Company Supply Chain Management Performance
Seen from The Aspect of Information Sharing and Cooperation
(Empirical Study of MSMEs in the Food Industry Sector in Kertajati Regency)

Deni Istiono [1] Nining Kurniasih [2] Pupung Pamungkas [3]
[1] Majalengka University, Faculty of Economics and Business
[2] Sebelas April University, Sumedang, Faculty of Economics and Business
[3] Halim Sanusi University, Faculty of Economics and Business
*E-mail: deni7533@unma.ac.id

ABSTRACT

The small food processing industry is an industrial sector that is quite capable of surviving economic shocks, because every year the need for food increases along with increasing population growth. Small and medium industries have an important role in developing processing businesses, especially in the food sector. The Kertajati specialty processed food industry is an industry that has potential to be developed, because each region has its own characteristics and characteristics. Suppliers, manufacturers, distributors, retailers and customers work together in the product creation process through to product distribution to final consumers, giving birth to the concept of supply chain management. This research aims to analyze the influence of information sharing and cooperation on the performance of supply chain management of MSMEs in the Food Industry Sector in the Kertajati District Region, both partially and simultaneously. The population in this research is small and medium industries in Kertajati District, Majalengka Regency which are engaged in processed food production, totaling 92 MSMEs. The sample used 48 MSMEs as respondents from the entire population, by collecting data through questionnaires. The sampling technique in this research uses probability sampling with a simple random sampling method. The type and source of data used is primary. The analysis technique used is correlation, where previously an instrument test was carried out using validity and reliability tests, then data transformation and data normality test, then hypothesis testing was carried out partially with the t test and simultaneously with the F test operated through the SPSS 21 program. The results of this research show that partially information sharing and cooperation have a significant effect on supply chain management performance. Simultaneous testing shows that information sharing and cooperation have a significant effect on supply chain management performance.

Keywords: *information sharing, cooperation, supply chain management performance*

INTRODUCTION

Pujawan and Mahendrawati (2010) explained that the important role of all parties starting from *suppliers, manufacturers, distributors, retailers* and *customers* in creating cheap, high quality and fast products is what gave birth to a new concept, namely *Supply Chain Management*. According to Indrajit and Djokopranoto (2005), the term *supply chain* was first used by several logistics consultants around the 1980s, then by academics analyzed further in the 1990s, the concept of *supply chain management was born* . Furthermore, Indrajit and Djokopranoto (2005) explained, in essence *supply chain management* is the expansion and development of the concept and meaning of logistics management, logistics management plays a role in managing the flow of goods and *supply chains* as well but includes inter-company related to the flow of goods and increasingly developing in relation to things needed by customers. According to Heyzer and Render (2005) companies need to consider supply chain issues to ensure that the supply chain supports the company's strategy. If the operations management function supports the overall company strategy, then the supply chain is designed to support the operations management strategy. The facilities and costs required to meet consumer needs, with the aim of achieving minimum costs and maximum service levels are all considered in *supply chain management.*

Industry is an economic activity that processes raw materials, raw materials, semi-finished goods, and/or finished goods into goods with higher value for their use, including industrial design and engineering activities. The processing industry is an economic activity that carries out the activity of changing basic goods mechanically, chemically or by hand so that they become finished goods or semi-finished goods and/or from goods of less value to goods of higher value and whose properties are closer to the final user (BPS in Triajie, 2006). The development of the processing industry sector has become very important, as can be seen from 2004-2012, the processing industry (oil and non-oil and gas) made a significant contribution to GDP, where in 2004 it reached 28.07% and in 2012 it amounted to 23.98%. Despite experiencing a decline, the role of the processing industrial sector in GDP remains the largest because the industrial sector is able to play a major role in driving economic growth due to its ability to increase high added value (Ministry of Industry, 2013).

Small food processing industries can be defined as a collection of companies whose main activity is processing and producing food (Triajie, 2006). The food processing industry is a very broad business opportunity, because human life cannot be separated from food, then the small food processing industry is an industrial sector that is quite capable of surviving economic shocks because the need for food from year to year has increased very rapidly along with increasing population growth. (Akmal, 2006). Small and Medium Industries have an important role in developing processing businesses in Kertajati District, especially food. The small processed food industry typical of Kertajati District is an industry that has potential to be developed. Each region has its own characteristics and characteristics that differentiate one region from another, this can be caused by the environment, social and cultural factors. These differences are clearly visible and reflected in the attitudes and behavior of the residents concerned, including the type of food consumed (Mayasari, 2008). The existence of the food processing industry can open up opportunities to create jobs thereby improving the economy in Kertajati District and reducing poverty. According to Liedholm (in Saputra and Akmal, 2006), in general small industries develop more in rural areas and small towns where they are often side businesses or part-time patterns of other economic activities. This indication is very positive in supporting development in the area as a driving force for the economy.

