FAKTOR EKSTERNAL PENDORONG KINERJA EKSPOR UNTUK INDUSTRI MANUFAKTUR

THE DETERMINING EXTERNAL FACTOR OF EXPORT PERFORMANCE IN MANUFACTURE INDUSTRY

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Abstract

Export Performance is one of the key indicators of national economic performance. Currently, the income per capita of Indonesia is US$3,005, which will be expected increasing up to US$13,000-14,900 by 2025. This is a kind of opportunity and challenge to boost economies by international trade. Globalization and technology are important factors contributing to international business. Export performance at a firm-level becomes the indicator of competitiveness and business sustainability in the overseas market. It also describes how big the market share that they have. International business always has been dealing with 4Cs Risk Factors (Commercial, Currency, Culture, and Country Risk). These risks are including the internal and external factors of a firm level. The ability to dealing with the risks will improve the sustainability of a firm. This paper describes empirical evidence of how strong the legal and political aspect or country risk to supply chain performance as the driver of export performance. It also proposes the Socio-Technical System Theory to be implemented in the manufacturing of electrical and electronic companies that have orientation for exporting the product to sustain the business.

Keywords: Export performance; Risk in International Business; Legal and Political Aspect; Socio Technical System Theory; Indonesia

INTRODUCTION

Involving in the international business will open the opportunity to expand market share, giving better services for customers and also keeping closer to the resources to maintain the expenses of production’s cost. At the national level, export
performance is a significant remark of a country's economic growth. It is equivalent to societal prosperity. In a narrower scope, export performance is the evidence of company capabilities to manage innovation and performance, managerial skills development, and better utilization of resource capacity (Morgan & Katsikeas, 1998). Therefore, a positive export performance can help to combat the problems of poverty and unemployment as it is mentioned that the international expansion of trade is essential for poverty reduction (World Bank Group and World Trade Organization, Geneva 2015).

Sustaining export performance in an emerging market is challenging. An emerging market is defined as a country with some characteristics of developed countries, it has a high growth prospect but the income is yet high. It happens in Indonesia. Based on ASEAN Secretary (2019) report, stated that amongst ASEAN Countries, Indonesia has the lowest export ratio to GDP. It stated that the value of Indonesia's exports in 2018 is only 17.28% of the Gross Domestic Product (GDP). This figure is below the ASEAN average of 55.22% of GDP and is in the most protruding position of the 10 countries. The country with the biggest export performance was Singapore, which was 113.16% of GDP, following Vietnam in second place with an export ratio reaching 100.8% of GDP. The following figure describing all the ASEAN Countries' export ratio to GDP in 2018.

![Export Ratio to GDP in 2018](image)

Figure 1. Export Ratio of ASEAN Countries to GDP in 2018

Source: ASEAN Secretary (2019)

Based on the export commodities oil and gas are still the mainstays of Indonesia's exports in the January-September 2019 period. The data from the Central Statistics Agency (BPS) shown that exports of the commodity are the biggest that
reached US $ 16.8 billion, or around 14.66 percent of the total non-oil and gas exports of US $ 114.8 billion. The second-largest commodity exports are animal fats and oils with a value of US $ 12.4 billion with a contribution of 10.81 percent of the total. While the third-largest commodity is electrical machinery/equipment with a value of US $ 6.28 billion or 5.4 percent of the total. In the period of January-September 2019, total export reached US $ 67.53 billion or around 58.86 percent of the total. Unfortunately, it fell 3.86 percent from the same period the previous year (BPS, 2019).

Krammer et al., (2018) stated that the export performance of emerging economy firms (EEFs) will depend both upon their firm-specific capabilities and their home institutional environments. Specifically, they argue that EEFs will be more likely to export when facing more uncertainty at home from greater political instability, substantial informal competition, and high corruption. Previous research conducted by Li et al., (2012) examined the effects of domestic legal institutions on firms’ export performance. The research explained that high-quality legal institutions lower production costs for exporters because it reduced the transaction costs at the border, as well as transaction costs facing importers. While Birru et al., (2019) found direct relationships between export performance and international business competencies (international orientation, export market orientation, and international entrepreneurial orientation). These researches portrait the export performance from the internal and external determining factors. It is supported by The Resource-Based View theory stated that that company will have a competitive advantage when it has resource heterogeneity and resource immobility (Barney, 1991). The criteria are the valuable resource to support strategic firm, the rarity of the resources, perfectly difficult to imitate and non-substitututability.

