

ENVIRONMENTAL UNCERTAINTY FACTOR, INCOTERM AND IMPLICATION FOR A STRATEGIC ALLIANCE IN FREIGHT FORWARDER COMPANIES CASE STUDY IN INDONESIA

Ahmad Sugiono^{1*}, Agus Rahayu², Lili Adi Wibowo³

¹Management Science Program, Faculty of Economics and Business, Indonesian Education University, Bandung, West Java, Indonesia, email: ahmadsugiono@upi.edu (corresponding author)

²Management Science Program, Faculty of Economics and Business, Indonesian Education University, Bandung, West Java, Indonesia, email: agusrahayu@upi.edu

³Management Science Program, Faculty of Economics and Business, Indonesian Education University, Bandung, West Java, Indonesia, email: liliadiwibowo2021@gmail.com

*(corresponding author)

Abstract

The study analyzes the effect of environmental uncertainty and incoterms on strategic alliances. The population in this study is a freight forwarder company on the island of Java that has a global alliance. The research sample is 50 companies engaged in international freight forwarders. Based on answers from respondents were analyzed according to the research model developed from the theoretical framework using the structural equation model Smart-PLS approach. The analysis results show that environmental uncertainty and Incoterm positively and significantly affect strategic alliances. The alliance strategy will impact when the main priority is the risk-sharing aspect, the risk management factor from the incoterm aspect, and the market turbulence on the environmental uncertainty factor. Novelty in this study is the positive impact of Incoterm on the alliance strategy, especially for International freight forwarders. This research contributes to the factors considered in strategic alliances in the freight forwarder industry. It also contributes to the company's strategy, especially sales managers, to pay attention to international trade terms in segmenting and selecting target consumers to be more effective in improving alliance performance. The limitations of this study include 1) The sample size used is only a small number of companies engaged in international Freight Forwarder services, only 50 companies; 2) The data used in this research is through the distribution of questionnaires based on perceptual analysis units; 3) Other factors that are outside the model are not all studied, while the possibility of these factors can affect the existing significance test.

Keywords

Environmental Uncertainty, Incoterm, Logistics, Strategic Alliance, Supply Chain

INTRODUCTION

The main interests and challenges related to uncertainty, risk, and vulnerability in supply chains have made it an attractive focal point for supply chain management researchers and practitioners (Adhikara et al., 2022; Chen and Tian, 2022; Chen et al., 2022; Jüttner, 2005; Jüttner et al., 2003; Peck, 2006; Svensson, 2004). The risk of disruption caused by factors within the supply chain and external environmental forces also continues to attract the attention of researchers (Trkman and McCormack, 2009), including during the Covid-19 pandemic (Hohenstein, 2022; Waqas et al., 2022). In particular, the COVID-19 outbreak in 2020 has increased the burden on the survival and transformation of many companies. Many companies are in immediate need of solving the problems of resumption of work and production and payback (Deng et al., 2022). Supply chain risk management is an increasingly important field devoted to developing approaches for identifying, assessing, analyzing, and treating areas of vulnerability and risk within the supply chain (Neiger et al., 2009).

Identifying which suppliers have the more significant potential for disruption is a critical first step in managing the frequency and impact of these disruptions, which often significantly impact the supply chain (Trkman and McCormack, 2009). Existing research shows an increasing trend in managing risks such as increased procurement, globalization, reduced supplier base, reduced buffers, increased demand, and on-time delivery or shorter product life cycles (Norrman and Jansson, 2004). Supply chain risk management approaches currently include measuring supplier attributes or supply chain structure to compare suppliers, predict disruptions, and mitigate and respond quickly (Trkman and McCormack, 2009). Supply chain risk management is often a formal process that involves identifying potential losses, understanding possible potential losses, and establishing the significance of the losses (Giunipero and Eltantawy, 2004). The approach with the PRAM methodology developed by the chemical company Dow to measure risk is one type of approach carried out; this approach examines market supply risk factors, supplier risk, organizational risk, and supply strategy risk (Trkman and McCormack, 2009). One of the efforts to manage environmental uncertainty is to make strategic alliances with other companies with the same industry characteristics, competitors, and government business entities (Emami et al., 2022; Hidayat and Hidayat, 2013; Ochie et al., 2022; Sun, 2022). Strategic alliances positively impact company performance (Cacciolatti et al., 2020), but other research states that the implementation of alliance strategies does not affect company performance (Muange and Maru, 2015). Strategic alliances are one of the competitive advantages of firms and can increase competitive advantage (Andrevski, 2009; Harrison et al., 2001). Other studies have found that contract protection and partner trust are strong predictors of opportunistic behavior (Judge and Dooley, 2006), especially in sustained high volatility. Industry must strike a balance between domestic and global business (Ali et al., 2022). Existing research still raises the inconsistency of the results to be interesting, so it is practically essential to look for other factors that can positively impact strategic alliances, including the international trade term commonly known as Incoterm.

Incoterms clauses are essential for buyers and sellers because they can increase efficiency in negotiations, reduce misunderstandings in international shipments, and reduce legal risks (Kadłubska, 2016; Schaefer, 2017). The Incoterm provisions describe eleven three-letter trade terms most commonly used, for example, CIF, DAP, and others that relate business to business practices in contracts for the sale of goods (The International Chamber of Commerce, 2020, p. 4).

