

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/352028958>

# The Mediating Role of the Supply Chain Financing on the Relationship between Negotiation, Collaboration and Digitalization with Supply Chain Effectiveness

Article in Technology Reports of Kansai University · May 2021

CITATIONS

0

READS

130

2 authors, including:



**Edi Purwanto**

Universitas Pembangunan Jaya

67 PUBLICATIONS 294 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



PENGARUH KEPEMIMPINAN TRANSFORMASIONAL DAN KEPEMIMPINAN OTENTIK TERHADAP NIAT KELUAR KARYAWAN DENGAN MEDIASI KOMITMEN AFEKTIF [View project](#)

# The Mediating Role of the Supply Chain Financing on the Relationship between Negotiation, Collaboration and Digitalization with Supply Chain Effectiveness

Eko Widodo<sup>1</sup>, Edi Purwanto<sup>2\*</sup>

Postgraduate Program, Bunda Mulia University, Jakarta, Indonesia<sup>1</sup>  
Department of Management & Jaya Pad Launch, Universitas Pembangunan Jaya, Indonesia<sup>2</sup>

Corresponding Author: 2\*



**ABSTRACT**— The study aims to investigate the mediating role of supply chain financing on the relationship between negotiation, collaboration, and digitalization with the supply chain effectiveness of Alfamikro partners. The study involves 261 owner micro-retailers of Alfamikro partner members in the Tangerang area as respondents. The study employs the Structural Equation Modeling (SEM) analysis technique with the help of the AMOS program. The results showed that there was an influence supply chain finance on supply chain effectiveness in the Alfamikro program. Collaboration and digitalization affect supply chain financing, but negotiations do not influence the supply chain financing. The study also found that supply chain financing mediates in increasing the effect of collaboration and digitalization on supply chain effectiveness. While supply chain financing does not mediate the relationship between the negotiations and supply chain effectiveness, therefore, micro-retailers and their suppliers can build strong relationships through collaboration and digitalization. Micro-retailers can engage suppliers to work under strategic alliances through cooperation, and digitalization.

**KEYWORDS:** Supply chain finance, Supply chain effectiveness, operation management.

## 1. INTRODUCTION

The development of micro and small businesses as the foundation of the national economy has shown its contribution significantly. The total contribution from the economic sector of micro, small, and medium enterprises reached 61.41% of Gross Domestic Product. Micro, small and medium enterprises are the pillars of the national economy with contributions from these sectors, reaching 0.10%. In comparison, large businesses are the roof of the national economy with a contribution of 0.01% in terms of the number of business units. The economic structure of the Province in all of Java in 2019 is still dominated by DKI Jakarta Province, which has a local gross domestic product of 29.94 percent, then East Java Province of 24.80 percent, West Java Province of 22.40 percent, and Banten Province contributing 7.01 percent. On a provincial scale, when referring to the Central Statistics Agency data in the last five years for annual production and trade for micro and small industries, it shows that Banten province has the second industrial growth after DKI Jakarta. The number of Small and Medium Enterprises (SME) in North Banten Province covering Tangerang Regency, Tangerang City, South Tangerang City in 2017 was 490,510 units or 97.86 percent of the total number of businesses in Banten in the non-agricultural category. With a concentration of the population that reaches 59 percent of the people of Banten, for SME businesses, it reaches more than 50 percent with Tangerang Regency and City having the highest number of SMEs. The dynamic role of micro-businesses requires support from various parties. Micro-businesses need help from private companies who has access to reliable system infrastructure, technology systems support, easy access to finance, and accuracy in the distribution of merchandise. It is an essential note in the business synergy process where the government, as the policymaker, the public can provide effective interventions to support the survival of micro-businesses, which have become pillars as well as the foundation of the country's economy [1].

The cycle of demand for goods carried out by small traders is a big data on sales potential that can increase usefulness as an analysis in the category of products according to consumer purchasing patterns. Modern retailer companies can provide precise supply chain predictions with digitalization system capabilities so that supply chain operations will continue to improve as one of the business strategies to be able to win the competition [2]. In traditional studies of supply chain management, people still focus on management operations perspectives such as production capacity, demand levels, pricing, and so on. In simple terms, the definition of supply chain management is how to manage an effective and efficient supply chain, whereas the critical functions of supply chain management in the main activities are supply planning, sourcing and procurement, and supply chain implementation [3]. Microenterprise has problems. They are difficulty in getting lager suppliers and supplies of good quality, the transaction process, and having to wait for the queue to become an unavoidable situation. On the other hand, the manager of a micro business must maintain its outlets independently so that many sales opportunities are lost. This traditional microenterprise still has its consumers where they have to compete with modern retailers who continue to grow in terms of numbers [4]. Modern retailer companies then capture this problem to be able to provide services to traditional micro-businesses so that they can be well served and able to manage outlets in a more modern way. Traditional micro business owners who can survive in achieving their business have strong reasons for the synergy of mutually beneficial cooperation in terms of supply chain and ease of transactions through digitalization that is continuously developed by modern retail companies. The synergy between modern retailers and traditional micro-businesses is through a win-win strategy model, which is a mutual benefit [5]. Through the power of the modern supply chain and the network of modern retailers, modern retailers are segmenting customers by continuing to seize opportunities so that the flow of products and services can continue to run. The value proposition through negotiating the demand for goods, collaboration in the speed of supply, using digital equipment in transactions, is the key to successful supply chain management in modern retailers [6].