Criteria for Small and Medium Industries are regulated in accordance with the regulation of the Minister of Industry of the Republic of Indonesia Number 64/M-IND/PER/7/2011, concerning types of industry in the development of the Directorate General and Agencies within the Ministry of Industry, Article 3 states that Small and Medium Industries are those who have investment in industrial companies of up to ten billion rupiah, excluding land and buildings where the business is located, except for certain

types of industry, the authority for development rests entirely with the Directorate General of Small and Medium Enterprises without limits on the amount of investment.

Based on Law Number 20 of 2008 concerning Micro and Medium Enterprises, the boundaries of small and medium industries are defined as follows:

Small industry is a productive economic activity that stands alone, carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or are part, either directly or indirectly, of medium or large businesses that have net assets. more than fifty million rupiah up to a maximum of five hundred million rupiah excluding land and buildings of business premises or having annual sales proceeds of more than three hundred million rupiah up to a maximum of two billion five hundred million rupiah. Medium industry is a productive economic activity that stands alone, which is carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or are part, either directly or indirectly, of small businesses or large businesses that have net assets. more than five hundred million rupiah up to a maximum of ten billion rupiah excluding land and buildings for business premises, or having annual sales proceeds of more than two billion five hundred million rupiah with a maximum of fifty billion rupiah. Based on the Decree of the Minister of Industry of Indonesia No.19/M/I/1986, the scope of the processing industry is divided into: 1) Basic chemical industry: for example cement, medicine, paper, fertilizer, etc. 2) Machinery and basic metal industry: for example the aircraft industry, motor vehicles, textiles, etc. 3) Small industry: bakery industry, oil stoves, snacks, ice, bulk cooking oil, etc. 4) Various industries: clothing industry, food and beverage industry and others.

The problems that small and medium industries often face in Kertajati District are generally the same as the problems that usually occur in other food processing industries, making it difficult for them to develop. The problems are as stated by Akmal and Triajie (2006), including: 1. Lack of access to capital/limited capital , 2. Lack of added value to products , 3. Marketing/distribution of products , 4. Procurement of raw materials , 5. The role of technology still not optimized , 6. Labor (human resources) , 7. Lack of expertise in managing SMEs , 8. Partnership problems , 9. Threat of new entrants (Mayasari, 2008)

Information sharing is the intensity and capacity of companies in their interactions to share information with partners regarding joint business strategies. *Information sharing* also enables supply chain members to obtain, maintain and convey the information needed to ensure effective decision making, and is a factor that is able to strengthen the elements of collaboration as a whole therefore industrial bottlenecks can be reduced by *information sharing* (Simatupang & Sridharan in Yaqoub, 2012). *Information sharing* can help companies improve the efficiency and effectiveness of supply chains and is the most important factor in achieving effective coordination in the supply chain and being a controller along the supply chain, this was stated by Anatan (2008)

Cooperation (cooperation) is a situation characterized when several parties work together to achieve mutually beneficial goals. Effective collaboration is a desire to develop relationships that will produce *trust* and commitment (Bujang, 2007). Collaboration with reliable suppliers will result in a good understanding and understanding of the needs and requirements of each party so that it can increase company income (Cempakasari and Yoestini, 2003). This supports research conducted by Ariefin (2004), to obtain good performance through cooperation, a good relationship between both parties is absolutely necessary.

LITERATURE REVIEW, FRAMEWORK AND HYPOTHESIS
Concept and Understanding of *Supply Chain Management*

Daft (2003) defines *supply chain management* as a term for managing a chain of suppliers and buyers, which includes all processing stages from purchasing raw materials to distributing finished goods

to final consumers. *Supply chain management* is the integration of materials and service procurement activities, conversion into semi-finished goods and final products, and delivery to customers (Heizer and Render, 2008). Simichi-Levi *et al* in Irmawati (2007) state supply chain management as an approach applied to unite suppliers, entrepreneurs, warehouses and other storage places (distributors, retailers and resellers) efficiently, so that products can be produced and distributed in large quantities. the right location, and the right time to lower costs and meet customer needs. This definition is based on several things:

a. Supply chain management needs to consider that all activities from suppliers, manufacturers, warehouses, distributors, retailers, to retailers have an impact on the cost of products produced that meet customer needs.

b. The aim of supply chain management is to make the total costs of all parts, starting from transportation and distribution of supplies of raw materials, goods in process, and finished goods more effective and efficient, thereby reducing costs.

c. Supply chain management revolves around the efficient integration of suppliers, manufacturers, warehouses, distributors, retailers and resellers covering all company activities, from the strategic level to the operational tactics level.