Proper application of these clauses can contribute to significant cost savings and competitive advantage (Gardner, 2012). The use of the Incoterm clause is also essential for policymakers. However, the performance of logistics operations available in the market, transportation infrastructure, and administrative barriers also affect the willingness of both parties to accept responsibility for specific tasks, for example, primary transportation, import duties, and possible local transportation roles and foreigners in international shipping (Đ. Stojanović and Ivetić, 2020). Studies related to external factors that indirectly influence the selection of Incoterms clauses and focus on the relationship between macroeconomic factors and Incoterms clause choices have been done in research by Branch (2012) and Del Rosal (2016). Bergani and Ticha (2022) conducted research explicitly discussing Incoterm risk management. They stated that exporting companies should adopt an enterprise risk management (ERM) approach to effectively minimize the risks associated with physical shipments of export shipments.

In the transportation and logistics sector, strategic alliances are the most common type of collaboration agreement shipping companies use to provide maritime container transportation services worldwide (Ghorbani et al., 2022). Cross-company coordination, organizational training, alliance costs, duration, and company size influence strategic alliances in the shipping industry (Rusinov and Ouami, 2022). Currently, rapid technological developments have inspired VOCC to build online ordering platforms and change the traditional ordering behavior of freight forwarders (Xu et al., 2022), NVOCC must quickly adapt to these changes. Environment. The company makes alliances with its partners to improve skills and technology, as in this study. We chose a logistics service provider company that has a transportation management business license on the island of Java because Indonesia's export and import activities still depend on the main ports on the island of Java and Indonesia. The port that is the most significant import entry point is Tanjung Priok. This research also focuses on companies operating globally where the company has cooperation and alliances with partners abroad. In practice, Incoterm is an essential part of their business activities.

The following aspects are the contributions of the research. First, discuss the impact of environmental uncertainty on strategic alliances; Second, discuss the impact of Incoterm on strategic alliances. The existing literature discusses the Incoterm effect from the point of view of the seller and the buyer. However, to the best of the author's knowledge, no one has discussed it from the perspective of a freight forwarder as the service provider. The existing literature also discusses the impact of Incoterm requirements on performance (Del Rosal, 2016; Hien et al., 2014; Huuhka, 2019; Soh, 2017; Đ. Stojanović and Ivetić, 2020; Đ. M. Stojanović and Ivetić, 2020) however, has not focused on the aspect of alliances and the perspective of transportation service providers.

The structure of this paper is as follows: Section 1 presents the introduction, Section 2 presents a literature review and research hypotheses, Section 3 introduces the research method, section 4 results and discussion, and Section 5 conclusion.

LITERATURE REVIEW

A strategic alliance is a collaboration between two or more companies or business units that work together to achieve mutually beneficial and strategically significant goals (Elmuti and Kathawala, 2001). These companies carry out this mutualistic symbiotic relationship to obtain technology to gain access to specific markets, reduce financial risk, reduce political risk, and

achieve or guarantee competitive advantage (Wheelen, 2000). Strategic alliances are developed and propagated as formalized inter-organizational relationships. This cooperative arrangement is a new organizational formation that seeks to achieve organizational goals better through collaboration than the competition (Todeva and Knoke, 2005). Complexity and uncertainty have increased in many industries, so competing alone is no longer an option. Strategic alliances have the potential to create multiple benefits for partner firms, such as access to new technologies and complementary skills, economies of scale, and risk reduction (Inkpen, 2006). Strategic alliances are beneficial for business, and there is ample evidence of how strategic alliances turn the tide of significant battles; this is also true of doing business. Having the right alliances can make a big difference between profit and loss. Liquidity in business entities and alliances can build trust and gain new insights into the business (Wall, 2022). In the unit of analysis, revealing the factors that affect the alliance's performance is the factor of justice. This analysis finds practices that prevent opportunistic behavior can foster trust and thus affect alliance performance (Mikami and Bird, 2022).

The COVID-19 pandemic poses unique challenges to the business environment. Strategic approach and effectiveness of strategic options using the notion of ambidexterity, alliances, mergers, and acquisitions strengthen relationships at the company level into practical options (Jang and Lee, 2022). Collaboration with key players can increase the company's competitive advantage (Alford and Duan, 2018). Trust is critical to alliance success, and strategic compatibility and appropriate governance mechanisms influence alliance success. Careful strategic planning and good partnership preparation are crucial to alliance success, but alliances must develop total value as they develop (Hoffmann and Schlosser, 2001). The indicators used in this study consist of risk-sharing, a combination of resources, market access, and the ability to improve skills and technology, referring to research conducted by Emami (2022), Hamel and Prahalad (1990), Muafi (2000), Saffu and Mamman (2000)