This research expands the work of [6] which discusses gaps related to supply chain financing and the supply chain effectiveness by identifying the uniqueness of the factors adopted by supply chain financing through a total cost approach. This study analyzes the benefits of management operations carried out between modern retail supply chains with micro businesses. This research investigates how suppliers and micro- entrepreneurs can build strong relationships when adopting safe schemes in supply chain financing. The study investigates the mediating role of supply chain financing on the relationship between negotiation, collaboration, and digitalization with the supply chain effectiveness of Alfamikro partners. Alfamikro is a program of Sumber Alfaria Trijaya Ltd to provide goods and to finance supply to micro-retailers. From 2015 to 2019, the Alfamikro program has 748 partner members in the Tangerang area only.

## **2. Literature Review**

### ***2.1 Supply Chain Financing and Supply Chain Effectiveness***

[7] defines supply chain financing management based on two main perspectives. First, financing-oriented is to focus on short-term solutions provided by financial institutions that handle debt and receivables. Second, supply-chain-oriented is to focus on short term solutions that do not involve financial institutions by optimizing working capital, inventory, and fixed asset financing. Supply chain players felt the benefits of the supply chain financing approach as resulting in lower debt costs or new opportunities to get due for payments and reduce supply chain working capital. [8] found that micro businesses can succeed in performance and growth if they can overcome obstacles that can hamper business growth. They overcome obstacles by developing strategies for accessing financial, marketing, and using technology to monitor business operations, improve customer service, and be able to provide customer security. For microbusinesses, this should be a top priority rather than advancing the business image and reputation. [9] found that business skills, capital

adequacy, access to finance, access to markets, or customers have a significant and positive impact on microbusiness efforts to survive. [10] found that there are a strong bond and positive effect between supply chain networks and the quality of supply chain financing credit mediated by positive results of abundance and access to knowledge. [7] found that the objective from the perspective of supply chain financing is still as general as optimizing the flow of the funding. But in supply chain financing is more focused on contributing to the goal of extending the payment term as a source of supply risk reduction as the most relevant driver in the implementation of supply chain financing.

Based on an analysis of the importance of the effectiveness of the micro-business supply chain, it is possible to state:

H1: Supply Chain Financing is positively related to Supply Chain Effectiveness

### ***2.2 Negotiation and Supply Chain Financing***

[11] found that practical negotiation skills are essential for organizational success because they are congruent with leadership development. Effective negotiators have a situational view of leadership that is useful and involves a leadership style that can adapt to the situation. Negotiation skills possessed are used to influence the performance of the supply chain. [12] found that the negotiations carried out showed goals directed through human movement through the cognitive and sensorimotor systems. That is responsible for the whole movement that can be dedicated to the negotiator to the maximum by allocating resources, policies, and functions so that such coordination can be viewed as a negotiation process. [13] found that taking into account the objectives of future relationships using a win-lose negotiation strategy can maximize financial results in a sustainable supply chain relationship. In understanding relationships with micro business supply chain players, it is possible not to achieve relational goals because this insight lies in the heart in face-to-face meetings with buyers and suppliers. Understanding these insights has proven beneficial for organizations and micro-businesses that seek to use supply chain relationships as a source of sustainable competitive advantage.

H2: Negotiation between Sumber Alfaria Trijaya Ltd and its partners has a positive and significant effect on Alfamiko Supply Chain Finance.

### ***2.3 Collaboration and Supply Chain Financing***

According to [14], collaboration in the supply chain structure on innovation has a positive impact through the cooperation through to develop long-term strategic partnerships in micro-businesses as assets, which are used constructively by companies. Modern retailer companies, together with micro retailers, develop innovations that focus on increasing orders by micro-entrepreneurs so that relations between the two parties become more potent, fostering mutual trust. Thus collaboration will be beneficial in a sustainable manner. According to [15], contributing to different perspectives in distribution strategies that focus on informal markets, traditional and non-traditional partners provide cost-effectiveness and social aspects that can influence important decisions in distribution network design and operation. Insights that highlight the level of retention that occurs in the distribution network of micro-entrepreneurship businesses with an emphasis on the importance of local socio-cultural factors can form a process of unity of collaboration. According to [16], micro-businesses need to build relationships and trust. That is consistently maintained to qualify as long-term cooperative partners of more substantial companies so that they can develop into reciprocal and interdependent relationships. Micro-businesses often experience shortcomings in network capabilities, so it is wise to collaborate with more substantial companies and customers. According to [17] disruptions and obstacles in the form of disaster risk hurt the supply chains of large companies where supply chain infrastructure designed to anticipate weak customer value. Collaborating with supply chain partners is vital in sharing information, making decisions,