In *the supply chain* there are usually three types of flows that must be managed:

1. Flow of goods/materials that flows from upstream to downstream
2. Money/financial flow, which flows from downstream to upstream.
3. Information flow, which flows from upstream to downstream or vice versa.
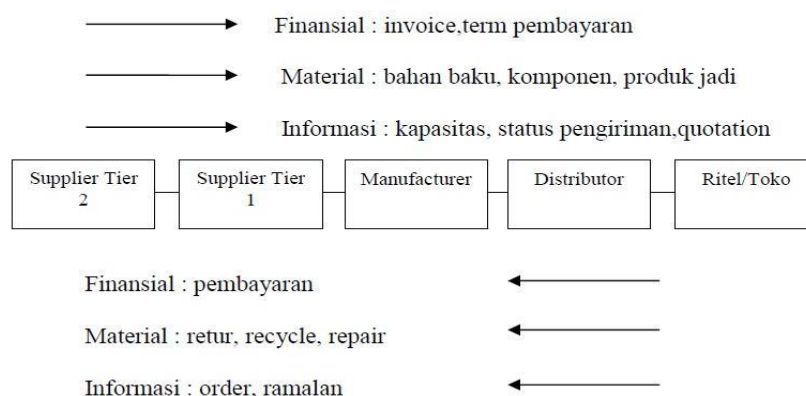

Figure 1 Simplications of *the supply chain model* and 3 types of managed flows (Pujawan and Mahendrawathi, 2010).

In *the supply chain* there are several main players who are companies that have the same interests (Indrajit and Djokopranoto, 2002), namely:

Chain 1: *Suppliers*

Chain 1-2: *Suppliers - Manufacturers*

Chain 1-2-3: *Supplier – Manufacturer - Distribution*

Chain 1-2-3-4 : *Supplier – Manufacturer – Distribution - Retail Outlets*

Chain 1-2-3-4-5 : *Supplier – Manufacturer – Distribution – Retailer Outlets – Customers*

The customer is the last link in *the supply chain. These* retailers or *retailers* offer their goods directly to customers or buyers or users of these goods. Companies in *the supply chain* essentially want to satisfy consumers by working together to make products that are cheap, delivered on time and with good quality (Rahmasari, 2011). By measuring *supply chain management performance* , as follows: 1) Quality (level of customer satisfaction, customer loyalty, accuracy of delivery) , 2) Time (total

replenishment time , *business cycle time*) , 3) Cost (total *delivered cost* , added value efficiency) , 4) Flexibility (quantity and specifications).

Information Sharing

Risnandar and Wulandari (2010) say, information is a collection of data that has been grouped, processed and communicated for reasonable and meaningful or useful needs. Therefore, information is used as a basis for making decisions which must be obtained at the right time, quickly and of good quality. Information is the basis for implementing the supply chain process.

According to Chopra and Meindl (in Pujawan and Mahendrawathi, 2010) information must have several characteristics to be useful in making supply chain decisions: a) Accurate. To make good decisions, information must describe actual conditions and be reliable. b) Exactly. Consider what information is appropriate and needed by the company. c) Can be accessed when needed. To be used when needed, information must be accessible properly and correctly, so that it can help in making decisions.

The success of *the supply chain* is very dependent on the information system, with information from business partners in the supply chain it can be taken into account (Pujawan and Mahendrawathi, 2010). Lack of coordination from the parties involved in *the supply chain* will cause information distortion which is called *the bullwhip effect phenomenon* (Parwati and Andrianto, 2009). Meanwhile, *the Bullwhip Effect* itself is defined by Susilo (2008) as an increase in demand variability that occurs at each level of *the supply chain* as a result of information distortion. Handfield and Nicholas (quoted by Susilo, 2008) say that inaccurate information or distorted information at every level of *the supply chain* from bottom to top can cause several important problems, including: 1) Excessive inventory , 2) Loss of income , 3) Decreased level of consumer satisfaction , 4) Ineffective delivery , 5) Errors in production scheduling , 6) Inefficient use of resources

Information sharing is the intensity and capacity of companies in their interactions to share information with partners regarding joint business strategies. *Information sharing* also enables supply chain members to obtain, maintain and convey the information needed to ensure effective decision making, and is a factor that is able to strengthen the elements of collaboration as a whole therefore industrial bottlenecks can be reduced by *information sharing* (Simatupang & Sridharan in Yaqoub, 2012). Research conducted by Anatan (2008) which suggests antecedent factors that must be considered in supply chain management to ensure the quality of information includes three main things, namely: environmental uncertainty, intra-organizational facilitators and inter-organizational relationships, states that *information sharing* can help companies improve supply chain efficiency and effectiveness and is the most important factor for achieving effective coordination in the supply chain as well as being a controller along the supply chain. *Information sharing* ensures timely availability of data so that the data held can be shared throughout the supply chain, and can respond to changes in consumer needs and desires more quickly. The quality of information is also very much needed because information that is fast but not of good quality cannot be used and shared throughout the supply chain.

