



The Effect of Supply Chain Speed, Responsiveness, Flexibility and Competence on the Profitability of PT. Bank Negara Indonesia

Muhammad Abid Prima Kawiswara, Veny Megawati^(✉),
and Stefanus Budy Widjaja Subali

University of Surabaya, Surabaya, Indonesia
veny_megawati@staff.ubaya.ac.id

Abstract. This study aims to analyze the effect of supply chain agility, which consists of speed, responsiveness, flexibility, and competence, on the profitability of PT. Bank Negara Indonesia. This study applies a quantitative approach using Structural Equation Modeling. The data used in this study was primary data obtained from the results of a questionnaire. Respondents in this study were 189 respondents who are permanent employees who have worked for a minimum of one year and a minimum education of Diploma 3. The study's results indicate a positive and significant effect between supply chain speed, flexibility, and competence on the profitability of PT. Bank Negara Indonesia. While supply chain responsiveness has no effect on the profitability of PT. Bank Negara Indonesia.

Keywords: Supply chain speed · Responsiveness · Flexibility · Competence · Profitability

1 Introduction

The banking industry is an activity that cannot be separated from economic and supply chain activities. Law number 10 of 1998 states that a bank acts as a business entity that collects funds from the public in the form of deposits and distributes them to the public through credit and or other forms to improve the standard of living for the people. Banks are also a major component of the financial system and active subjects in financial markets throughout the country. A bank's supply chain activities directly affect the bank's performance as the supply chain is in the form of strategic coordination, which aims to integrate management from the supply and demand sides [1, 4]. Both supply and demand sides are essential, especially for a bank that serves priority customers exclusively. Priority customers will have a relationship manager who helps manage the funds they deposit in the bank. The relationship manager will work closely with the treasury and product management divisions to enable them to provide satisfactory products and services for priority customers. The supply chain development will also determine the rate of products offered to priority customers because the banking sector

is oriented toward customer satisfaction. Supply chain management also serves as a mediation. In order to supply raw materials, companies need to deal with suppliers. Companies also need distributors who distribute products to customers. A relationship manager (RM) in the banking industry is part of the sales team tasked with building and maintaining relationships with clients/customers. RMs possess various tasks, one of which is to offer financial products to potential customers [3]. The banking industry plays a vital role in supporting national economic growth. PT. Bank Negara Indonesia (BNI) offers various financial products that customers can choose from. Each financial product has a different level of return of interest and risk. Customers can have financial products by meeting predetermined criteria. The financial products offered have unique characteristics related to the BNI administration system.

Financial Services Authority (OJK) report shows that Indonesia's level of financial literacy and inclusiveness has increased in the past five years. In 2019, OJK conducted a national-scale financial literacy survey, and the results showed that Indonesia achieved a financial literacy index value of 38.03%, while financial inclusion was 76.19%. The increase in literacy levels in the past five years was quite good, but the increase in DFI Operators until Q3-2020 had a much more significant increase than the level of financial literacy in Indonesia. This increase in financial literacy results from the implementation of national strategic initiatives that have been held since 2017. Based on BNI's financial statements in 2019 and 2020, there was a high decline in net profit after income tax. The net profit after income tax in 2020 decreased to 78.55%, which is recognized as the biggest decline in the past four years.

Supply chain agility is one of the significant challenges for corporate companies engaged in the banking industry. This topic is related to how a company can make a decision that can adapt to the utilization of its supply chain assets with dynamic market demands and meet each demand in real-time. Supply chain agility allows companies to anticipate short-term supply and demand volatility. Any changes made to the company aspects related to supply chain agility can boost the company's profitability that has different contexts and situations, especially when the company is faced with an uncertain market environment [4, 5].