This study is focusing on the external determining factors of export performance in Kepulauan Riau (Kepri) Province, especially in the Electronic and Electrical Company. This is one of the young provinces in Indonesia (based on Law of Indonesian Republic No. 25 Year 2002 on the establishment of Kepulauan Riau Province). Examining export performance in Kepri is interesting because it has Batam island that is projected as one of the economic generators due to its strategic location
which is located just off the coast of Singapore. Batam is a free trade zone area that consists of eight islands: Batam, Tonton, Nipah, Setokok, Rempang, Galang, Galang Baru, and Janda Berias. As the most developed area in Indonesia, Bahrum (2011) Batam’s development has been influenced by two forces, nationally and politically in Jakarta, and internationally and economically in Singapore. Batam’s Electronic and Electrical (E&E) industry has a significant contribution to Indonesian exports. The export value of the group of electrical machinery/equipment goods during 2018 reached US $ 2.31 billion, slightly decreasing compared to 2017 which reached US $ 2.32 billion (BPS, 2018).

As the legal and political condition is the external factors that influence the international trade, the research is intended to find the empirical evidence how strong the legal and political aspect or country risk to supply chain performance as the driver of export performance. It also described how the Socio-Technical System Theory can be implemented in the manufacturing of electrical and electronic companies that have orientation for exporting the product to sustain the business.

Disruptive technology creates more intensive competition in the global market. It brings more uncertainties in the business world. Sustaining business becomes challenging even though global-scale companies failed to survive. Agility can be described as how fast a firm responding to the market need is reflected by the supply chain performance of a firm. This research is intended to answer the following questions:

1. How does the relationship between legal and political as the external factor may affect the supply chain performance and how does it affect export performance?
2. How does Socio-Technical System Theory responding to the need for building agility to sustain the business, especially in the manufacturing of electrical and electronic companies that have orientation for exporting the product?

METHODOLOGY
This research is applied literature review as the methodology to develop the conceptualization of variables. The variable of export performance has been subject to research since 1950. However, the result of previous research is sometimes
contradictory because export as international business is sensitive to some issues of culture, country such as legal and political factors, currency, culture, etc. It can be influenced by the internal and external of firms and country of origin or host country.

This research is conducted using a literature review approach as Literature Review is a critical analysis of the research conducted on a particular topic or question in the field of science (Synders, 2019). Furthermore, Synders stated that literature review is an excellent way of synthesizing research findings to show evidence on a meta-level and to uncover areas in which more research is needed, which is a critical component of creating theoretical frameworks and building conceptual models. There are three broad types of methods commonly used in literature review e.g. the systematic review, the semi-systematic review, and the integrative review. It can be chosen depending on the need to achieve the purpose of the review because it appropriates to reach a specific goal.

This research is using the applied systematic review as a method of a literature review is. The following justification for choosing the method:

1. The typical purpose is to be synthesizing and comparing evidence.
2. The search strategy is systematic that collect the second data based on articles published by indexed journals.
3. The articles collected, analyze, and evaluate are quantitative articles about the determinants of export performance in developed or developing countries.
4. Answering a specific question about the relationship between the legal and political aspects and its influence on supply chain performance and export performance in an electronic and electrical company.
5. The research contributes to developing evidence of the effect on building policy and practice.

**DISCUSSION**

1. How does the relationship between legal and political as the external factor may affect the supply chain performance and how does it affect export performance?
a. Legal and Political

The legal and political factors are defined based on (Li et al., 2012) that referred to the quality of soft infrastructure for business such as clarity of regulations, the implementation of laws and regulations at the host country’s business. The government’s capability to implement the laws plays a significant role and even it can give pressure on firms’ marketing performance (Cavusgil & Zou, 1994). This condition is giving different effects for each firm to establish its export strategies.