Cooperation (Cooperation)

Indrajit and Djokopranoto (2002) said, Cooperation *is* one of the best alternatives in carrying out optimal *supply chain management.* The reason is because organizations or companies that are in the *supply chain management network* definitely need an information system that is accurate and smooth and requires trust between participants procuring goods and services. All of this cannot be achieved without good cooperation.

There are several principles of cooperation that need to be adhered to and developed continuously, namely: a) Believe in having the same goal (*common goal*), b) Mutual benefit (*mutual benefit*), c) Trust each other (*mutual trust*), d) Be open (*transparent*), e) Establish a long-term relationship (*long term relationship*), f) Continuously make improvements in the costs and quality of goods/services.

Company *Supply Chain Management* Performance

Performance is work ability demonstrated by work results. Company performance is something that the company produces within a certain period with reference to predetermined standards. Business performance refers to how much the company is market-oriented and profit goals (Rahadi, 2012). The concept of integrating physical activities in a company was stated by Christopher (in Larson, Halldorsson and Ariefin, 2004) who defined the supply chain as an organizational "work network" that involves vertical upward (*upstream*) and downward vertical (*downstream*) relationships. in different processes and different activities that produce value in the form of products and services in the hands of final consumers.

Then it was also explained by (Pujawan and Mahendrawathi, 2010) *Supply chain* is a network of companies that work together to create and deliver a product to the end user. The activities included in a supply chain include sourcing, procurement, product design, production planning, material handling, ordering process, inventory management, transportation, warehousing, and customer service (Shankar quoted by Ariefin, 2004). Relationships with customers/end consumers are a must in achieving success in the supply chain, supply chains must be close to their end consumers to form cooperative relationships in demand planning (Cook and Graver in Bernard, 2011).

Managing a successful *supply chain according to Heizer and Render (2010) starts from agreement on shared goals, shared trust, and continues with an aligned organizational culture.*
1) Agreement on common goals , 2) Trust , 3) Appropriate organizational culture

It can be concluded that if the company's performance increases, the company will be closer to the targets the company wants to achieve, and it is clearly illustrated how important the performance of *supply chain management* is to the company, this can be seen from the definitions put forward by experts.

Next, to find out how *information sharing* and *cooperation influence* the performance of company *supply chain management* in the MSME Food Industry Sector in Kertajati sub-district, which can be completely described as in the following picture:
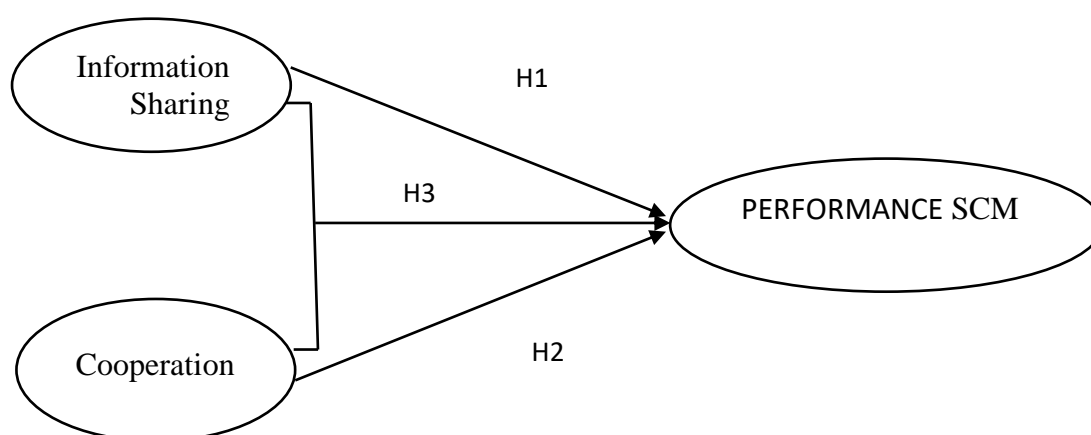

Figure 2. Research Model

Information :
1. H1: Information Sharing on SCM Performance
2. H2: Cooperation on SCM Performance
3. H3: Information Sharing, Cooperation on SCM Performance

METHOD

The method used in this research is descriptive analysis and verification analysis with a quantitative approach. The type of data used in this research is quantitative data. The source of data collection in this research is secondary data. The data collection technique is a documentation technique. This documentation technique is carried out by collecting data from small and medium industries (IKM) in Kertajati District which operate in the field of processed food production and the data can be obtained from District Regional Statistics. Kertajati 2016. The population used in this research is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn (Sugiyo, 2012). Meanwhile, according to Ferdinand (2006) population is a combination of all elements in the form of events, things or people who have similar characteristics which are the center of attention of a researcher because it is seen as a research universe. The population in this study is small and medium industries (IKM) in Kertajati District which are engaged in the production of processed food, totaling 92 IKM (Source: Kertajati District Regional Statistics 2016) , and the sample in this study is some of the IKM which produce or produce food a typical preparation from Kertajati District. Considering that the population can be determined precisely, to determine the sample size of a population, the Slovin formula is used with a result of 47.92 rounded to 48 SMEs.