Based on the background mentioned above, the problem formulation for this study: does supply chain speed as a supply chain agility factor affect the profitability of PT. Bank Negara Indonesia?; does supply chain responsiveness as a supply chain agility factor affect the profitability of PT. Bank Negara Indonesia?; does supply chain flexibility as a supply chain agility factor affect the profitability of PT. Bank Negara Indonesia?; and does supply chain competence as a supply chain agility factor affect the profitability of PT. Bank Negara Indonesia?

2 Research Methods

This research is basic research as it was carried out to develop research that has been done before. Based on its objectives, this research is categorized as casual research. Casual research aims to explain the cause-and-effect relationship [6]. It was conducted to examine the effect of the independent variables used, including supply chain speed, responsiveness, flexibility, and competence, on profitability as the dependent variable

in this study for a company in the banking sector, namely PT. Bank Negara Indonesia (BNI).

This study used four independent variables that affect one dependent variable. The independent variables in this study were supply chain speed, responsiveness, flexibility, and competence. The dependent variable in this study was profitability. Sources of data used in this study were primary data obtained from distributing questionnaires to respondents who were employees in various divisions at PT. Bank Negara Indonesia in Surabaya city and have been directly involved with transaction activities with customers. Respondents in this study were PT. Bank Negara Indonesia's internal parties. The distribution of the questionnaire was intended to measure the effect of the independent variables (supply chain speed, responsiveness, flexibility, and competence) on the dependent variable (profitability). Questionnaires were distributed online via Google Forms. The questionnaire made by the researchers also asked the respondent's profiles such as gender, age, last education level, work experience, and current job position to clarify the respondent's profile as a descriptive data display.

The type of data in this study was quantitative data. The measurement level used was the interval level. The interval level was chosen because it is a metric level so that it can be quantified, while the measurement scale used was the Likert scale. The Likert scale was used because the context of this research was supply chain management, which is included in behavioral research, so to measure variables in research requires measurements based on the attitudes, opinions, and perceptions of respondents about statements concerning phenomena in business activities. Variables were measured through indicators that were converted as question instruments in the questionnaire. A close-ended questionnaire was used to collect data from respondents. The answer choices at the interval level were arranged on a numerical scale to enable respondents to assess statements on a point scale. These measurements were applied to the independent variables (supply chain speed, responsiveness, flexibility, and competence) and the dependent variable (profitability).

3 Results and Discussion

The results of hypothesis testing exhibited in Table 1 show that of the four research hypotheses; three hypotheses are supported, and one hypothesis is not supported.

Figure 1 exhibits the final model of this study where there are standardized estimates values that indicate the magnitude of the effect between variables. Based on

Table 1. The Results of Hypothesis Testing.

Hypothesis	Path	S.E.	C.R	P	Results
H1	SPED → PROF	.448	1.912	0.056	Supported
H2	RESP → PROF	-.349	-.630	0.529	Not Supported
H3	FLEX → PROF	.593	1.740	0.082	Supported
H4	COMP → PROF	.395	1.737	0.082	Supported

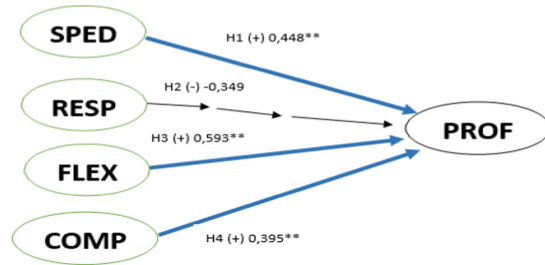


Fig. 1. The Results of Structural model hypothesis testing.

Fig. 1, it can be seen that three variables have a positive and significant effect (SPED, FLEX, & COMP) on the variable (PROF). Meanwhile, the variable (RESP) has no effect on (PROF).

Table 1 shows that H1 has the standardized estimates value of .448 with C.R. 1.912, implying that supply chain speed has a positive effect on the company's profitability. This hypothesis testing result shows that the H1 of this study has a positive effect but is not supported. This is in line with Bidhandi and Valmohammadi's study results [8].