Environment Uncertainty

Every company has many reasons to succeed or fail in carrying out its activities, perhaps the central question in its strategy (Porter, 1991). Managers of companies running today's business must manage strategically, not only make decisions based on existing rules, old policies, or simple calculations only for current trends. Still, they must plan broad organizational goals, initiate strategies, and establish procedures (Wheelen and Hunger, 2012). An increasingly complex environment will increase environmental uncertainty, so information about the competitive environment is also more difficult (Prasetya, 2008). The less complexity of environmental changes, the fewer costs incurred to monitor environmental changes (Dollinger and Golden, 1992). The environment influences collective strategy by influencing a firm's ability to perceive rewards for cooperative versus competitive behavior and by determining the importance of the process itself (Dollinger, 1990). Environmental complexity refers to the amount and concentration of environmental elements (Keats and Hitt, 1988). The dynamic industrial environment brings change and uncertainty to companies. High dynamism increases the likelihood of cooperative behavior between companies (Dollinger, 1990). Complex information will make it difficult for managers to understand the relationships that occur and affect their

resources (Clark et al., 1994, p. 30). Indicators of environmental change include changes in regulations and laws, technological developments, and management's perception of people's tastes (Calantone et al., 1994; McGinnis and Kohn, 1993), while other researchers reveal environmental uncertainty, market turbulence, the intensity of competition, and the technological turbulence (Jaworski and Kohli, 1993). Environmental uncertainty also refers to the behavioral uncertainty of customers, suppliers, competitors, and regulatory groups, a micro category (Govindarajan, 1984).

International Commercial Term (Incoterm)

The International Chamber of Commerce (ICC) has released the term incoterm since 1936, aiming to facilitate the implementation of international trade by providing clear boundaries regarding each party's obligations in a transaction, thereby reducing the risk of disputes between parties (International Chamber of Commerce, 2011, p. 4). Incoterm is a term used in a trade contract that contains ten rights and obligations between the seller and the buyer. Incoterm can reduce the risk of uncertainty caused by different interpretations in each country (The International Chamber of Commerce, 2020, p. IV). The scope of use of Incoterm is limited to issues of rights and obligations between the parties involved in the sale and purchase contract, especially those relating to the delivery or risk transfer of goods from the seller to the buyer (International Chamber of Commerce, 2011, p. 6). The Incoterm Terms describe a three-letter set of trade terms that reflect business-to-business practices in contracts of sale of goods. This provision outlines the duties, costs, and risks involved in delivering the cargo of the seller and the buyer (International Chamber of Commerce, 2011, p. 11). The selection of Incoterm has proven to be able to improve export performance by considering business environmental factors (Hien et al., 2014; Yaakub et al., 2018), able to enhance supply chain financial performance (Soh, 2017), and able to improve a country's logistics performance (Đ. Stojanović and Ivetić, 2020). The limited literature on Incoterm indicators related to strategic alliances from the perspective of transportation service providers is a challenge for the authors. The author considers returning to the basis of the incoterm theory, which consists of costs, risks, and responsibilities of each party transacting (International Chamber of Commerce, 2011) as the closest answer, and these indicators also refer to research conducted by ICC (2020), Huuhka (2019), and Surakarsa et al. (2020).

METHODS

This study conducted research with the survey method based on proportionate stratified sampling. In obtaining primary data, we used a questionnaire instrument on 50 Freight Forwarder companies with the primary condition that they have a global alliance located in Jakarta, West Java, Central Java, and East Java areas. We also obtain secondary data from references, publications, documents, and reports from related agencies. In processing the data, the first step is to tabulate, while the data analysis uses the structural equation modeling Smart-PLS. The method is descriptive analysis, path analysis, and model feasibility testing in answering the

research hypotheses. This research focuses on developing an ideal strategic alliance model from Indonesia's Freight Forwarder service providers' perspective.

Hypothesis

Based on the description, the hypothesis is as follows:

- H1. Adaptive management of environmental uncertainty will have a positive effect on strategic alliance
- H2. Incoterm selection can improve strategic alliances

Model Development

Model development for this study is as below:

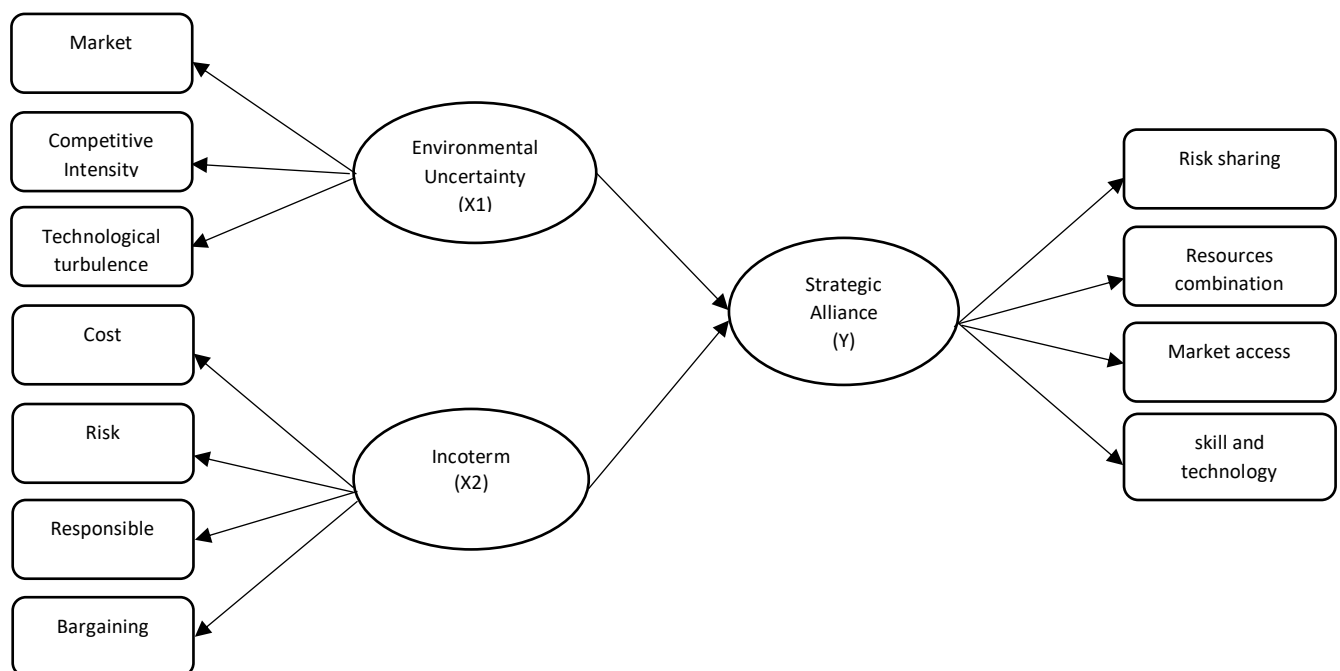


Figure 1. Model and Indicator Development

In the above figure, we complete the figure with the following arrangement of indicators based on the literature review: 1) Environmental uncertainty has indicators of market turbulence, the intensity of competition, and technological turbulence; 2) Incoterm has indicators of cost, risk, task responsibilities, and bargaining; 3) Strategic alliance has indicators of risk sharing, resource combination, market access, skill, and technology improvement

RESULT AND DISCUSSION

The hypothesis formulated from the structure of the relationship between the construct of latent variables can be tested after measuring the dimensions or indicators of each construct variable. Variations in data values that occur in dimensions describe variations in construct variables. The relationship that strengthens or weakens from each indicator to the construct variable is indicated by the size of the factor value (loading factor). In the smart PLS program, the lamda estimate is equal to the value of the standardized regression parameter, or is called the path coefficient. The magnitude of the path coefficient will consider how much the value of the direct and indirect structural influence or the total influence of the predictor variable on the prediction can be determined or known. The loading factor of each indicator is shown in table 1.

Table 1. Factor Loading Result

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Market turbulence	0,954	0,953	0,016	58,447	0,000
Competitive Intensity	0,930	0,928	0,022	42,292	0,000
Technology turbulence	0,953	0,952	0,017	56,437	0,000
Cost	0,932	0,931	0,023	40,710	0,000
Risk	0,864	0,858	0,082	10,592	0,000
Task responsibility	0,912	0,904	0,050	18,352	0,000
Bargaining	0,876	0,881	0,028	31,291	0,000
Risk sharing	0,994	0,994	0,002	524,896	0,000
Resource combination	0,949	0,949	0,013	71,130	0,000
Market access	0,945	0,945	0,012	78,898	0,000
Skill and technology	0,933	0,932	0,025	37,671	0,000

(Print out PLS, 2022)

The estimation results of the factor loading parameter (λ value) on exogenous and endogenous variables show a coefficient greater than 0.70 at a significant level of $\alpha = 0.05$. The research condition means that the dimension or indicator (Measurement variable) is a valid and reliable factor in each latent variable or construct. This value is another measure of discriminant validity. The expected value is that each indicator has a higher loading for the measured construct than the other constructs' loading value. The dimensions of market turbulence are the most dominant factor in the environmental uncertainty variable, with a factor loading of 0.954. The cost dimensions are the most dominant factor in the Incoterm, with a factor loading of 0.932. The risk-sharing dimension is the most dominant factor in strategic alliances, with a factor loading of 0.994.

Table 2. Cross Loading

Item	Incoterm	Market Uncertainty	Strategic Alliance
Bargaining	0,876	0,619	0,752
Competitive Intensity	0,758	0,930	0,791
Cost	0,864	0,730	0,673
Market access	0,830	0,830	0,945
Market turbulence	0,727	0,954	0,728
Resource combination	0,786	0,730	0,949
Risk	0,932	0,779	0,747
Risk sharing	0,786	0,814	0,994
Skill and technology	0,665	0,691	0,933
Task responsibility	0,912	0,674	0,716
Technology turbulence	0,728	0,953	0,763

(Print out PLS, 2022)

The above results indicate that each question item's value produces a more significant cross-loading in making comparisons between the variables in the questions used to represent them, as shown in table 2.

Table 3. Reliability and Validity

Latent Variable	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Market Uncertainty	0,941	0,942	0,962	0,894
Incoterm	0,918	0,920	0,942	0,804
Strategic Alliance	0,968	0,974	0,977	0,913

(Print out PLS, 2022)

The above results show that the indicators used to measure the latent variables meet the established criteria, namely Cronbach's Alpha and composite reliability above 0.7 and AVE above 0.5, meaning that the dimensions or indicators set are reliable. All tests carried out have high and valid reliability. Composite reliability shows internal consistency; namely, a high composite reliability value indicates the consistency value of each indicator in measuring the construct. Average variance extracted is used to measure the amount of variance the construct can capture compared to the variance caused by measurement errors.