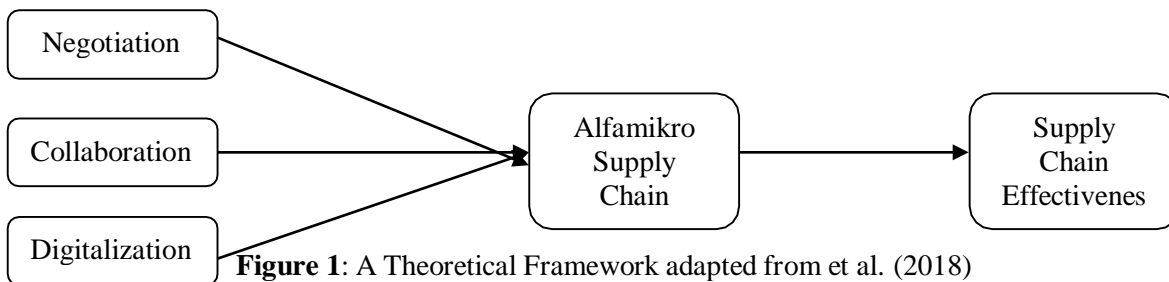
and recovering assistance.

H3: Collaboration between Sumber Alfaria Trijaya Ltd and its partners has a positive and significant effect on Alfamikro Supply Chain Finance.

**2.4 Digitalization and Supply Chain Financing**

According to [7] the impact of the digitalization process on the implementation of supply chain financing solutions has the most complicated solution implementation. The digitalization of the trading process is known to provide significant cost savings associated with paper-based trading processes, which can provide added value to services to micro businesses and customers. Modern retailer companies, through micro retailers, offer a form of re-serving or factoring in debt by giving additional features of flexibility in payment. According to [18] information technology strategy has a significant influence on internal business processes, and internal business processes have a substantial influence on financial performance. The use of information technology has driven improvements in internal business processes so that it has a positive impact on financial performance. According to [19] digital orientation and digital capabilities have a positive effect on digital innovation that affects financial and non-financial performance mediated by technology orientation. In a resource-based context, digital innovation formally demonstrates an important role that can contribute to the supply chain financing performance.

H4: Digitalization between Sumber Alfaria Trijaya Ltd and its partners has a positive and significant effect on Alfamikro Supply Chain Finance.



**Figure 1:** A Theoretical Framework adapted from et al. (2018)

**3. Research Methods**

**3.1 Population, sample and sampling technique**

Sumber Alfaria Trijaya Ltd is a modern retail company in Indonesia. Until 2018, the number of outlets amounted to 15,294. The outlets spread throughout the Jakarta area by 33.0%. The Java region outside Jabodetabek by 37.5%, and areas outside of Java by 29.42%. Later the company launched the Alfamikro program to contribute to the development and progress of the microbusiness. Sumber Alfaria Trijaya Ltd launched the Alfamikro program to supply goods to micro retailers by providing a lot of convenience in helping improve micro businesses. The Alfamikro business unit has been started since 2013 and has collaborated with micro-business owners to become members. The company provides comfort in the ordering process, a supply of goods, and the payment process. The number of micro business owners (retailers) who work with the Alfamikro program (suppliers) in the Tangerang area is the population of this study. A total of micro joint retailers as active members of the Alfamikro program is 748 in 2019 (see Table 1).

**Table 1.** The population of Alfamikro Members in Tangerang Area

District/Regency/City	Year				
	2015	2016	2017	2018	2019

Tangerang Regency	189	47	422	230	285
Tangerang City	94	48	243	276	233
South Tangerang City	32	24	17	165	230
Grand Total	315	119	682	671	748

The study employs simple random sampling, and the determination of sample size uses the Slovin formula. The Slovin formula for determining the minimum sample size (n) if known population size (N) at the significance level  $\alpha$  is:

$$n = \frac{N}{1 + N\alpha^2} = \frac{748}{((1 + (748(0.05)\alpha^2))} = 260,6272 = 261$$

### 3.2 Goodness of Fit Measurement

Goodness of Fit is an indication of the comparison between models and observed variables [20- 24]. The first stage is evaluating whether the data used can meet the SEM assumptions, namely through several tests as follows:

**Table 2.** The goodness of Fit Index Table

The goodness of Fit Indexes	Cut Off Value
Chi-Square	Expected to be Small
Significance Probability	$\geq 0,05$
RMSEA	$\leq 0,08$
GFI	$\geq 0,90$
AGFI	$\geq 0,90$
CMIN/DF	$\geq 0,90$
TLI	$\geq 0,90$
CFI	$\geq 0,90$

## 4. Result

### 4.1 Measurement of Data and Results

Data analysis uses structural model equations to validate proposed models and relationships. Before running the investigation, the data set is checked for each multicollinearity, outlier, and missing value set, and the results show that such problems are not found in the data set.