RESULTS AND DISCUSSION

Descriptive Data Analysis

Descriptive data analysis is used to describe the condition of respondents' answers for each variable. The results of the respondents' answers were then used to obtain respondents' answer tendencies regarding the conditions of each research variable.

Table 1. Information Sharing (X1)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Item 1	19,0000	5,319	,518	.	,791
Item 2	19,0625	5,634	,615	.	,786
Item 3	19,1250	4,410	,715	.	,701
Item 4	11,4375	1,783	1,000	.	,577

Table 2. Cooperation (X2)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Item 1	17,3958	7,606	,591	.	,791
Item 2	17,3333	7,291	,667	.	,765
Item 3	17,0417	7,530	,686	.	,769
Item 4	10,3542	2,617	1,000	.	,643

Table 3. Performance Scm (Y)
Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Item 1	31,2708	12,159	,298	.	,724
Item 2	31,3542	11,127	,520	.	,679
Item 3	31,0833	12,376	,334	.	,720
Item 4	31,3333	10,525	,626	.	,652
Item 5	31,1458	12,042	,502	.	,697
Item 6	17.3542	3,510	1,000	.	,514

Based on, the three variables above are *information sharing, cooperation* and *Supply chain management* performance has a $_{calculated\ r\ value}$ > 0.6 , meaning that all statements in these three variables are declared reliable (can be controlled). (SPSS *output* . The reliability of these three variables can be seen in the attachment).

Data Normality Test

In this research, the correlation analysis uses multiple correlation analysis, namely *Pearson Product Moment* (PPM) Correlation, which requires that the data analyzed must be normally distributed. The normality test in this research uses the SPSS 21 application to test sample data that has been obtained through a questionnaire for each variable. The normality test was carried out using the Kolmogrof-Smirnov (KS) test, and a histogram graph, the results are:

Table 4. Data Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Information Sharing	Cooperation	SCM performance
N		48	48	48
Normal Parameters [a, b]	Mean	49.9810	49,9688	50,0229
	Std. Deviation	9,96588	9,97433	10,01853
Most Extreme Differences	Absolute	,267	,137	,156
	Positive	,130	,137	,140
	Negative	-,267	-,136	-,156
Kolmogorov-Smirnov Z		1,853	,952	1,079
Asymp. Sig. (2-tailed)		,102	,325	,194

a. Test distribution is Normal.
b. Calculated from data.

SPSS output results , it is found that the KS value for the *information sharing variable* is 1.853 with a significance of 0.102 which is greater than α = 0.05. This means that the variable data is normally distributed. The *cooperation* variable has a KS value of 0.952 with a significance of 0.325 which is greater than α = 0.05. This means that the variable data is normally distributed. *The supply chain management* performance variable has a KS value of 1,079 with a significance of 0.194 which is greater than α = 0.05. This means that the variable data is normally distributed.

Correlation Analysis

Inter-Variable Correlation Analysis (Simple Correlation)

Simple correlation analysis is used to determine the relationship between individual variables, both the direction of the relationship and the level of correlation. From the results of the analysis using SPSS, the correlation coefficient values were obtained as follows:

Table 5. Correlation Analysis
Correlations

		SCM performance	Information Sharing	Cooperation
Pearson Correlation	SCM performance	1,000	,575	,620
	Information Sharing	,575	1,000	,537
	Cooperation	,620	,537	1,000
Sig. (2-tailed)	SCM performance	.	,000	,000
	Information Sharing	,000	.	,000
	Cooperation	,000	,000	.
N	Kinerja SCM	48	48	48
	Information Sharing	48	48	48
	Cooperation	48	48	48

the correlations table above, it is found that: The correlation coefficient value between *information sharing and supply chain management* performance (ryx_1) is 0.575. This shows that: first, the level of close relationship between *information sharing* and *supply chain management performance* is in the medium category; secondly, the direction of the relationship between *information sharing* and *supply chain management performance* is positive, meaning that the better *the information sharing , the better the supply chain management* performance will be . The correlation coefficient value between *cooperation* and *supply chain management performance* (ryx_2) is 0.620. This shows that: first, the level of close relationship between *cooperation* and *supply chain management performance* is in the strong category; second, the direction of the relationship between *cooperation* and *supply chain management* performance is positive, meaning that the better *the cooperation , the better the supply chain management* performance will be .

Multiple Correlation Analysis

Multiple correlation analysis is carried out to analyze the relationship between independent variables together with the dependent variable, both in the direction of the relationship and the level of closeness.