Table 4. VIF Test

Item	Incoterm	Market Uncertainty	Strategic Alliance
Incoterm			2,558
Market Uncertainty			2,558
Strategic Alliance			

(Print out PLS, 2022)

The above results show the VIF value < 5, which means it does not violate the multicollinearity assumption test. After evaluating the measurement model and the appropriate results, we can perform a structural model analysis. The inner model shows the power of estimation between latent variables or constructs. In our research, we carry out the results of the path coefficient test, goodness of fit test, and hypothesis testing.

Table 5. R-Square Result

Model	R Square	R Square Adjusted
Strategic Alliance_Y	0,730	0,718

(Print out PLS, 2022)

R square is a value that shows how much the independent variable (exogenous) affects the dependent variable (endogenous). The R-Square table above shows the effect of environmental uncertainty and Incoterm variables on strategic alliances. Based on the above table, the impact of environmental uncertainty and Incoterm is 0.730. The value of R square is good if it is above 0.5 because the value of R square ranges from 0 to 1. R Square values of 0.75, 0.50, and 0.25 indicate that the model is strong, moderate, and weak (Sarstedt et al., 2017); based on the results of the R Square test in this study, the effect of environmental uncertainty and Incoterm on strategic alliances a strong relationship.

Table 6. The Goodness of Fit Result

Item	Saturated Model	Estimated Model
SRMR	0,057	0,057
d_ ULS	0,217	0,217
d_ G	0,677	0,677
Chi-Square	157,492	157,492
NFI	0,809	0,809

(Print out PLS, 2022)

The limitations or criteria for the fit model include SRMR or Standardized Root Mean Square < 0.10 or < 0.08 and NFI Value > 0.1. Based on the above data, the SRMR value is 0,057, and the NFI value is 0,809, so the model is fit.

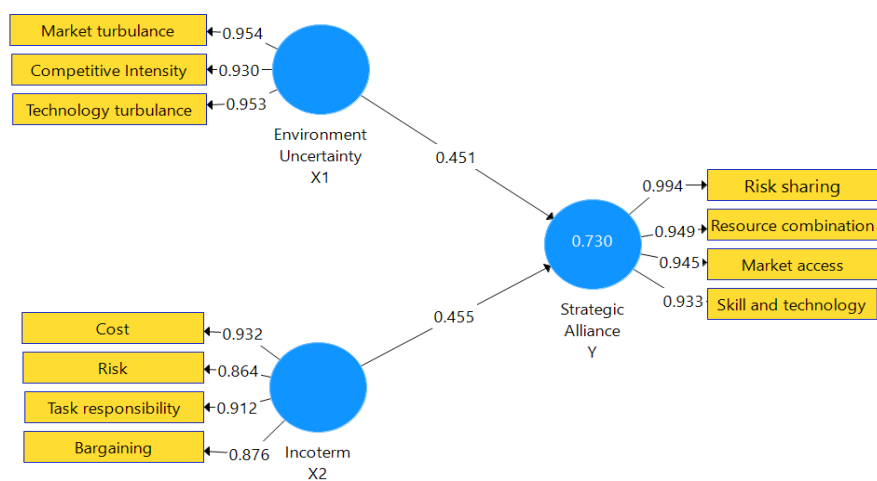


Figure 2. Model of the Effect of Environmental Uncertainty and Incoterm on Strategic Alliances (Print out PLS, 2022)

In the results of the strategic alliance, the risk-sharing ability factor became the dominant factor with a loading factor of 0.994. The result is different from research conducted by Hidayat (2013), which focuses on increasing skills and technology. This study, in combination, supports research that has been done previously (Hien et al., 2014; Lee, 2019; Prasetya, 2008; Đ. Stojanović and Ivetić, 2020; Yaakub et al., 2018). Environmental uncertainty factors should be a company's attention as a strategic decision (Grant, 1991; Wheelen and Hunger, 2012). Environmental uncertainty affects manufacturing strategy variables such as manufacturing flexibility and the role of manufacturing managers in strategic decision-making. Manufacturing strategy variables, in turn, affect business performance (Swamidass and Newell, 1987). The company management can control the management system and budget to evaluate environmental uncertainty (Adhikara et al., 2022). Environmental uncertainty must also be seen from the perspective of dynamic strategic capabilities to overcome disruptions in the supply chain by considering organizational capabilities, disruption, and resilience factors to achieve adequate operational performance (Laguir et al., 2022).

Table 7. The Effect of Environmental Uncertainty and Incoterms on Strategic Alliances

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Incoterm -> Strategic Alliance	0,455	0,464	0,082	5,557	0,000
Environment Uncertainty -> Strategic Alliance	0,451	0,454	0,083	5,415	0,000

(Print out PLS, 2022)

The above results show that environmental uncertainty and Incoterm have a positive and significant effect because T. Statistics shows a number above 1.96 and a p-value below 0.05. The influence of environmental uncertainty has a value of 0.451 which means that environmental uncertainty can explain 45.1%, with the dimensions of market turbulence being the most dominant factor in the environmental uncertainty variable with the largest loading factor of 0.954; the next is the technological turbulence factor and the level of competition. These results answer the first hypothesis about whether there is an effect of environmental uncertainty on the alliance strategy. The influence of Incoterm on strategic alliances has a number of 0.455, or the Incoterm factor can explain 45.5% of the alliance strategy, with the cost factor being the most dominant factor on the variable international trade terms of 0.932. These results answer the second hypothesis that Incoterm affects strategic alliances.