**Table 3.** Sample Statistics

Categories	Total	%	Categories	Total	%
<b>Business Location</b>			<b>Gender:</b>		
Tangerang District	128	49	Male	169	65
Tangerang City	83	32	Female	92	35
South Tangerang City	50	19	<u>Grand Total</u>	261	100
Grand Total	261	100			
<b>Business Age</b>			<b>Year:</b>		
< 1 Year	17	7	< 1 Year	80	31
> 1 – 3 Years	52	20	> 1 – 3 Years	91	35
> 3 Years	192	74	> 3 Years	90	34
Grand Total	261	100	Grand Total	261	100
<b>Age of Owner</b>					
17 – 30 Years Old	45	17			

31 – 40 Years Old	125	48
41 - 50 Years Old	68	26
> 50 Years Old	23	9
Grand Total	261	100

#### 4.2 Reliability and Validity Analysis

Data analysis using Structural Equation Modeling (SEM) using the AMOS 24.0 system. SEM is an analysis technique that allows analysis of the effects of several variables on other variables simultaneously. The advantage of SEM application in management research is in its ability to confirm the dimensions of a concept or factor that is very commonly used in management as well as its ability to measure relationships that theoretically exist [25]. AMOS presents the effect of each variable, which summarized in the direct and indirect impact and total effect. The testing of research instruments in this study uses the validity and reliability tests of latent constructs. The validity test uses a Confirmatory Factor Analysis (CFA). CFA in SEM-AMOS determines the number of factors and the relationship between factors with latent constructs based on theory. Confirmatory Factor Analysis (CFA) requires a minimum number of factors that must be used, namely > 3, which has a fit size to measure the suitability of the model with research data. Reliability testing uses construct reliability (CR) value  $\geq 0.70$  [26- 28] and extracted variance value (AVE)  $\geq 0.50$  [29- 33], through manual calculations with the help of an Excel program. The results of the validity and reliability of the research model are shown in Table 4.

Table 5 shows that the correlation between each variable and items is significant, P-value < 0.05. Therefore, all indicators are valid.

**Table 4.** Validity and Reliability Test Results of All Indicators

No	Variable	Indicator	Standardized Loading Factor	Validity	CR	AVE	Reliability
1	Negotiation Ability	NGO1	0,839	Valid	0,891	0,761	Reliable
		NGO2	0,823	Valid			
		NGO3	0,901	Valid			
		COL1	0,734	Valid			
2	Collaboration	COL2	0,830	Valid	0,878	0,692	Reliable
		COL3	0,849	Valid			
		COL4	0,791	Valid			
3	Digitalization	DGT1	0,853	Valid	0,837	0,683	Reliable
		DGT2	0,776	Valid			
		DGT3	0,753	Valid			
4	Supply Chain Financing	SCF1	0,722	Valid	0,815	0,656	Reliable
		SCF2	0,748	Valid			
		SCF3	0,841	Valid			
5	Supply Chain Effectiveness	SCE1	0,770	Valid	0,939	0,751	Reliable
		SCE2	0,874	Valid			
		SCE3	0,859	Valid			
		SCE4	0,865	Valid			
		SCE5	0,915	Valid			
		SCE6	0,797	Valid			

**Table 5.** Regression Weight (Default Model)

			Estimate	S.E.	C.R.	P	Label
NGO3	<---	Negotiation	1,000				
NGO2	<---	Negotiation	0,964	0,057	16,882	***	Par_1
NGO1	<---	Negotiation	0,978	0,056	17,402	***	Par_2

COL4	<---	Collaboration	1,000				
COL3	<---	Collaboration	0,939	0,062	15,078	***	Par_3
COL2	<---	Collaboration	0,912	0,062	14,659	***	Par_4
COL1	<---	Collaboration	0,765	0,061	12,589	***	Par_5
DGT3	<---	Digitalization	1,000				
DGT2	<---	Digitalization	1,056	0,065	16,128	***	Par_6
DGT1	<---	Digitalization	1,148	0,082	13,991	***	Par_7
SCF1	<---	SCF	1,000				
SCF2	<---	SCF	1,072	0,093	11,471	***	Par_8
SCF3	<---	SCF	1,108	0,088	12,598	***	Par_9
SCF4	<---	SCF	1,288	0,105	12,253	***	Par_10
SCE1	<---	SCE	1,000				
SCE2	<---	SCE	1,251	0,080	15,660	***	Par_11
SCE3	<---	SCE	1,364	0,089	15,310	***	Par_12
SCE4	<---	SCE	1,357	0,088	15,432	***	Par_13
SCE5	<---	SCE	1,374	0,083	16,630	***	Par_14
SCE6	<---	SCE	1,084	0,078	13,948	***	Par_15