O’Cass and Julian (2003) argued that as far as the legal and regulatory policies of host country governments are concerned, frequently when a developing country is involved, the host-country government may exercise influence over the choice of suppliers and marketing. Alternatively, it may impose exchange controls, which can have an important impact on reinvestment, financing, and repatriation decisions (Beamish et al., 1993).

Gao et al., (2010) explained that emerging markets which characterized by low-quality and unpredictable institutional landscapes such as less stable political environments, less transparent regulation, the underdeveloped labor force (Rottig, 2016). An emerging market is higher levels of uncertainty (Gao et al., 2010). Furthermore, Hiatt & Sine, (2014) give the extreme points that political instability may rise a civil or political which will lead to greater political operational difficulties. As Indonesia is classified in this group the similar condition can be referred to happening in Indonesia. The empirical research conducted by Fernando et al., (2016) described that the exporters were not confident that, in the short term, Indonesia can implement high-quality legal institutions. This condition gave little hope that production costs can be lowered to support their competitiveness in the foreign market. The good practices of the Indonesian government have issued a regulation to protect the industrial zone as the national assets from any potential of public protests or riots.

The condition of the legal and political of a country depends on the quality of the institution. In a developed country the institutional environment is stable and transparent, it means good governance is established. Therefore, Krammer et al., (2017) found the condition of the legal and political situation in emerging markets as a trigger to ‘push’ mechanism and find a foreign market by exporting. As Li (2007)
mentioned that exporting allows firms to be success because of the wider market, diversify of revenue streams and reducing unsystematic risk. This can be applicable when firms doing export to developed market.

b. Supply Chain Performance

Supply chain practices have been identified as the most important strategies for medium and large organizations and have become a prerequisite for success in the global market (Gorane and Kant, 2014). Supply chain is defined based on Beamon (1998) which stated that it is as an integrated process wherein a number of various business entities (i.e., suppliers, manufacturers, distributors, and retailers) work together in an effort to: (1) acquire raw materials, (2) convert these raw materials into specified final products, and (3) deliver these final products to retailers. This process is not only dealing with the internal system but an external process as well. Hence, to measure Supply Chain Performance (SCP) as the successful implementation of supply chain management should be based on all related factors. Ibrahim & Ogunyemi (2012) stated that the measurement of supply chain performance still remains unexplored.

It is important to build the strategic buyer-supplier relationships (in terms of risk-sharing, access to global resources, and the delivering of superior customer value) (Hsu et al., 2008), at a time when low-cost, high quality, reliable products with greater design flexibility are taken for granted in an increasingly global competitive environment (Tan, 2002). Gereffi and Sturgeon (2013) proposed ‘soft’ rather than ‘hard’ technological issues to improve SCP. They emphasized the importance of interrelation or collaboration between suppliers and customers to minimize risks that may influence the supply chain. Through integration and partnership, firms with high levels of flexibility and cost-effectiveness are believed to be better placed to penetrate new foreign markets quickly (Leonidou, 1995).

SCP measurements can be captured by financial and operational measures. It is reflected in terms of cost, quality, flexibility, speed, and reliability, and provides a relatively direct indication of the efforts of the various SC constructs (Chen and Paulraj, 2004). While Lee et al., (2007) use ‘efficiency’ and ‘effectiveness’ as key variables to measure SCP. ‘Efficiency’ refers to the ability to provide a service using the least inputs, while ‘effectiveness’ concerns the ability to accommodate customers’
special requests or time-based performance measures’ (Fawcett and Clinton, 1996; Chen and Paulraj, 2004). In a recent study, Ryoo and Kim (2015) found that knowledge exchange has a greater impact on SCP for suppliers than for buyers.

