

Measuring Export Performance Commodities: A Proposed Model

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Abstract-The purpose of this research is to examine the variables that have an impact on the performance of Aceh commodity exports. It is very few studies had addressed to the export and international trade of commodities by exporters in certain countries, especially in developing countries like Indonesia. To be successful in exporting product and compete in the global market, the research intended to propose the model of Aceh commodities export performance, explaining the variable relation affecting export performance of commodity. The study would focus on an approach of firm competency variable and customer relationship and export competitive strategy as a mediating variable that aims to improve the performance of firm export as a whole.

Keywords-Export performance; Competitive strategy; Customer relationship; Firm competencies

I. INTRODUCTION

This study of commodity exports only examines some literature related to export commodities. This research proposes mediation variables that are used as proposed models. As the previous study, mostly commodity exports studies are carried out in developed countries such as America, Europe, and other developed countries. It is very little research has been conducted in developing countries such as Indonesia, where Indonesia is one of the exporting countries. Indonesia consists of many provinces where Aceh is one of the areas as a commodity exporter that has a competitive advantage compared to other provinces in Indonesia.

From the previous study showed that the ability of the organization had been rarely studied about high growth. It is shocking that only five studies address the role of capability given that organizational capability is an essential means of creating, configuring, and recasting the company's resource base and is, therefore, necessary for growth and competitive advantage of the company (Barney, 1991). The research is further known as a resource-based view (RBV) approach. Thus, Barney studies have explained the gap for not only firm growth, but also firm capability, competitive strategy especially to improve firm performance for further research. Thus, this research aims to propose commodity export as the proposed model and also measure its performance.

Exports have a substantial role in influencing the economic progress of a country. Exports can have a direct or indirect impact on the increase not only in the shape of state revenues, as well as domestic production, the decline in the unemployment rate, and generate foreign exchange to meet the needs of import costs which certainly play a substantial role for a country. Capacity and ability of a country to compete and succeed in the international market and to maintain a balance of inter-state trade that can certainly provide a significant advantage and can control the external payment situation which is a reflection of economic power and comparative marginal competence to other countries (Shamsuddoha, 2004).

Ding and Field (2004), there is a view by world economists that natural resources are a blessing for a precious country so that a country rich in natural resources has a significant advantage for the country, and has its advantages over other countries with no or very little of the country's natural resources. Natural resources have significantly helped the country not only to grow but also to develop its country with the availability of these natural resources. Besides, the availability of natural resources implies that the country can further develop and provide a foundation for developing related technologies and capital goods industries.

The government in a country, in this case, is responsible for direct economic sustainability in a country. This can be seen both directly or indirectly affect the company's business-level objectives. Given that exports play a substantial role in the country's revenues and wealth, export development certainly has an impact on the aspects of economic development where the government should pay particular attention to it. Therefore, export activities and the ability to export are required by a country. Also, the state plays a vital role in advancing export performance, where it is necessary for support for decision making in the field of international trade. Export performance is a broad concept, which requires the use of both quantitative and qualitative variables (Sousa, 2004).

The following is a description of the development of Indonesia's export activities from time to time (World Bank, 2018).

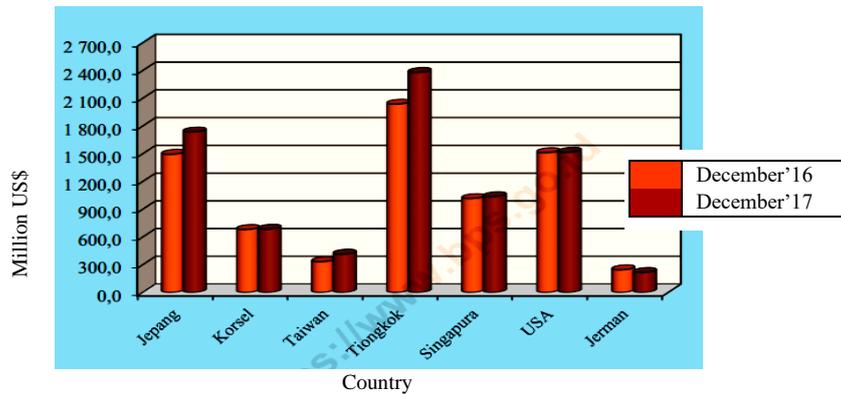
TABLE I. KEY ECONOMIC AND INDICATORS (GROWTH YOY, PERCENT, UNLESS OTHERWISE INDICATED)

