Determinants of Export Performance of Coconut Industry in Sri Lanka with Special Reference to the Export Competitiveness

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Abstract: An export promotion strategy is crucial for fostering economic growth and development for any country in today's highly internationalized world. Economic factors and market conditions have traditionally been used to understand the export competitiveness of trading nations. Therefore, the primary aim of this research is to investigate the factors that influence the coconut sector's export performance, with a special emphasis on export competitiveness, and to develop a framework that improves the coconut industry's international competitiveness. The Porter's Diamond model was used as the study's theoretical framework, and a deductive research approach was adopted in conducting this study. The Porter's Diamond model incorporated demand conditions, firm factor conditions, association with related and supporting industries, firm strategy, structure, and rivalry, as well as government assistance. The structured questionnaire was administered to collect primary data for the analysis from 150 coconut exporting firms in Sri Lanka. The main data analysis techniques of this study are descriptive data analysis, correlation, and Kenny and Barron regression. A study shows the coconut industry's present export competitiveness and growth are moving in a positive direction. Furthermore, it shows that associated supporting industries, demand conditions, factor conditions, and government support all play a key role in improving export competitiveness in this sector. Future research might need to investigate the impact of technological breakthroughs and innovations on the competitiveness of the coconut industry and the most effective strategies for stimulating innovation and new technology adoption for greater innovative competitiveness in this sector. The methodology used and the policies derived from this study can be applied to similar research in any country, specifically for South Pacific countries, including Papua New Guinea.

Keywords: Coconut industry, Exports, Performance, Competitiveness, Porter's diamond model, Sri Lanka.

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1. Introduction

Export-led growth is widely regarded as the best option for countries in the context of globalization, as evidenced by the rapid reduction of trade, international travel, and capital flow barriers. The development and promotion of the export sector is critical because it is the country's primary source of foreign exchange. Export performance is critical in Sri Lanka's efforts to improve its Balance of Payments (BOP) position and to establish a sustainable position in the global economy.

Coconut and coconut-related products are the main export products of Sri Lanka, which ranks among the top four global coconut producers. The coconut tree, known as "Kap Ruka" or the Tree of Bounty, is embedded in the spiritual, culinary, artistic, health, and other everyday aspects of Sri Lankan culture. The growth of the coconut export trade is rooted in the colonial histories of the country. Dating back to the 16th century, Portuguese, Dutch, and British colonial powers played pivotal roles in shaping the structure and functioning of the coconut industry. Initially introduced by the Portuguese, the coconut palm gained prominence under subsequent colonial administrations, becoming a strategic commodity for trade and economic growth. The imposition of European colonial rule significantly influenced the cultivation practices, land tenure systems, and export-oriented strategies of Sri Lanka's coconut industry, laying the foundation for its integration into global trade networks.

In the present day, several factors impact the coconut industry's export competitiveness and performance. The export competitiveness of coconut products in Sri Lanka is hampered by obsolete technology, a lack of high-quality raw materials, a lack of value addition and R&D, and inconsistent government rules and regulations. Most companies in Sri Lanka's coconut sector can be classified as Small and Medium Establishment (SMEs). In most developed nations, the SME sector generates 30 to 50 percent of export revenues to the national economy. However, Sri Lanka's SME sector accounts for only around 5% of the country's GDP in terms of exports. In addition, SME

manufacturers confront numerous challenges in the context of international trade, including a lack of funds, insufficient infrastructure, a lack of innovation and market information, increased competition, antiquated technology, legal requirements, and government support (Fernando, 2021). The export of coconut products including coir fiber (extracted from the coconut husk) products in Sri Lanka is declining due to tariff and non-tariff barriers, small-scale exporters undercutting prices, high sea and air freight costs, and export impediments. When compared to other nations that produce and export coconuts, Sri Lankan coconut products seem to be less competitive on the international market. To date, there is limited research on the factors that affect export performance and competitiveness in the coconut sector, despite its importance to the Sri Lankan economy and society. This study aims to contextualize the present-day determinants of export performance, incorporating both the enduring impacts of colonialism and the contemporary factors identified through the lens of Porter's Diamond Model (Porter, 1990). Our analysis incorporates demand conditions, firm factor conditions, association with related and supporting industries, firm strategy, structure, and rivalry, as well as the government's assistance.

2. Research Questions and Objectives

Over the years, the Sri Lankan coconut products export sector competitiveness is diminishing to its competitors and its market share is taking by the other coconut exporting countries. Therefore, it is timely to investigate the reasons for the decrease in the competitiveness of coconut products export and their subsequent effects on the overall economy. Therefore, this research is framed to find answers for the following research questions.