Furthermore, Gunasekaran et al., (2004) explained, legal or governmental regulations become the external drivers for firms to implement and enhance their SC management practices to increase their SCP. Firms engaged in international trade should be familiar with their home country’s policies, procedures, laws and regulations, and tariffs. In practice, many firms involved in exporting activities are also active importers of various materials. To be internationally successful, a firm’s understanding of complying with home-country regulations has always been mandatory. This understanding would have a significant impact on their effectiveness and efficiency in global SC (Pujawan, 2004).

Tachizawa and Thomsen (2007) explained, the E&E sector is characterized by high demand volatility, thus leading to the higher inaccuracy of the inventory. Gunasekaran et al., (2004) explained that inaccuracy of the inventory can reduce profit by 10%. When there is an unexpected short-term supply shortage of raw material, a flexible production system will incur high costs due to its inability to reschedule production or to decrease production capacity temporarily (Pujawan, 2004). Doherty and Misrahi (2013) highlight that industry and governments should redesign their policies to lower logistics costs, something that is particularly important in the current economic context where the priority for policymakers is to boost economic growth and create jobs.

High logistics costs are akin to a tax on international trade. In this case, legal factors or regulations might reduce firms’ flexibility. By considering legal factors as the predictors, practitioners alike will benefit from the extended model of SCP that has been tested from firms in FTZs.

This model also provides empirical evidence that local and foreign firms should appoint cross-functional teams to frequently check the local and global legal requirements. This is a critical part that is sometimes overlooked by firms in developing countries. Firms should aware of forced or overexploited labor and green business issues such as gas emission, cleaner production, and other energy concerns in SCM. These factors are often neglected in Indonesia. However, they are of huge
importance as they affect SCP and can potentially discourage orders from buyers. This will make the situation worse as foreign investors leave the country.

2. How does Socio-Technical System Theory responding to the need for building agility to sustain the business, especially in the manufacturing of electrical and electronic companies that have orientation for exporting the product?

STS Theory is applied to explain the relationship between internal and external factors that influence the supply chain and business performance. Socio-technical system theory encompasses three general subsystems namely: technical, social, and environmental (Kull et al., 2013). These theories were grounded the theoretical framework of export performance to explain the nature of drivers.

In the global business, the uncertainty of the business environment is higher, and customers demand better value as well. Today business is no longer competing as stand-alone entities but rather as supply chains. Umeda (2013) explained that a supply chain is a global network used to deliver products and services from raw materials to end customers through an engineered flow of information and physical distribution. Supply chain systems pose complex network structures, which include both material flows and information flows.

As a strategic factor, agility is the concept of management that focuses on responsiveness to dynamic and turbulent markets and customer demand. Sukatia (2012) explained that agility is the successful exploration of competitive bases (speed, innovation pro-activeness, quality, and profitability) through the integration of reconfigurable resources and best practices in a knowledge-rich environment to provide customer-driven products and services in a fast-changing market environment.

Kull et al., (2013) explained that Trist and Bamforth developed Socio-Technical System (STS) theory in 1951. Initially, STS theory focused on how to maximize productivity with limited capital expenditure. Furthermore, they extended the applicability of STS theory in system integration, therefore, the interaction between the environment, people and technology can achieve better outcomes of business results.

The author is exploring the applicability of STS theory to explain the relationship of export determinant that is legal and political to support firms’ to be
agile in implementing supply chain management to achieve the target of export performance. The relationship is described in the figure:

Figure 2. Supply Chain Management Agility by Applying STS Theory

The figure describes the relationship between export determinants, supply chain agility and export performances. The supplier’s and buyer’s environment including legal and political aspects that influence the business environment. The social system is related to people who work within the organization and all related to them such as attitudes, beliefs, relations, cultures, norms, politics, behaviors, and emotions. The social system will establish the relationship between individuals and align with organizational objectives. The technical system consists of the tools, techniques and methods, procedures, and knowledge used by firms’ employees to acquire inputs, transform inputs into outputs, and provide output or services to clients or customers.