Source: Amos Data Analysis 24.00, 20204.3. Goodness of Fit Measurement

The goodness of Fit measurement aims to determine the feasibility of a research model. The results of the Goodness of Fit analysis are as follows:

**Table 6.** The goodness of fit model

The goodness of Fit Indexes	Cut Off Value	Results	Evaluation
Chi-Square	Expected to be Small (< 188,3317)	435,615	Poor Fit
Significance Probability	≥ 0,05	0,000	Poor Fit
RMSEA	≤ 0,08	0,082	Marginal Fit
GFI	≥ 0,90	0,864	Marginal Fit
AGFI	≥ 0,90	0,819	Poor Fit
CMIN/DF	≥ 0,90	2,757	Poor Fit
TLI	≥ 0,90	0,922	Fit
CFI	≥ 0,90	0,935	Fit

Source: Amos Data Analysis 24.00, 2020

Table 6 shows that the Chi-Squares, Probability, AGFI, and CMIN / DF criteria produce poor fit, while RMSEA and GFI produce marginal fit, while TLI and CFI produce a good fit. Overall shows that Goodness of Fit is not good. However, the analysis can still proceed to the hypothesis testing stage because other criteria such as TLI and GFI produce a good fit so that the overall model is still acceptable to provide sufficient confirmation for the acceptance of a unidimensional hypothesis.

### 4.3 Result of Hypothesis Testing

Hypothesis testing is done to validate the hypothesis that has been made. Decision making to determine whether a hypothesis is accepted or rejected is based on a probability of significance, that is,  $\alpha = 0.05$  (5%), where the hypothesis is accepted if it has a value of  $p < 0.05$ . Table 7 shows the results of hypothesis testing. H1, H3, and H4 are supported, but H2 rejected.

**Table 7.** Regression Weight (Default Model)

			Estimate	S.E.	C.R.	P	Label
--	--	--	----------	------	------	---	-------



SCE	<---	SCF	1.901	0.208	9.1444	***	Supported
SCF	<---	Negotiation	-0.037	0.030	-1.257	0.209	Rejected
SCF	<---	Collaboration	0.149	0.060	2.473	0.013	Supported
SCF	<---	Digitalization	0.341	0.094	3.627	***	Supported

Source: Amos Data Analysis output

Note \*\*\* = Perfect (0,000)

The effect of supply chain financing on supply chain effectiveness is significant because its p-value is  $0.000 < 0.001$ . Likewise, the impact of collaboration on supply chain financing is significant because its p-value is  $0.01 < 0.05$ . As well as the effect of digitalization on supply chain financing is significant because its p-value is  $0.000 < 0.001$ . But, the impact of negotiation on supply chain financing is not significant, because its p-value is  $0.209 > 0.05$ .

The Sobel test is carried out by testing the strength of the indirect effect of the independent variable on the dependent variable through the mediating variable. According to [25], a variable is called a mediating variable if it influences the relationship between the predictor variable (Independent) and the criterion variable (dependent). For the Sobel test, a calculation of the role value (Estimate) and its standard error (S.E) is calculated from the direct path of the X to Y and M to Y variables. Table 8 shows the Sobel test output.

**Table 8.** Sobel test output

	C.R.	p-value
Negotiation* SCF → SCE	-1.222	0.221
Collaboration * SCF → SCE	2.296	0.016
Digitalization* SCF → SCE	3.371	0.000

The moderating role of the supply chain financing on the relationship between negotiation and supply chain effectiveness is not significant. The value of the negotiation path to supply chain financing, from Table 7 shows that the Estimated value = -0.037 (a) and S.E = 0.030 (Sa). While the value of supply chain financing to the effectiveness of the supply chain are: Estimates = 1.901 (a) and S.E = 0.208 (Sa). Based on these data shows that the indirect role is -1.222 and p-value = 0.221 ( $p > 0.05$ ). These results indicate that supply chain financing does not provide an indirect role in increasing the effect of negotiations on supply chain effectiveness.

The moderating role of the supply chain financing on the relationship between collaboration and supply chain effectiveness is significant. The value of the collaboration path to supply chain financing, from Table 7 shows that the Estimated value = 0.149 (a) and S.E = 0.060 (Sa). While the value of supply chain financing to the effectiveness of the supply chain is: Estimated at 1.901 (a) and S.E = 0.208 (Sa), based on these data shows that the indirect role is 2.296 and p-value = 0.016 ( $p < 0.05$ ). These results indicate that supply chain financing provides an indirect role in increasing the effect of collaboration on supply chain effectiveness.

The moderating role of the supply chain financing on the relationship between digitalization and supply chain effectiveness is significant. The value of the digitalization path to supply chain financing, from Table 7 shows that the Estimated value = 0.341 (a) and S.E = 0.094 (Sa). While the value of supply chain financing to the effectiveness of the supply chain is: Estimated at 1.901 (a) and S.E = 0.208 (Sa), based on these data, it is known that the indirect role is 3.371 and p-value = 0.000 ( $p < 0.05$ ). These results indicate that supply chain financing provides an indirect role in increasing the effect of digitalization on supply chain effectiveness.