1) What is the current export situation of the Sri Lankan coconut sector performance with reference to export market?
2) What are main factors that influence the coconut industry's current poor export performance?
3) What are the right policies and strategies to recommend to increase the competitiveness of this sector to overcome the barriers of the industry and achieve higher export revenue for the country?

This study's main objective is to examine the variables that affect the performance of the coconut industry's exports, with a special emphasis on export competitiveness in Sri Lanka. Exports are playing a pivotal role to earn foreign exchange and strengthen the balance of payment in any country. Coconut being the 4th highest net export-earning sector in Sri Lanka, it is critical to identify the key drivers that influence the coconut industry's export competitiveness. In addition to the above goal, this study intends to assess the existing position and export behavior of the coconut industry in Sri Lanka, and identification of the main factors that influence the coconut industry's current poor export performance with a final aim is to derive the appropriate policies and strategies to increase the competitiveness of this sector to overcome the barriers of the industry and achieve higher export revenue for the country.

3. Methodology and Conceptual Framework

The quantitative/deductive technique is employed in this study to investigate the determinants of the coconut industry's export competitiveness in Sri Lanka. A conceptual framework, operationalization table, and hypotheses are developed to see the relationship of each construct. It is more feasible to use Porter's diamond model as a framework for analyzing the competitiveness of any industry inside a country. Factor conditions are categorized into basic and advanced quality inputs. Since domestic customers put pressure on businesses to provide a more innovative product than their rivals, demand in the home market can help enterprises establish a competitive edge. Quality inputs required for the sector's innovation and globalization may be produced by linked and supporting sectors. Firm strategy, structure, and rivalry exist to manage aims and objectives for the industry's performance, and the government functions as a mediator to impact the four components listed above (Jarungkitkul, 2016). According to the Diamond model framework, export competitiveness and geographic economic factors of emerging markets, such as consumer demand, foreign direct investment, the wage of emerging markets, the irrigated land area of emerging markets, the price index of agricultural production of emerging markets, and the exchange rate for export of the agriculture industry, are related and influence each other (Bakan, 2012).

This study's proposed model is based on the modified version (Huo, 2019; Kumarasinghe, 2018) of Porter's diamond model to understand the factors that affect the Sri Lankan coconut industry's ability to compete internationally. According to the aforementioned research methodologies, this study model consists of one dependent factor (export competitiveness), four independent variables (factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry), and two to six mediating variables (government functions).