CONCLUSION

One of the efforts to build competitive advantage is to build strategic alliances, but many alliances do not achieve their goals. This lack of success is related to poor risk mitigation related to performance and relationship management. In the transportation, logistics, and warehousing sector, especially in international Freight Forwarder companies, it is necessary to pay attention

to factors that can improve the performance of their alliances. The use and utilization of alliance strategy strengthen the company's position in the face of increasingly fierce business competition. The companies need to pay attention to business environment factors and international trade terms in their alliance strategy.

This study contributes to the continuation of previous research related to environmental uncertainty factors that affect alliance strategy. The novelty of this research is the positive impact of international trade on strategic alliances, especially in Freight Forwarder services, which to the author's knowledge, has not been carried out by other researchers. Based on research, generally, international trade only focuses on seller and buyer transactions, but no one has tested logistics service providers, especially international transportation management services. This study also contributes to the company's strategy, especially sales managers, to pay attention to international trade terms in segmenting and selecting target consumers to be more effective in improving alliance performance. The limitations of this study include 1) The size used is only a small number of companies engaged in international transportation management services, namely only 50 companies; 2) The data used in this research is through the distribution of questionnaires based on perceptual analysis units, and perceptions are not able to fully control honesty and sincerity in determining honest answers; 3) Other factors that are outside the model are not all studied, while the possibility of these factors can affect the existing significance test, so it is necessary to look for other elements in further research.

ACKNOWLEDGMENTS

The author would like to thank the Indonesian Logistics and Forwarder Association (ILFA) for its support in conducting this research activity, especially for collecting data questionnaires. The author also thanks to the Logistics Management and Administration Program, Vocational College, Diponegoro University. Finally, thanks to the University of Education Indonesia for your knowledge and guidance.

REFERENCES

- Adhikara, M.F.A., Diana, N., Basjir, M., 2022. Organizational Performance in Environmental Uncertainty on the Indonesian Healthcare Industry: A Path Analysis. *Acad. J. Interdiscip. Stud.* 11, 365.
- Alford, P., Duan, Y., 2018. Understanding collaborative innovation from a dynamic capabilities perspective. *Int. J. Contemp. Hosp. Manag.*
- Ali, I., Arslan, A., Chowdhury, M., Khan, Z., Tarba, S.Y., 2022. Reimagining global food value chains through effective resilience to COVID-19 shocks and similar future events: A dynamic capability perspective. *J. Bus. Res.* 141, 1–12.
- Andrevski, G., 2009. *Competitive Strategy, Alliance Networks, and Firm Competitive Strategy*,

Alliance Networks, and Firm Performance Performance.

- Bergami, R., Tichá, L., 2022. Managing Incoterms® 2020 export risks. *Int. J. Econ. Bus. Res.* 23, 255–273.
- Branch, M.A.E., Branch, A.E., 2012. Elements of Shipping, Elements of Shipping. <https://doi.org/10.4324/9780203929971>
- Cacciolatti, L., Rosli, A., Ruiz-Alba, J.L., Chang, J., 2020. Strategic alliances and firm performance in startups with a social mission. *J. Bus. Res.* 106, 106–117. <https://doi.org/10.1016/j.jbusres.2019.08.047>
- Calantone, R.J., di Benedetto, C.A., Bhoovaraghavan, S., 1994. Examining the relationship between degree of innovation and new product success. *J. Bus. Res.* 30, 143–148. [https://doi.org/10.1016/0148-2963\(94\)90033-7](https://doi.org/10.1016/0148-2963(94)90033-7)
- Chen, H., Tian, Z., 2022. Environmental uncertainty, resource orchestration and digital transformation: A fuzzy-set QCA approach. *J. Bus. Res.* 139, 184–193.
- Chen, J., Shu, W., Wang, X., Sial, M.S., Sehleanu, M., Badulescu, D., 2022. The impact of environmental uncertainty on corporate innovation: Empirical evidence from an emerging economy. *Int. J. Environ. Res. Public Health* 19, 1–19. <https://doi.org/10.3390/ijerph19010334>
- Clark, T., Varadarajan, P.R., Pride, W.M., 1994. Environmental management: The construct and research propositions. *J. Bus. Res.* 29, 23–38.
- Del Rosal, I., 2016. Factors influencing the choice of delivery terms used in Spanish seaborne container trade. *Int. J. Shipp. Transp. Logist.* 8, 318–333. <https://doi.org/10.1504/IJSTL.2016.076261>
- Deng, M., Fang, X., Tian, Z., Luo, W., 2022. The Impact of Environmental Uncertainty on Corporate Innovation: Evidence from Chinese Listed Companies. *Sustainability* 14, 4902.
- Dollinger, M.J., 1990. The evolution of collective strategies in fragmented industries. *Acad. Manag. Rev.* 15, 266–285.
- Dollinger, M.J., Golden, P.A., 1992. Interorganizational and collective strategies in small firms: Environmental effects and performance. *J. Manage.* 18, 695–715.
- Elmuti, D., Kathawala, Y., 2001. An overview of strategic alliances. *Manag. Decis.*
- Emami, A., Welsh, D.H.B., Davari, A., Rezazadeh, A., 2022. Examining the relationship between strategic alliances and the performance of small entrepreneurial firms in telecommunications. *Int. Entrep. Manag. J.* <https://doi.org/10.1007/s11365-021-00781-3>
- Gardner, B.D.L., 2012. How to Use International Trade Terms for Competitive Advantage & Financial Gain.
- Ghorbani, M., Acciaro, M., Transchel, S., Cariou, P., 2022. Strategic alliances in container shipping: A review of the literature and future research agenda. *Marit. Econ. Logist.* 1–27.
- Giunipero, L.C., Eltantawy, R.A., 2004. Securing the upstream supply chain: a risk management