#### **4.4 Results of the Determination Coefficient**

**Table 9.** Squared Multiple Correlations ( $R^2$ )

	Estimate
SCF	0,463
ERP	0,200

Source: Amos Data Analysis 24.00, 2020

Table 9 shows the coefficient of determination to determine the contribution of the simultaneous influence of independent variables on the dependent variable. The coefficient of determination between the variables of negotiation, collaboration, and digitalization on supply chain financing is 0.463 or 46.3%. It shows that variations in the contribution of negotiation, collaboration and digitalization variables to supply chain financing amounted to 46.3%, while the remaining 53.7% is influenced by other variables outside the research model, such as innovation, competitive advantage, etc. The coefficient of determination between supply chain financing and supply chain effectiveness is 0.220 or 22%. This shows that the variation in the contribution of supply chain financing to supply chain effectiveness is 22%, while the remaining 78% is influenced by other variables outside the research model, such as business skills, capital adequacy, etc

## 5. Discussion and Conclusions

This study found that Alfamikro supply chain financing affects supply chain effectiveness. It means that supply chain financing variables are essential to be considered by Alfamicro in increasing supply chain effectiveness. The results confirm previous studies by [6] that supply chain financing has a significant positive effect on supply chain effectiveness. As [7] stated that the lower the cost of debt or new opportunities to get due on payments could reduce the working capital of the supply chain, to increase the effectiveness of the supply chain. This study found that negotiations did not affect Alfamikro financing. It can happen because Alfamikro has given a win-win solution to micro-businesses while prioritizing mutually beneficial cooperation. It does not require a long negotiation process in seeking agreement between Alfamikro and members so that every decision taken in the use of Alfamikro financing is absolute from micro businesses that become members. The negotiation activities are minimal. [34] stated that Sumber Alfaria Trijaya Ltd, as the manager of a modern retail network, strengthened support to help community micro-businesses or small shop owners through financial assistance. Alfamikro makes it easy for stall owners to order the desired items, while payments can be afterward. This result confirms previous studies by [6] that negotiations have a positive relationship with supply chain financing because they can define business terms positively. This study found that collaboration influences Alfamikro's supply chain financing. It explains that good collaboration will increase supply chain financing. The collaboration variable is essential for Alfamikro to consider in improving supply chain financing. This study supports previous studies by [6] that collaboration has a significant positive relationship with supply chain financing to improve as a form of strategic alliance and to act as an identical unit. According to [16], micro-businesses need to build relationships and trust continuously. Micro retailers need to maintain to qualify as a long-term cooperative partner of larger companies so that they can develop into reciprocal and interdependent relationships. Microbusinesses often experience a lack of network capability, so it is wise to collaborate with larger companies and customers. In applying the supply chain financing context, collaboration means developing trust, commitment, knowledge, respect, and business agility among suppliers and acting as a homogeneous unit. It is widely recognized that supply chain collaboration supports superior performance in SMEs because of the processes, competencies, capitalization of resources, and procedures in the company. Theoretically, a collaboration between companies helps minimize search costs and quality checking costs. Collaboration also reduces transaction costs because certain assets increase with contract frequency and higher levels of interdependence [6]. Thus, for a more cohesive relationship between buyers and suppliers, collaboration is an essential component for the success of supply chain financing.

The results of subsequent studies indicate that digitalization influences Alfamikro's supply chain financing. It explains that good digitalization will be able to increase supply chain financing. It means that the digitalization variable is vital for Alfamikro to consider in improving supply chain financing. This result confirms previous studies by [6] that the digitalization of trade is significantly related to supply chain financing in providing effectiveness in reducing costs compared to paper-based business, which can improve the quality and visibility of supply chain financing cycles. According to [18], information technology strategy has a significant influence on internal business processes, and internal business processes have a substantial influence on financial performance. The use of information technology has driven improvements in internal business processes so that it has a positive impact on financial performance. According to [19], in a resource-based context, digital innovation formally demonstrates an important role that can contribute to supply chain financing performance. Under technological advances and rapid globalization, SMEs place their orders on top of a well-managed and transparent online digital trading system that helps all microbusinesses to quickly check the status of their orders, such as delivery times, inventory control, and payment times. Digitalization increases the efficiency of operations and effective SME decision making. Therefore, the process of digitizing trade provides a significant cost reduction compared to conventional based business procedures and enables value-added services (invoice visibility). Trade digitalization also gives suppliers flexibility regarding receivables or debt. This virtual flexibility does not require any costs to be obtained from the digitization trading process. Digitalization is essential for SMEs to expand the management and control of trading activities [6]. Thus, companies that maintain a higher level of digitalization of trade tend to adopt more advanced financing solutions. The results of this study also found that the supply chain financing from Alfamikro provides an indirect role in increasing the effect of collaboration and digitalization on supply chain effectiveness. While negotiations do not have an indirect impact, these results suggest that collaboration can reduce uncertainty transaction costs, which in turn increases supply chain effectiveness. Besides, by using digitalization, micro-businesses can efficiently ensure compliance, transparency, and minimize the risk of default that leads to supply chain financing and increases supply chain effectiveness.