From the results of the analysis using SPSS, the correlation coefficient values are obtained as follows:

Table 6. Multiple Correlation Analysis
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,683 [a]	,466	,442	7.48153

a. Predictors: (Constant), Cooperation, Information Sharing

Based on the table above, the double correlation coefficient value (Ryx_1x_2) = 0.683 is obtained. This shows that the relationship between *information sharing* and *cooperation with the supply chain management* performance of MSMES in the Food Industry Sector in the Kertajati District area has a high level of closeness, and the direction of the relationship is positive, meaning that the better *the information sharing* and *cooperation* , the better *the supply chain management performance will be* .

Hypothesis testing
Test Partially

To partially test whether *information sharing* (X_1), and *cooperation* (X_2), have a significant effect on the performance of *supply chain management* (Y) of MSMES in the Food Industry Sector in the Kertajati District Region, a t test was carried out, namely comparing the $_{calculated\ t}$ with the t $_{table}$. The analysis results based on SPSS output are obtained as shown in table 4.17 below.

Table 7. Test Partially

Coefficients ͣ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11,009	6,333		1,738	,089
	Information Sharing	,342	,130	,340	2,632	,012
	Cooperation	,439	,130	,437	3,385	,001

a. Dependent Variable: SCM Performance

1. Hypothesis: *information sharing* has a significant effect on *supply chain management performance* . The test criteria are if t $_{count}$ ≥ t $_{table}$ or sig value < α = 0.05 , then Ho is rejected. This means that *information sharing* has a significant effect on *supply chain management performance* . And conversely, if t $_{count}$ < t $_{table}$ or sig value > α = 0.05 , then Ho is accepted. This means that *information sharing* does not have a significant effect on *supply chain management performance* . Because t $_{count}$ (2.632) > t $_{table}$ (2.012) and the sig value = 0.012 < α = 0.05, it can be concluded that *information sharing has a significant effect on supply chain management* performance .

2. Hypothesis: *Cooperation* has a significant effect on *supply chain management performance* . The test criteria are if t $_{count}$ ≥ t $_{table}$ or sig value < α = 0.05 , then Ho is rejected. This means that *cooperation* has a significant effect on *supply chain management performance* . And conversely, if t $_{count}$ < t $_{table}$ or sig value > α = 0.05 , then Ho is accepted. This means that *cooperation* does not have a significant effect on *supply chain management performance* . Because t $_{count}$ (3.385) > t $_{table}$ (2.012) and the sig value = 0.001 < α = 0.05, it can be concluded that *cooperation has a significant effect on supply chain management* performance .

Test simultaneously

To simultaneously test whether *information sharing* (X_1) and *cooperation* (X_2) have a significant effect on the performance of *supply chain management* (Y) of MSMES in the Food Industry Sector in the Kertajati District area, an F test was carried out, namely by comparing the $_{calculated\ F}$ with the F $_{table}$. The result is :

Table 8.Test simultaneously

ANOVA ͣ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2198,633	2	1099,317	19,640	,000ᵇ
	Residual	2518,797	45	55,973		
	Total	4717,430	47			

a. Dependent Variable: Kinerja SCM

b. Predictors: (Constant), Cooperation, Information Sharing

Test criteria: If $_{calculated\ F}$ ≥ F $_{table}$ or sig value < α = 0.05 ﹐ then Ho is rejected. This means that *information sharing* and *cooperation* simultaneously have a significant effect on *supply chain management performance* . And conversely, if F $_{count}$ < F $_{table}$ sig value > α = 0.05 ﹐then Ho is rejected. This means that *information sharing* and *cooperation* simultaneously do not have a significant effect on *supply chain management performance* . Based on the Anova table, the $_{calculated\ F\ value}$ = 19.640 > F $_{table}$ = 3.20, and the probability value (sig) = 0.000 < α = 0.05, then H0 $_{is}$ rejected, meaning that *information sharing* and *cooperation* simultaneously have a significant effect on *supply chain performance. management* of MSMES in the Food Industry Sector in the Kertajati District Area.

After analyzing and statistical testing the data obtained, the author got an overview of *information sharing* , *cooperation* and *supply chain management performance* , as well as the influence *of information sharing* and *cooperation* on *the supply chain management performance* of MSMES in the Food Industry Sector in the Kertajati District Region, both partially and simultaneously.

Information Sharing in MSMES in the Food Industry Sector in Kertajati District

Based on the results of the analysis, it is known that *information sharing* in the MSMES in the Food Industry Sector in the Kertajati District Area included in the good category. This shows that on average among Small and Medium Industry entrepreneurs/craftsmen in the food sector in Kertajati District like to share information in terms of finance, production and design, like to exchange information on an ongoing basis, and the information obtained can help all parties.

However, based on the results of the analysis of the three indicators used to measure the *information sharing variable* , there are still scores below the average, namely that the information indicator can help all related parties. This means that there are still many entrepreneurs/craftsmen who feel they have not been helped by the information they have obtained. For this reason, it is hoped that related parties, especially the government, in this case the Department of Cooperatives and Micro, Small and Medium Enterprises (KUKM) of Majalengka Regency, will be more active in providing the information needed by entrepreneurs/craftsmen so that they can feel optimally helped.