- approach. *Int. J. Phys. Distrib. Logist. Manag.*
- Govindarajan, V., 1984. Appropriateness of accounting data in performance evaluation: An empirical examination of environmental uncertainty as an intervening variable. *Accounting, Organ. Soc.* 9, 125–135. [https://doi.org/10.1016/0361-3682\(84\)90002-3](https://doi.org/10.1016/0361-3682(84)90002-3)
- Grant, R.M., 1991. Grant_1991. *Knowl. Strateg.* 3–24.
- Hamel, G., Prahalad, C.K., 1990. The core competence of the corporation. *Harv. Bus. Rev.* 68, 79–91.
- Harrison, J.S., Hitt, M.A., Hoskisson, R.E., Ireland, R.D., 2001. Resource complementarity in business combinations: Extending the logic to organizational alliances. *J. Manage.* 27, 679–690. [https://doi.org/10.1016/S0149-2063\(01\)00118-0](https://doi.org/10.1016/S0149-2063(01)00118-0)
- Hidayat, A., Hidayat, A., 2013. STRATEGIC ALLIANCES TO DEVELOP A COMPETITIVE ADVANTAGE ON SMALL MEDIUM ENTERPRISES (SMEs) IN INDONESIA. *Widyariset* 16, 1–10. <https://doi.org/10.14203/widyariset.16.1.2013.1-10>
- Hien, N., Laporte, G., Roy, J., 2014. Business Environment Factors, Incoterms Selection and Export Performance. *Oper. Supply Chain Manag. An Int. J.* 2, 63–78. <https://doi.org/10.31387/oscm040017>
- Hoffmann, W.H., Schlosser, R., 2001. Success factors of strategic alliances in small and medium-sized enterprises—An empirical survey. *Long Range Plann.* 34, 357–381.
- Hohenstein, N.-O., 2022. Supply chain risk management in the COVID-19 pandemic: strategies and empirical lessons for improving global logistics service providers' performance. *Int. J. Logist. Manag.*
- Huuhka, H., 2019. Effective use of incoterms in the case company.
- Inkpen, A.C., 2006. [hanbook] 14 Strategic Alliances. *Blackwell Handb. Strateg. Manag.* 403–427.
- International Chamber of Commerce, 2011. *Incoterm 2010 : ICC Rules for The Use of Domestic and International Trade Term.*
- Jang, Y., Lee, W., 2022. Never have a crisis like COVID-19, in: *SHS Web of Conferences. EDP Sciences*, p. 1018.
- Jaworski, B.J., Kohli, A.K., 1993. Market orientation: antecedents and consequences. *J. Mark.* 57, 53–70.
- Judge, W.Q., Dooley, R., 2006. Strategic alliance outcomes: A transaction-cost economics perspective. *Br. J. Manag.* 17, 23–37. <https://doi.org/10.1111/j.1467-8551.2005.00441.x>
- Jüttner, U., 2005. Supply chain risk management: Understanding the business requirements from a practitioner perspective. *Int. J. Logist. Manag.*
- Jüttner, U., Peck, H., Christopher, M., 2003. Supply chain risk management: outlining an agenda for future research. *Int. J. Logist. Res. Appl.* 6, 197–210.
- Kadłubka, J., 2016. The Significance of the Incoterms Rules in the Freight Forwarding Services Market. *World Sci. News* 57, 97–105.