	Annual			Revision from previous IEQ
	2017	2018f	2019f	2018
Gross Domestic Product (GDP)	5.1	5.2	5.3	-0.1
Private consumption expenditure	5.0	5.0	5.1	-0.1
Government consumption	2.1	3.0	4.5	-0.1
Gross fixed capital formation	6.2	7.5	6.5	1.5
Exports of goods and services	9.1	7.0	6.5	0.0
Imports of goods and services	8.1	9.5	7.5	2.5

Source: BPS: BI: CEIC; World Bank staff projections, 2018 (processed)

As the projection of Bank Indonesia in table 1 above, shows the percentage of export activity fluctuated from 2017 to 2018 and in second quarter 2018 report still showing decreased from 9.1 to 7.0, this happened as an impact of the global economy.

Based on data from the Central Bureau of Statistics 2018, shows that from 1997 to 2017 or about 21 years of export activity, there was a significant decrease in export volume about 84%, as well as declining sales revenue in the dollar by 97%.



Source: Warta Ekspor Kementerian Perdagangan Republik Indonesia, 2018 (processed)

FIGURE I. THE EXPORT DESTINATION COUNTRIES INDONESIA 2016-2017

Some countries have been increasingly purchased Indonesian. Here are 10 main export destinations of Indonesia, China with 13.63% market share, Japan (11.26%), United States (9.53%), India (8.13%), Singapore (6.89%), Malaysia (5.53%), Korea (4.37%), Thailand (3.59%), Netherlands (3.00%) and Philippines (2.41%).

TABLE II. VOLUME AND VALUE OF ACEH PROVINCE EXPORT BY DESTINATION COUNTRY, 2017

Country	Volume (Kg)	Value (US\$)
Japan	5.761	58.724
Hong Kong	50.953	228.284
South Korea	100	5.500
Taiwan	12.420	87.444
China	878.931.000	23.075.654
Thailand	70.985.483	4.378.780
Singapore	38.020	287.451
Filipina	1.004.708	232.339
Malaysia	7.643.763	2.445.781
Vietnam	14.853.403	4.697.451
India	1.543.943.000	42.181.731
Total	2,517,468,611	77,679,139

Source: BPS of Aceh Province 2018 (processed)

In general, as Table II above, the decrease in sales volume and so is followed by a decline in export earnings caused by the global economic crisis that resulted in a weakening in the export sector. The global economic crisis of 1997 and the last year of 2008 has had an impact on the general decline in export performance for Indonesia and the Aceh region as well.

Based on Table II above, there are eleven main destination countries of Aceh commodity exports based on data from BPS in 2018. Of the eleven export destination countries both the volume and value of exports obtained are varied. Total volume in

kilograms 2,517,486,611 kg. While the total USD Aceh export gain is USD 77,679,139 of these acquisitions, India has the highest volume of 1,543,943,000 kg and is also the highest USD value of USD 42,181,731 While South Korea is an export destination country with the lowest export volume and export of 100 kg and USD 5,500

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Similarly, the condition of foreign trade in Aceh, experienced fluctuations in the period 1997 until the year 2017, where there is a significant decrease caused by several things, such as Aceh hit by conflict in a long time. The following description of Aceh province export from 1997 to 2017 as follows:

TABLE III. VOLUME AND VALUE ACEH PROVINCE EXPORTS IN PERIOD 1997-2017

<i>Year</i>	<i>Export (Volume/kg)</i>	<i>Export (USD)</i>
1997	15.744.065.076	2.654.301.240
1998	14.911.681.585	2.059.087.160
1999	12.987.076.537	1.780.912.864
2000	8.519.408.829	1.806.083.419
2001	3.405.879.409	666.738.727
2002	8.401.425.696	1.571.114.161
2003	7.483.440.452	1.704.621.446
2004	6.124.958.338	1.812.364.338
2005	5.307.764.303	2.072.415.260
2006	4.224.074.908	2.032.790.547
2007	3.573.192.907	1.854.234.711
2008	3.386.382.500	2.234.130.664
2009	2.742.507.597	1.138.018.858
2010	2.390.754.875	1.359.251.711
2011	2.240.752.691	1.483.590.754
2012	1.725.188.588	1.257.398.628
2013	1.486.982.850	962.969.640
2014	715.003.350	507.414.478
2015	1.182.177.854	93.336.621
2016	296.623.559	22.869.514
2017	2.517.468.611	77.679.139

Source: BPS of Aceh Province 2018 (processed)

Based on table 3 above, it shows that from 1997 to 2017 or around 21 years of export activities, there was a significant fluctuation and decrease in export volume from year to year of more than 84%, and likewise, fluctuations and decreases in sales revenue in (USD) in the period this time is more than 97%. In the period before 2004 Aceh was in a state of prolonged conflict and Aceh's security problems which continued in this period.