## 6. References

- [1] R. H. Samujh, "Micro-businesses need support: Survival precedes sustainability," *Corp. Gov.*, vol. 11, no. 1, pp. 15–28, 2011, doi: 10.1108/14720701111108817.
- [2] K. Kleemann, "Theory of Supply Chain Finance: Its Implementation and an Organisation's Benefits," Saimaa University of Applied Sciences, 2018.
- [3] B. H. Prihatmanto, *Supply Chain, Manajemen, Ilmu Pengetahuan, Strategi Teori dan Praktik*. Jakarta: Elex Media Komputindo, 2018.
- [4] D. Hikmawati and C. Nuryakin, "Keberadaan Ritel Modern dan Dampaknya terhadap Pasar Tradisional di DKI Jakarta," *J. Ekon. dan Pembang. Indones.*, vol. 17, no. 2, pp. 195–208, 2017.
- [5] T. J. Utomo, "Persaingan Bisnis Ritel: Tradisional Vs Modern," *Fokus Ekon.*, vol. 6, no. 1, pp. 122–133., 2010.
- [6] Z. Ali, B. Gongbing, and A. Mehreen, "Predicting supply chain effectiveness through supply chain finance: Evidence from small and medium enterprises," *Int. J. Logist. Manag.*, vol. 30, no. 2, pp. 488–505, 2019, doi: 10.1108/IJLM-05-2018-0118.
- [7] F. Caniato, L. M. Gelsomino, A. Perego, and S. Ronchi, "Does finance solve the supply chain

financing problem?," *Supply Chain Manag.*, vol. 21, no. 5, pp. 534–549, 2016, doi: 10.1108/SCM-11-2015-0436.

[8] N. Baporikar, G. Nambira, and G. Gomxos, "Exploring factors hindering SMEs' growth: evidence from Namibia," *J. Sci. Technol. Policy Manag.*, vol. 7, no. 2, pp. 190–211, 2016, doi: <https://doi.org/10.1108/JSTPM-11-2015-0036>.

[9] G. O. Candiya Bongomin, J. Munene, J. M. Ntayi, and C. A. Malinga, "Determinants of SMMEs growth in post-war communities in developing countries: Testing the interaction effect of government support," *World J. Entrep. Manag. Sustain. Dev.*, vol. 14, no. 1, pp. 50–73, 2018, doi: 10.1108/WJEMSD-06-2017-0026.

[10] H. Song, Q. Lu, K. Yu, and C. Qian, "How do knowledge spillover and access in supply chain network enhance SMEs' credit quality?," *Ind. Manag. Data Syst.*, vol. 119, no. 2, pp. 274–291, 2019, doi: 10.1108/IMDS-01-2018-0049.

[11] E. Chapman, E. W. Miles, and T. Maurer, "A proposed model for effective negotiation skill development," *J. Manag. Dev.*, vol. 36, no. 7, pp. 940–958, 2017, doi: 10.1108/JMD-01-2016-0002.

[12] K. H. Kim, R. B. Gillespie, and B. J. Martin, "Negotiated control between the manual and visual systems for visually guided hand reaching movements," *J. Neuroeng. Rehabil.*, vol. 11, no. 1, pp. 1–12, 2014, doi: 10.1186/1743-0003-11-102.

[13] S. Thomas, J. Eastman, C. D. Shepherd, and L. T. Denton, "A comparative assessment of win-win and win-lose negotiation strategy use on supply chain relational outcomes," *Int. J. Logist. Manag.*, vol. 29, no. 1, pp. 191–215., 2018.

[14] E. N. Yunus, "Leveraging supply chain collaboration in pursuing radical innovation," *Int. J. Innov. Sci.*, vol. 10, no. 3, pp. 350–370, 2018, doi: 10.1108/IJIS-05-2017-0039.

[15] V. Varga and E. Rosca, "Driving impact through base of the pyramid distribution models: The role of intermediary organizations," *Int. J. Phys. Distrib. Logist. Manag.*, vol. 49, no. 5, pp. 492–513, 2019, doi: 10.1108/IJPDLM-01-2018-0040.

[16] A. E. Tobiassen and I. B. Pettersen, "Exploring open innovation collaboration between SMEs and larger customers: The case of high-technology firms," *Balt. J. Manag.*, vol. 13, no. 1, pp. 65–83, 2018, doi: 10.1108/BJM-01-2017-0018.