- Keats, B.W., Hitt, M.A., 1988. A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. *Acad. Manag. J.* 31, 570–598.
- Laguir, I., Modgil, S., Bose, I., Gupta, S., Stekelorum, R., 2022. Performance effects of analytics capability, disruption orientation, and resilience in the supply chain under environmental uncertainty. *Ann. Oper. Res.* 1–25.
- Lee, E., 2019. Improving a Firm's Performance within a Strategic Shipping Alliance. *Asian J. Shipp. Logist.* 35, 213–219. <https://doi.org/10.1016/j.ajsl.2019.12.008>
- McGinnis, M.A., Kohn, J.W., 1993. Logistics strategy, organizational environment, and time competitiveness. *J. Bus. Logist.* 14, 1.
- Mikami, K., Bird, A., 2022. Opportunism and trust in cross-national lateral collaboration: the Renault-Nissan Alliance and a theory of equity-trust. *J. World Bus.* 57, 101286.
- Muafi, 2000. Mengelola Persaingan Kompetitif Melalui Aliansi Strategis. *Telaah Bisnis* 1 No 2, 133–146.
- Muange, R., Maru, L.C., 2015. Strategic alliances on performance of retail firms in Nairobi county, Kenya. *TQM J.* 27, 732–740. <https://doi.org/10.1108/TQM-06-2015-0075>
- Neiger, D., Rotaru, K., Churilov, L., 2009. Supply chain risk identification with value-focused process engineering. *J. Oper. Manag.* 27, 154–168.
- Norrman, A., Jansson, U., 2004. Ericsson's proactive supply chain risk management approach after a serious sub-supplier accident. *Int. J. Phys. Distrib. Logist. Manag.*
- Ochie, C., Nyuur, R.B., Ludwig, G., Cunningham, J.A., 2022. Dynamic capabilities and organizational ambidexterity: New strategies from emerging market multinational enterprises in Nigeria. *Thunderbird Int. Bus. Rev.*
- Peck, H., 2006. Reconciling supply chain vulnerability, risk and supply chain management. *Int. J. Logist. Res. Appl.* 9, 127–142.
- Porter, M.E., 1991. Towards a dynamic theory of strategy. *Strateg. Manag. J.* 12, 95–117. <https://doi.org/10.1002/smj.4250121008>
- Prasetya, H., 2008. Aliansi strategis dalam membangun keunggulan bersaing.pdf. Diponegoro University.
- Rusinov, I., Ouami, A., 2022. Key Profitability Factors for Strategic Alliances in Shipping Industry, in: *IOP Conference Series: Earth and Environmental Science*. IOP Publishing, p. 42043.
- Saffu, K., Mamman, A., 2000. Contradictions in international tertiary strategic alliances: The case from down under. *Int. J. Public Sect. Manag.*
- Schaefer, T.J., 2017. Incoterms[®] Use in Buyer-Seller Relationships : a Mixed Methods Study. *Dissertations* 270.
- Soh, S., 2017. The Impact of Incoterms Selection and Supply Chain Finance on the Working Capital of a Company: A Case Study Analysis.
- Stojanović, Đ., Ivetić, J., 2020. Possibilities of using Incoterms clauses in a country logistics

- performance assessment and benchmarking. *Transp. Policy* 98, 217–228. <https://doi.org/10.1016/j.tranpol.2020.03.012>
- Stojanović, Đ.M., Ivetić, J., 2020. Macrologistic performance and logistics commitments in sales contracts in international supply chains. *Int. J. Logist. Manag.* 31, 59–76. <https://doi.org/10.1108/IJLM-12-2018-0323>
- Sun, C.-C., 2022. Strategic Alliance Pattern Evaluation Model for Taiwan's Machine Tool Industry: A Hierarchical DEMATEL Method. *Math. Probl. Eng.* 2022.
- Surakarsa, J., Amchang, C., Sawatwong, N., 2020. Decision-Making on Incoterms 2020 of Automotive Parts Manufacturers in Thailand. *J. Asian Finance. Econ. Bus.* 7, 461–470. <https://doi.org/10.13106/jafeb.2020.vol7.no10.461>
- Svensson, G., 2004. Key areas, causes and contingency planning of corporate vulnerability in supply chains: A qualitative approach. *Int. J. Phys. Distrib. Logist. Manag.*
- Swamidass, P.M., Newell, W.T., 1987. Manufacturing strategy, environmental uncertainty and performance: a path analytic model. *Manage. Sci.* 33, 509–524.
- The International Chamber of Commerce, 2020. ICC Rules for the Use of Domestic and International Trade Terms, 723E ed. International Chamber and Commerce Indonesia.
- Todeva, E., Knoke, D., 2005. Strategic alliances and models of collaboration. *Manag. Decis.* 43, 123–148. <https://doi.org/10.1108/00251740510572533>
- Trkman, P., McCormack, K., 2009. Supply chain risk in turbulent environments—A conceptual model for managing supply chain network risk. *Int. J. Prod. Econ.* 119, 247–258.
- Wall, W.P., 2022. Strategic Alliance—Strength in Numbers, in: *Global Competitiveness*. Springer, pp. 55–66.
- Waqas, U., Abd Rahman, A., Ismail, N.W., Kamal Basha, N., Umair, S., 2022. Influence of supply chain risk management and its mediating role on supply chain performance: perspectives from an agri-fresh produce. *Ann. Oper. Res.* 1–29.
- Wheelen, T., 2000. *J. dan Hunger. J. David.*
- Wheelen, T.L., Hunger, J.D., 2012. *Concepts in strategic management and business policy: Toward global sustainability*. Pearson.
- Xu, L., Shi, J., Chen, J., 2022. Agency encroachment and information sharing: cooperation and competition in freight forwarding market. *Marit. Policy Manag.* 1–14.
- Yaakub, S., Szu, L.Y., Arbak, S., Halim, N.A., 2018. INCOTERMS Selection Factors and Its Effect on Export Performance The International Commercial Terms (Incoterms), introduced and governed by International Chamber of Commerce (ICC) are standard trade terms used in international and domestic sales contr 2.