Cooperation in the MSMES Food Industry Sector in the Kertajati District Area

Based on the results of the analysis, it is known that *cooperation* in the MSMES Food Industry Sector in the Kertajati District Area included in the good category. This shows that on average among Small and Medium Industry entrepreneurs/craftsmen in the food sector in Kertajati District has established good cooperation based on mutual trust with raw material suppliers and traders who market their products. *Cooperation* is measured based on indicators discussed about sales planning and forecasting, cooperation is determined based on objective conditions, improving sustainable relationships.

However, based on the results of the analysis of the three indicators used to measure the *cooperation variable* , there are still those whose scores are the smallest and far below the average, namely the indicator of discussing sales planning and forecasting. This shows that entrepreneurs/craftspeople in the food sector in Kertajati District still rarely hold discussions regarding sales planning and forecasting, even though it is actually very important to do so. For this reason, in the future, it is hoped that entrepreneurs/craftspeople will hold regular meetings to discuss matters related to the sale of their products.

Supply Chain Management Performance in MSMES in the Food Industry Sector in the Kertajati District Area

Based on the results of the analysis, it is known that the Performance of *Supply Chain Management* in MSMES in the Food Industry Sector in the Kertajati District Area included in the high category. Thus, it can be interpreted that entrepreneurs/craftsmen in the small and medium industries in the food sector in Kertajati District has a good market share, has a sufficient level of profit, has high competitiveness, the products it produces are of high quality, and have been able to satisfy its customers.

Supply Chain Management performance is measured based on indicators: Market share, profit level, competitiveness, product quality and customer satisfaction. Of the five indicators, based on the results of the analysis, it turns out that there is one indicator whose total score is the smallest and far below the average, namely the profit level. This means that entrepreneurs/craftsmen admit that their businesses have not received optimal profits so far.

Based on this reality, the author hopes that related parties can provide intensive managerial training to entrepreneurs/craftsmen, especially in terms of production planning, calculations in determining selling prices, opening up more open market opportunities to develop production, and so on. So that it can improve the performance of *Supply Chain Management.*

The Influence of *Information Sharing* on *Supply Chain Management Performance* in MSMES in the Food Industry Sector in the Kertajati District Area

Based on the results of verification analysis and partial hypothesis testing, it is proven that *information sharing* has a significant effect on *the supply chain management performance* of MSMES in the Food Industry Sector in the Kertajati District Region. *Information sharing* is the intensity and capacity of companies in their interactions to share information with partners regarding joint business strategies. *Information sharing* also enables supply chain members to obtain, maintain and convey the information needed to ensure effective decision making, and is a factor that is able to strengthen the elements of collaboration as a whole therefore industrial bottlenecks can be reduced by *information sharing* (Simatupang & Sridharan in Yaqoub, 2012).

Research conducted by Anatan (2008) which suggests antecedent factors that must be considered in supply chain management to ensure the quality of information includes three main things, namely: environmental uncertainty, intra-organizational facilitators and inter-organizational relationships, states that *information sharing* can help companies improve supply chain efficiency and effectiveness and is the most important factor for achieving effective coordination in the supply chain as well as being a controller along the supply chain. *Information sharing* ensures timely availability of data so that the data held can be shared throughout the supply chain, and can respond to changes in consumer needs and desires more quickly. The quality of information is also very much needed because information that is fast but not of good quality cannot be used and shared throughout the supply chain. Therefore, understanding the factors that influence *information sharing* and the quality of information is very necessary to support the quality and process of information sharing.

The Influence *of Cooperation on Supply Chain Management* Performance in MSMES in the Food Industry Sector in the Kertajati District Area

Based on the results of verification analysis and partial hypothesis testing, it is proven that *cooperation* has a significant effect on the performance of *supply chain management* of MSMES in the Food Industry Sector in the Kertajati District Region. The importance of well-developed *supplier* collaboration with companies is increasingly being realized by companies, not only for short-term interests but also for the long term. Companies can gain many benefits from long-term cooperation. This is felt in conditions when the company requires raw material shipments for urgent needs, *the supplier* can immediately fulfill the request, because the relationship has been well developed so far. A good *supplier relationship* with the company will also provide benefits in stable shipping costs, so that costs can be reduced more efficiently (Rahardian, 2011).

