, A., Kahnali, R. A., & Taghavi, A. (2010). Relationship between supply chain quality management practices and their effects on organizational performance. Singapore Management Review, 32(1), 45-69.
- Bowersox, D., Closs, D., Cooper, M. B. (2019). Supply Chain Logistics Management, 5th Edition.
- Chaghooshi, A. J., Arbatani, T. R., & Samadi, B. (2015). The Effect of Supply Chain Management Processes on Competitive Advantage and Organizational Performance (Case Study: Food Industries based in West Azerbaijan Province). Global Journal of Management Studies and Researches, 2(3) 152-157.
- De Guimarães, J.C.F., Severo, E.A., de Vasconcelos, C.R.M., (2018). The influence of entrepreneurial, market, knowledge management orientations on cleaner production and the sustainable competitive advantage. Journal of Clean Product 174, 1653-1663
- Delbufalo, E. (2022). Disentangling the multifaceted effects of supply base complexity on supply chain agility and resilience. International Journal of Physical Distribution & Logistics Management.
- Dolgui, A., & Ivanov, D. (2021). Ripple effect and supply chain disruption management: new trends and research directions. International Journal of Production Research, 59(1), 102-109.
- Duong, B. T., Truong, H. Q., Sameiro, M., Sampaio, P., Fernandes, A. C., Vilhena, E., . . . Yadohisa, H. (2019). Supply chain management and organizational performance : the resonance influence. International Journal of Quality & Reliability Management Vol. 36 No. 7, 2019 pp. 1053-1077 © Emerald Publishing Limited 0265-671X DOI 10.1108/IJQRM-11-2017-0245.
- Fathian, M., Jouzdani, J., Heydari, M. & Makui, A. (2018) Location and transportation planning in supply chains under uncertainty and congestion by using an improved electromagnetism-like algorithm. Journal Intelligent Manufacturing 29, 1447–1464. https://doi.org/10.1007/s10845-015-1191-9
- Flöthmann, C., Hoberg, K., & Gammelgaard, B. (2018). Disentangling supply chain management competencies and their impact on performance. International Journal of Physical Distribution & Logistics Management Vol. 48 No. 6, 2018 pp. 630-655.
- Gökalp, E., Gökalp, M. O., & Çoban, S. (2022). Blockchain-based supply chain management: understanding the determinants of adoption in the context of organizations. Information systems management, 39(2), 100-121.
- Habib, M. A., Bao, Y., Nabi, N., Dulal, M., Asha, A. A., & Islam, M. (2021). Impact of strategic orientations on the implementation of green supply chain management practices and sustainable firm performance. Sustainability, 13(1), 340.

- Heizer, J., & Render, B. (2021). Operations Management: Sustainability and Supply Chain Management, Global Edition, 13th Edition, Prentice Hall.
- Jacobs, F. R., Chase, R. (2020). Operations and Supply Chain Management, 17th Edition. McGraw Hill.
- Karimi, E., & Rafiee, M. (2014). Analyzing the Impact of Supply Chain Management Practices on Organizational Performance through Competitive Priorities (Case Study: Iran Pumps Company). International Journal Academic Research in Accounting, Finance, and Management Science, Vol 4, 1-15.
- Koh, L. C. S., Demirbag, M., Bayraktar, E., Tatoglu, E., & Zaim, S. (2007). The impact of supply chain management practices on performance of SMEs. *Industrial Management and Data Systems*, 107(1), 103-124. https://doi.org/10.1108/02635570710719089
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T., & Subba Rao, S. (2006). The impact of supplychain management practices on competitive advantage and organizational performance. The International Journal og Management Science Omega, Vol. 34 No. 2, 107-124.
- Min, S., Zacharia, Z., & Smith, C. (2019). Defining supply chain management: in the past, present, and future. Journal of Business Logistics, Vol. 40, 44-55.
- Pertheban, T., & Arokiasamy, L. (2019). The relationship between Supply Chain Resilience Elements and Organisational Performance: The Mediating Role of Supply Chain Ambidexterity. Global Business and Management Research: An International Journal Vol. 11, No. 1 (2019, Special Issue).
- Qrunfleh S, Tarafdar M (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
- Richey, R. G., Roath, A. S., Adams, F. G., & Wieland, A. (2022). A responsiveness view of logistics and supply chain management. Journal of Business Logistics, 43(1), 62-91.
- Samad, S., Nilashi, M., Almulihi, A., Alrizq, M., Alghamdi, A., Mohd, S., ... & Azhar, S. N. F. S. (2021). Green Supply Chain Management practices and impact on firm performance: The moderating effect of collaborative capability. Technology in Society, 67, 101766.
- Tarigan, Z., Jiputra, J., & Siagian, H. (2021). The effect of supply chain practices on retailer performance with information technology as moderating variable. International Journal of Data and Network Science, 5(1), 47-54.
- Thatte, A. A., Rao, S. S., & Ragu-Nathan, T. S. (2013). Impact Of SCM Practices of A Firm On Supply Chain Responsiveness And Competitive Advantage Of A Firm. Journal of Applied Business Research (JABR), 29(2), 499–530. https://doi.org/10.19030/jabr.v29i2.7653
- Tracey, M., Vonderembse, M. A., & Lim, J.-S. (1999). Manufacturing Technology and Strategy Formulation: Keys to Enhancing Competitiveness and Improving Performance. Journal of Operations Management, 17, 411-428. https://doi.org/10.1016/S0272-6963(98)00045-X
- Tracey, M., Lim, J. and Vonderembse, M.A. (2005), "The impact of supply-chain management capabilities on business performance", Supply Chain Management, Vol. 10 No. 3, pp. 179-191. https://doi.org/10.1108/13598540510606232
- Uddin, S., Ali, S. M., Kabir, G., Suhi, S. A., Enayet, R., & Haque, T. (2019). An AHP-ELECTRE framework to evaluate barriers to green supply chain management in the leather industry. International Journal of Sustainable Development & World Ecology, 26(8), 732-751.