This hypothesis indicates that speed as a variable that can complete supply chain activities as quickly as possible can make a positive contribution to the profitability of PT. Bank Negara Indonesia. Speed is an important variable in the banking industry because bank employees need to get potential customers quickly, process data, and use resources effectively according to bank needs. Any delays that occur can reduce the value of the company's productivity, which will impact profitability.

Table 1 shows that H2 has the standardized estimates value of -0.349 with C.R. -0.630 , implying that supply chain responsiveness has no effect on the company's profitability. This hypothesis testing result shows that H2 of this study has no effect and is supported. This is in line with Ali and Ahmed's study results [7].

This hypothesis indicates that responsiveness as a variable that has the ability to identify, respond, and anticipate changes in demand cannot give a positive contribution to the PT. Bank Negara Indonesia's profitability. PT. Bank Negara Indonesia, as a company engaged in the banking industry, will undoubtedly prioritize its position as a bank that provides excellent services and products; thereby, it is in line with Ali and Ahmed's study on textile companies [7].

Table 1 shows that H3 has the standardized estimates value of .593 with C.R. 1.740, implying that supply chain flexibility has a positive effect on the company's profitability. This hypothesis testing result shows that H3 of this study has a positive effect but is not supported. This is in line with Bidhandi and Valmohammadi's study results [8].

This hypothesis indicates that flexibility as a variable that can complete tasks with the same goal with different resources or facilities based on varying requirements and demands cannot give a positive contribution to the profitability of PT. Bank Negara Indonesia. PT. Bank Negara Indonesia can benefit from changing some policies when needed, providing services with technology/skills that support customer wishes, and acting flexibly to accommodate customer requests and needs. Especially during a pandemic that demands various changes, companies need to adapt flexibly and meet customer

needs. Table 1 shows that H4 has the standardized estimates value of .395 with C.R. 1.737, implying that supply chain competence has a positive effect on the company's profitability. This hypothesis testing result shows that H4 of this study has a positive effect but is not supported. This is in line with Bidhandi and Valmohammadi's study results [8].

This hypothesis indicates that competence as a variable related to activities carried out by organizations with various skills and competencies, such as continuous work process innovation, can positively contribute to the profitability of PT. Bank Negara Indonesia. Competence of company employees is a key factor in achieving targets & goals. Another factor is that PT. Bank Negara Indonesia, as a state-owned enterprise (BUMN), is required to operate effectively and efficiently both from the side of shareholders and the government, which can provide added value or benefits to customers.

4 Conclusion

The study results show that the supply chain speed variable has an effect on the profitability of PT. Bank Negara Indonesia. This indicates that PT. Bank Negara Indonesia needs to improve its ability to operate at high speed to increase its profitability. Increasing supply chain speed can also be trained through virtual communication and collaboration systems, given that the pandemic is still happening. This can be overcome by sharing resources according to supply chain actors' interests and urgent needs that can provide added value to the company. Moreover, based on the results of this study, it can be said that the supply chain flexibility variable has an effect on the profitability of PT. Bank Negara Indonesia. Companies need to maintain and increase the output produced based on different resources or facilities, complying with requirements and demands that vary consistently from time to time. PT. Bank Negara Indonesia can increase its flexibility in the supply chain by aligning policy changes related to conditions and providing training to actors in the supply chain who are required to act responsively to customer requests and needs [7, 8].

The supply chain responsiveness variable is the only variable that does not contribute positively to profitability. However, the function of this variable is to respond to changes proactively through information systems and technology that continue to adapt and follow market changes actively. Responsiveness itself is an important variable in the supply chain. Responsiveness can respond to, identify, and anticipate changes in demand. Responsiveness can also integrate the company in a better direction as a whole. PT. Bank Negara Indonesia can improve its information systems and use the latest technology to support the needs of supply chain activity actors, especially in the ability to predict and understand market demand. In this section, supply chain actors have the highest distribution among the other items [7, 8].

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