[17] Q. Zhu, H. Krikke, M. C. J. Caniëls, and Y. Wang, "Twin-objective supply chain collaboration to cope with rare but high impact disruptions whilst improving performance," *Int. J. Logist. Manag.*, vol. 28, no. 2, pp. 488–507, 2017, doi: 10.1108/IJLM-02-2016-0028.

[18] J. Y. Kurniawan, M. I. Malelak, and D. Astuti, "Pengaruh Attitude, Subjective Norm, Past Behavior, Dan Perceived Control Terhadap Budgeting Intention Mahasiswa Di Surabaya," *Int. J. Financ. Invest. Stud.*, vol. 1, no. 1, pp. 21–29, 2020, doi: 10.9744/ijfis.1.1.21-29.

[19] S. Khin and T. C. F. Ho, "Digital technology, digital capability and organizational performance: A

mediating role of digital innovation,” *Int. J. Innov. Sci.*, vol. 11, no. 2, pp. 177–195, 2019, doi: 10.1108/IJIS-08-2018-0083.

[20] S. Bahri and F. Zamzam, *Model Penelitian Kuantitatif Berbasis SEM-Amos*, 1st ed. Yogyakarta: Deepublish, 2014.

[21] H. Handi, T. Hendratono, E. Purwanto, and J. J. O. I. Ihalauw, “The effect of E-WOM and perceived value on the purchase decision of foods by using the go-food application as mediated by trust,” *Qual. Innov. Prosper.*, vol. 22, no. 2, pp. 112–127, 2018, doi: 10.12776/qip.v22i2.1062.

[22] C. C. Dapas, T. Sitorus, E. Purwanto, and J. J. O. I. Ihalauw, “The effect of service quality and website quality of zalora. Com on purchase decision as mediated by purchase intention,” *Qual. - Access to Success*, vol. 20, no. 169, pp. 87–92, 2019.

[23] E. Purwanto, J. Deviny, and A. M. Mutahar, “The Mediating Role of Trust in the Relationship between Corporate Image, Security, Word of Mouth and Loyalty in M-Banking Using among the Millennial Generation in Indonesia,” *Manag. Mark.*, vol. 15, no. 2, pp. 255–274, 2020, doi: 10.2478/mmcks-2020-0016.

[24] E. Purwanto, “The effect of cosmopolitanism on perceived foreign product and purchase intentions: Indonesia case,” *Qual. - Access to Success*, vol. 17, no. 155, 2016.

[25] I. Ghozali, *Model Persamaan Struktural Konsep Dan Aplikasi Dengan Program AMOS 24*. Semarang: Badan Penerbit Universitas Diponegoro, 2017.

[26] E. Purwanto and H. Tannady, “The Factors Affecting Intention to Use Google Meet Amid Online Meeting Platforms Competition in Indonesia,” vol. 62, no. 06, pp. 2829–2838, 2020.

[27] M. Christian, E. Purwanto, and S. Wibowo, “Technostress creators on teaching performance of private universities in Jakarta during covid-19 pandemic,” *Technol. Reports Kansai ...*, vol. 62, no. 06, pp. 2799–2809, 2020, [Online]. Available: [http://www.academia.edu/download/64028209/TRKU Vol 62 No 06%232 2020.pdf](http://www.academia.edu/download/64028209/TRKU_Vol_62_No_06%232_2020.pdf).

[28] E. Purwanto and J. Loisa, “The intention and use behaviour of the mobile banking system in Indonesia: UTAUT model,” *Technol. Reports Kansai Univ.*, vol. 62, no. 6, pp. 2757–2767, 2020.

[29] A. L. J. Jauw and E. Purwanto, “Moderation effects of cultural dimensions on the relationship between E-service quality and satisfaction with online purchase,” *Qual. - Access to Success*, vol. 18, no. 157, 2017.

[30] C. G. Karno and E. Purwanto, “The effect of cooperation and innovation on business performance,” *Qual. - Access to Success*, vol. 18, no. 158, 2017.

[31] M. Tjiu and E. Purwanto, “Guanxi and the leader-member exchange in the chinese supervisor and subordinate relationship,” *J. Appl. Econ. Sci.*, vol. 12, no. 8, 2017.

[32] A. L. J. Jauw and E. Purwanto, “Moderation effects of cultural dimensions on the relationship between E-service quality and satisfaction with online purchase,” *Qual. - Access to Success*, 2017.

- [33] E. Purwanto and A. D. B. Purwanto, “An investigative study on sustainable competitive advantage of manufacture companies in Indonesia,” *Bus. Theory Pract.*, vol. 21, no. 2, 2020, doi: 10.3846/btp.2020.12256.
- [34] E. Sukarelawanto, “Alfamikro dan Toko Modal Dukung Permodalan Warung Kecil,” 2018. <https://bali.bisnis.com/read/20181028/538/853986/alfamikro-dan-toko-modal-dukung-permodalan-warung-kecil>.



This work is licensed under a Creative Commons Attribution Non-Commercial 4.0 International License.