The integration of these elements will form the firms’ capabilities. Such capabilities will have firms acquire firms’ supply chain agility that builds advantageous to win the market competition. The supply chain agility can be in the form of efficiency and flexibility in the process of delivering product value to the market.
The theory can be used to improve the understanding when there is a changing of social and technical in the working environment, it will affect entirely the interaction process of social and technical systems of a firm. In a case, when a firm plan to enter the country should comply and implement the standard that standardizes in its country. Otherwise, the product will be rejected, and firms will lose the market. This is related to the legal aspect as the predecessor that the managers should be able to overcome. The managers pursue to choose the most suitable strategy to maintain the efficiency and flexibility of firms. This interaction will influence the firms’ performance.

In E&E firms in Batam, firms’ export performance gained through firms’ ability to create supply chain efficiency. It means that firms have managed the internal determinants successfully through the quality management system applied in the firms. However, the study discovers that supply chain flexibility has a less significant effect to export performance due to the limited capability of firms to reduce the negative risk of external risks. This answers the phenomena of fluctuating export performance of firms in Batam. It also evidenced legal and political factors as firms’ external determinant has a strong impact to export performance.

In this context, STS theory explained the importance of building the interrelationship between the people, social and technical systems. This interaction would have brought a strategy for firms to meet business objectives. Furthermore, a socio-technical systems theoretical perspective is useful in explaining the nature of complexity and complexity management for business competitiveness.

STS Theory provides a framework for understanding relationships within organizations without prescribing what should be done (Kull et al., 2013). Thus, managers must pursue strategies, select resources, and implement technologies aligned with the environment to answer the criteria of flexibility in project management. Within a supply-chain context, managers should respond to the demand of the market and the impact on supply chain partners (Green et al., 2012). It means that managers have options to design the plan, monitor, evaluate and assess the project based on their “world view”. In this stage, firms required to attribute their managers with the knowledge and skills required.
This is common happened that projects may fall from known to unknown processes or unknown-to-unknown ones, especially conducting an international business scale in the foreign market. It becomes a challenge for managers as well as running projects in emerging countries because of its higher environmental uncertainties.

In the current global business, firms should maintain a good relationship with the partner in the supply chain. For example, providing customer service support, service desk, technical support to provide ongoing support to foreign distributors, technical assistance, marketing know-how, promotional support, etc. This will lead to firms’ efficiency and flexibility as the source of supply chain agility. Initiate and sustain strong and mutually beneficial relationships with partners will give a positive impact on export performance. In that condition, all teams in the supply chain management should define the success criteria, how to measure, get the commitment of every stakeholder, product or services scope that can be delivered. The next process is planning the schedule of the project. The next process is resource availability. This is related to how good the relationship with the suppliers and customers as well. The last is cost, whether there is a benefit of escalating cost or vice versa. In this case, all stakeholders should respond effectively as the source of supply chain agility.

Supply chain performance is a firms’ indicator of how a firm manages all enablers or resources to respond quickly, exploit potential resources, risk planning to reduce the risk because uncertainties are higher in market turbulence or market run unexpectedly. It can be mediated the relationship between determinants and export performance that required managers' management knowledge to achieve its objectives.

CONCLUSION

The volatility of export value in Indonesia has been affected by internal and external factors of firms. The legal and political environment is validated as one of external determining factors that has a strong relationship with supply chain performance. The legal and political situation can be a problematic issue when conducting business overseas because, in global business, production is not only dealing with domestic but also an overseas supplier. Therefore, supply chain performance is a significant driver to export performance.
Investors prefer conducting business in a country that has a high quality legal and political implementation. This will support the operation process because the clarity of rule and procedure, and the stability of the political situation will strengthen the business environment. Therefore, focusing on the factors determined as the export performance is important for creating a more conducive business environment. All these require firms and governments to undertake proactive capacity building and other measures to ensure and sustain their participation in supply networks and to sharpen their competitiveness, flexibility and hence business sustainability. This study contributes to the extent of the existing knowledge on export performance; the internal and external determining factors of export performance investigated in a non-Western context.

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