Seringhaus (1986), the complexity of international business and the consequent lack of knowledge about the business will make it difficult for a company to suffer losses from competing against other companies. Therefore, it is clear that the role that knowledge and expertise is an essential factor in competing in foreign markets. Also, some barriers to exports exist that may hinder companies in seeking or expanding export sales. The information, knowledge, experience, and resources necessary to cope with export barriers and export promotion programs have emerged to provide information, knowledge, experience, and resources to the company.

II. LITERATURE REVIEW

A. Firm Competencies

In the international business review, some literature suggests that export performance variables are the most widely cited and used variables. In accordance with to Aaby and Slater (1989), export performance is grouped into four parts: corporate characteristics (managerial commitment, size, and managerial perceptions), firm competence (market knowledge, technology, export policy, market planning, and control system, quality control, and communication skills), export strategy (product mix, market selection, intermediary / intermediary use, product development, promotion, pricing), and external environment.

From the results of Nelson and Winter (1982) research, that the company's internal capability and innovation performance, where it becomes an emphasis on the evolutionary economy. This view sees the company's innovation behavior as to whether the company can achieve superior performance in a rivalry environment.

Sousa et al., (2008), the competence of the company has a positive impact on export performance. In general, the competencies can be divided into types, namely: (1) Skills required gaining or preserving a competitive advantage in overseas markets, and (2) Skills needed to develop relationships with international customers. Research refers to the first type as "entrepreneurial competence" and the second type is "relationship-oriented competence". This competency, in general, can be applied in all relation with international customers, in any case of their specific cultural background or the geographic market in which they operate.

Firm competence is not only an indicator of overall export capability; Instead, they are a precursor of the company's capacity to start and maintain exports on a regular basis. In addition, with increasing competition, rapidly switch over consumer needs and desires, and shorter product life cycles, companies need enhanced capabilities to recognize, create and convey excellent customer value in export markets rather than rivalry (Rauch, Wiklund, Lumpkin, & Frese, 2009). Therefore, company competence is the basis, foundation, and key to success for companies to be competitive.

B. Customer Relations

According to Phan et al. (2005), companies are oriented to their customer interests, including also on increasing satisfaction with the ability of customers through improved communication. Communications use information that is useful to others and may include information about the customer's financial capacity. Such information is beneficial and provides an opportunity for exporters to make necessary informed decisions about customer relationships that the company wants to maintain. Customer relationship competence involves a continuous market search process to recognize customer needs and changes in tastes and preferences of customers Tzokas et al. (2015).

For export companies, things that are constantly changing (volatility) are a big concern coming from the market environment. This means the hardship of anticipating changes in overseas markets (Gaur, et al., 2011). However, as the exporter maintains relationships with its overseas distributors based on collaboration, information intercourse, and flexibility, this relationship minimizes the effects of export volatility in overseas markets (Bello et al., 2003).

According to Piercy et al. (1998), related to customer relations, noted the importance of suppliers and buyers having an excellent relationship to maintain a competitive advantage in overseas markets. Exporters should pay attention to customer needs by having a good relationship with them, thus affecting performance and satisfaction.

Associated to the capabilities in customer relationships, thus enable companies to gain knowledge of customers and companies continue to develop their creativity and knowledge to expand new products and services (Anderson & Srinivasan, 2003). Therefore, customer relationships play a key role in influencing the competitive advantage in the business and influencing export performance.

C. Competitive Strategy

Barney (1991), that competitive advantage arises from the creation of superior competencies that are utilized to create customer value and achieve cost and differentiation advantages or market share and profitability performance. Barney (1991) proposed that the source of the company should be developed and maintains its competitive advantage through value-based resources (RBV). A resource must be valuable, rare, and difficult to replicate and support by the organization.

Porter (1980), that firms may have two types of competitive advantage; cost leadership and differentiation. Morgan, et al. (2004), identifies that cost leadership, marketing differentiation, and service differentiation form a competitive strategy that acts to mediate resources and positional capabilities and advantages in export market business performance.

The competitive advantage approach is closely related to the positional advantage that the company has in the market segment in which it operates. This advantage is certainly based on customer delivery of superior value or lower cost achievement compared to the company's competitors (Hooley & Greenley, 2005). The advantage of the firm position regarding cost, promotion, and sales is a determinant factor that can improve company performance (Hill, 1988). The advantage of a company's position is the result of a competitive strategy to become a low-cost manufacturer in the industry or differentiate its product/service line.