To obtain good performance through collaboration, a good relationship between both parties is absolutely necessary. The quality of the relationship can be measured by adopting the measurement dimensions used by Johnson in Ariefin (2004), namely trust *and* fairness *as* dimensions. - dimensions that make up the quality of a collaborative relationship. When a company trusts its collaboration partners and truly treats these partners fairly, the company will view these relationships more as strategic assets and strategic tools that will strengthen the company's competitive capabilities (Ariefin, 2004). Collaboration

with reliable *suppliers is expected to produce mutual understanding and a good understanding of the needs and requirements of each party (Cempakasari and Yoestini, 2003).*

CONCLUSION

Based on the results of research and discussion regarding the influence of *Information Sharing* and *Cooperation on* the Company's *Supply Chain Management* Performance (Empirical Study on MSMES in the Food Industry Sector in Kertajati District) It can be concluded that *Information Sharing* has a positive and significant effect on *Supply Chain Management Performance* . Small and medium industries (IKM) in Kertajati District have understood the importance of sharing information because by obtaining information it is hoped that they will be able to overcome various problems both internally and externally. establishing good cooperation based on mutual trust with suppliers means that *Information Sharing* and *cooperation* both simultaneously provide a significant contribution to the high and low performance of *Supply Chain Management* in MSMES, especially IKM in the food sector in the Kertajati District area.

REFERENCES

Akmal, Yori. 2006. "Analysis of Factors Affecting Labor Productivity in the Sanjai Crackers Small Industry in Bukittinggi City". Thesis. Bogor: IPB.

Bernard, F Simplus. 2011. "Analysis of the Influence of Relationship Quality Factors on Supply Chain Performance." Thesis. Semarang: Undip.

Single. 2007. "Examining Factors That Influence *Trust* and Commitment in the Relationship Between Suppliers and Companies." *Optimal Journal.* Vol 1, No. 1.

Cempakasari, Diah Arum and Yoestini. 2003. "Study Regarding the Development of Long-Term Relationships between Companies and Retailers". *Indonesian Journal of Marketing Science.* Vol II, No. 1.

Hamidin, Dini and Kridanto Surendro. 2010. "Supply Chain Management Model in a Technology Perspective". *Aptikom National Conference Seminar and Call For Paper.*

Heizer, Jay and Barry Render. 2010. *Operations Management* . Edition 9. Jakarta: Salemba Empat.

Indrajit, Richardus and Richardus Djokopranoto. 2002. *Supply Chain Management Concepts* . Jakarta: PT Gramedia Widiasarana Indonesia.

Indriani, Niken Kusuma. 2006. "Analysis of the Effect of Trust in Retail Outlets on Their Suppliers to Achieve Long-Term Relationships." Thesis. Semarang: Master of Postgraduate Study Program at Diponegoro University.

Irmawati. 2007. "The Influence of Supply Chain Management on Performance at PTPN VIII Gunung Mas Bogor". Thesis. Bogor: IPB

Lestari, Purbasari Indah. 2009. "Supply Chain Management Study: Analysis of Relationship Marketing Between Recovery Farm Farms and Their Suppliers and Customers." Thesis. Bogor: IPB.

Miguel, PLS, and Ledur Brito, LA 2011. "Supply Chain Management measurement and its influence on Operational Performance". *Journal of operations and supply chain management.* Vol 4, No. 2.

Mulyanto, Edy. 2011. "Analysis of the influence of service quality on customer satisfaction at Ajisaka Motor Kudus Workshop". Thesis. Semarang: Undip.

Pujawan, I Nyoman and Mahendrawathi ER. 2010. *Supply Chain Management.* Edition 2. Surabaya: Guna Widya.

Rahadi, Dedi Rianto. 2012. "The Influence of Supply Chain Management on Company Operational Performance". Proceedings of *Production System Seminar*

Setiawan, Ahmad Ikhwan and Heri Santosa. 2006. "Supply Chain Integration in the Textile Industry: Survey of Retailers and Wholesalers in Central Java and East Java." *Empirical Journal* . Vol 19, No.1.

Setiawan, Ahmad Ikhwan and Reza Rahardian. 2005. "The Influence of Supply Chain Management Integration Patterns on Company Performance in the Food Service Industry in Surakarta". *Journal of Business & Management.* Vol 05, No.1.

Sugiyono. 2012. *Quantitative Qualitative Research Methods and R&D.* Bandung: CV. Alphabet.

Triajie, Muhammad Iqbal. 2006. "Sources of Growth in the Food Processing Industry in Indonesia (Total Factor Productivity Analysis)". Thesis. Bogor: IPB.

Triastyti, Rahayu. 2010. "Customer Relationship Management: Efforts to Achieve Long-Term Profitability". *Journal of Economics and Entrepreneurship* . Vol 10, No. 2.

Viona Mayasari. 2008. "Competitive strategy analysis of the Small Traditional Food Industry Typical of Pyakumbuh City". Thesis. Bogor: IPB.

Yaqoub, M Amak. 2012. "The Mediating Effect of Trust on the Relationship Between Supply Chain Collaboration and Operational Performance". *Journal of Management & Entrepreneurship.* Vol 14, No. 2.