D. Export Performance

Lages (2000), the work to evaluate export performance is considered a complex task, and the extent to which valuation is particularly useful will depend heavily on the credibility of the action. Specified steps such as growth, volume, and strategic and competitive positions are presented to six exporters in a preliminary interview session to gain their perspective on the steps taken.

The response is that the actions taken are considered irrelevant, mainly because of the small size of the company. Therefore, export performance is assessed based on three steps determined based on the results of the interview.

Chen, et al., (2016), in the phases over the past four decades, a great deal of research has addressed the determinants of export performance. Significant contributions to the export activity of gross domestic product (almost 30% in 2015 according to World Bank statistics) and the popularity of exports as an international market entry mode (mainly for small and medium-sized enterprises), followed by a large number of studies conducted to identify factors a decisive factor on export success (Leonidou et al., 2002).

Walker and Ruekert (1987), operates export performance as a second-order factor consisting of three dimensions: effectiveness, efficiency, and adaptability. This dimension of effectiveness and efficiency further measures the performance of the export market and the financial performance of exports of Morgan et al. (2012). The dimensions of adaptation are consistent with product performance measurement (Murray, et al., 2011), which this research is a reflection of the ability to export companies to introduce new products in their overseas markets successfully. This study further developed the steps that took the basis of previous research (Murray et al., 2011).

III. METHOD

This research is qualitative, where the approach is taken is to examine articles related to export performance both from journals and relevant theories, so that from this theoretical approach the research model is proposed.

A. Research Frameworks

This research focuses on causal variables that might respond to the problems that occur to the current condition of commodity exports in Aceh, thus result on how the condition of export performance by the current exporting company of Aceh. This study, also using literature approaches directly related to the variables studied on this research is an important issue related to the competitive advantage of exports for commodity exporting firms in Aceh and the impact on export performance for exporting Aceh firms. Below is a figure of the research frameworks:

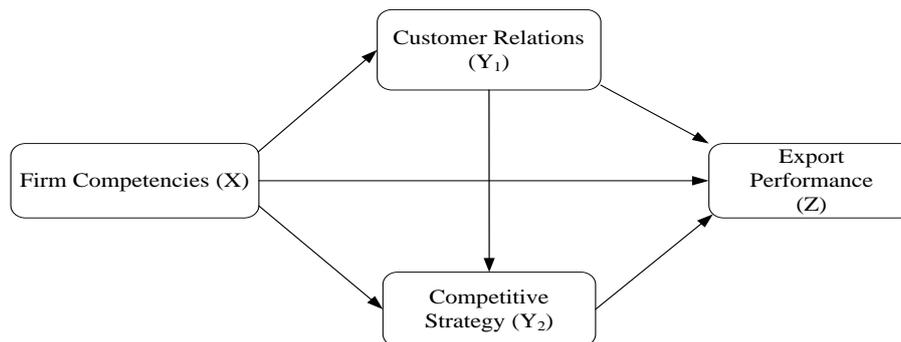


FIGURE II. RESEARCH FRAMEWORKS

IV. CONCLUSION

The model proposed in this study provides a detailed picture of commodity exports in developing countries including Indonesia. Aceh is one of the provinces in Indonesia that produce some commodities for export. Aceh is one province that produces different commodities and has competitive advantages compared to other provinces in Indonesia.

From the literature of resource-based view (Barney, 1991); this research further has explained the gap for not only firm growth, but also firm capability, competitive strategy especially for improvement of firm performance for further research. Therefore, the study tries to propose a model of measuring export performance with competitive strategy and customer relations as mediating variables as predictors of export performance.

One of the most critical things from export activities which are the changing environment of the international trade market has had a massive impact on the changing world trade market. Therefore, to address the need for any commodity exporting company to conduct export activities which might adapt to the changing world market demand from time to time due to quick changes in the era of globalization. The company is required to be able to answer the various obstacles, and a tough challenge which is the flow of information exchange is pretty fast that followed by the rapid development of technology. In this study, the model

framework offered would provide benefits for export activities by commodity exporters in developing countries such as Indonesia and especially Aceh region which is one of export commodity producers. Furthermore, it is necessary to develop the competence aspect of the exporting firm, to improve and good develop relations with the export destination countries including distributors and also very important that is how the exporting company might have competitive advantage against other international exporting firms which has a good capability and competitive advantage against competitors in the international market. Furthermore, the final achievement of this research model is to have an impact on improving export performance for the exporting company as a whole.

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