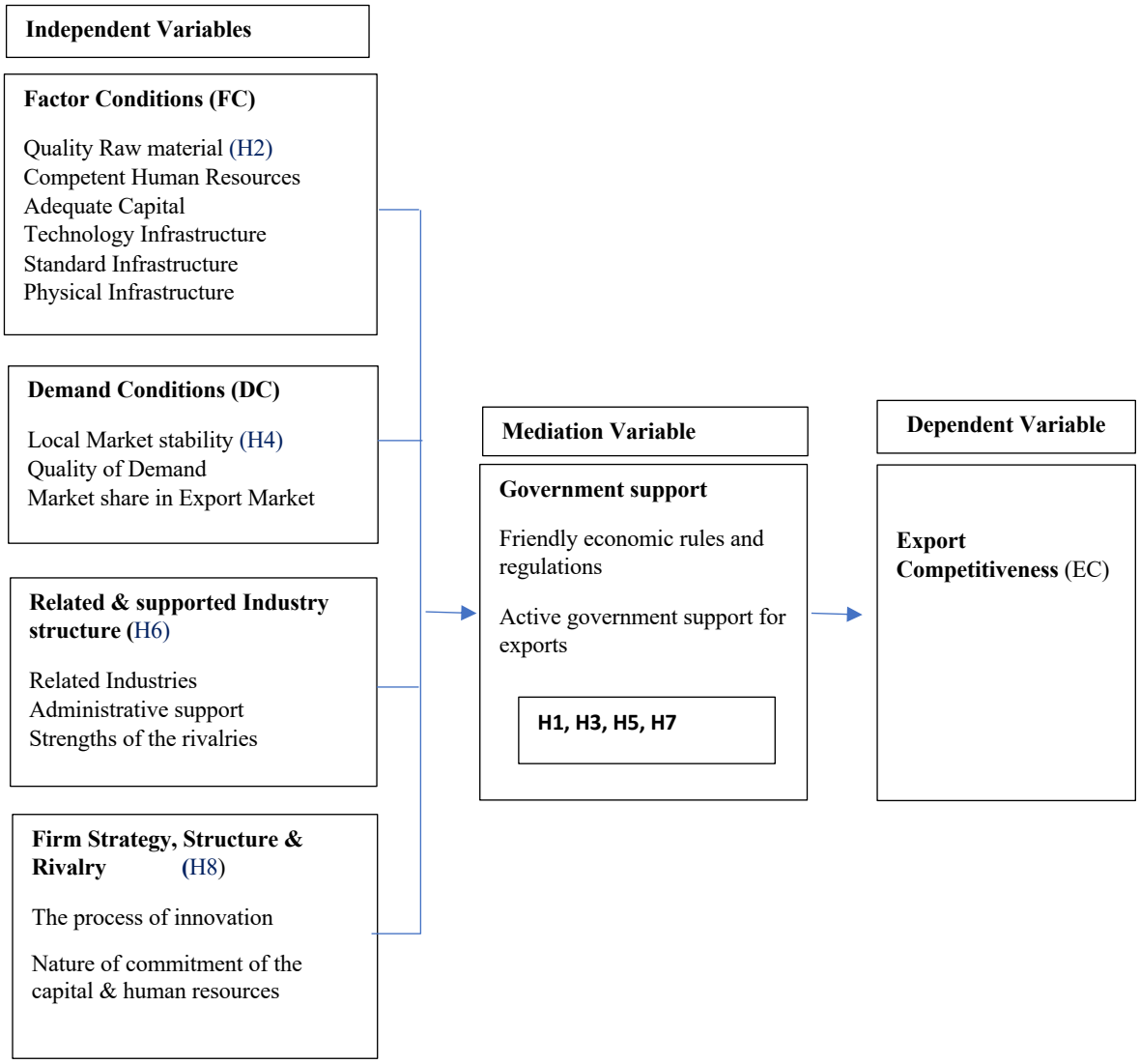

Fig. 1. Conceptual framework of the study.

3.1. Hypothesis Development

The hypothesis has been built using determinants in accordance with past literature. Literature review section did not include for this article due to words limitation. Factor conditions, demand conditions, linked and supporting industries, firm strategy, structure, and rivalry are the four independent variables for the proposed model. Export competitiveness is the dependent variable, and government support and policies operate as a mediating variable that may have an impact on the four independent variables. To investigate the link and influence of independent variables and mediator variables on dependent variables, hypotheses were created.

H1: Government support mediates the relationship between factor conditions and government support and policies for export competitiveness.
H2: There is a significant impact of factor conditions on the export competitiveness of coconut industry in Sri Lanka.
H3: Government support mediates the relationship between demand conditions and government support and policies for export competitiveness.
H4: There is a positive significant impact of demand conditions on export competitiveness of the coconut industry in Sri Lanka.
H5: Government support mediates the relationship between supporting industries and government support and policies for export competitiveness.

H6: There is a significant impact of related and supporting industries on the export competitiveness of the coconut industry in Sri Lanka.

H7: Government support mediates the relationship between firm strategy, structure, and rivalry and government support and policies for export competitiveness.

H8: There is a significant impact of firm strategy, structure, and rivalry on export competitiveness of the coconut industry in Sri Lanka.

3.2. Operationalization of Variables

A country's or region's "export competitiveness" is determined by its "market development and possession ability" and "profit-making ability" in foreign marketplaces where its commodities are offered (Farinha,,2018). A country's agricultural product competitiveness is mostly tied to its capacity to export agricultural products and the products' sustainability. It employed two evaluation methodologies to assess China's agricultural sector's competitiveness: trade competitiveness and Reveled comparative advantage. Researchers (Jarungkitkul, 2016; Bakan, 2012) used Porter's diamond model to investigate the factors influencing the competitiveness of specific industries. The intensity of domestic competition is captured by the firm's strategy, structure, and rivalry. Firm strategy is required to effectively fulfill its aims and objectives, and rivalry behavior is critical in the process of product innovation and sustaining with global competition. Researchers (Jarungkitkul, 2016; [4]} showed that national diversities in business practices, for example; good management manner and practices & training, development & training of leaders, hierarchic style of the organization working model and the relationship between work and management, motivation of the works has brought advantages and disadvantages when comporting in different sectors. Moreover, the role of the government is the additional determinant that affects the model to be completed. Hence, the diamond model was used to examine the competitiveness of the coconut sector in Sri Lanka, taking into account factor circumstances, demand conditions, firm strategy, structure, rivalry, linked and supporting sectors, and the involvement of the government.

Table 1. Operationalization Table

Determinants	Component	Variables
Factor conditions	Raw material Human Resources Capital Physical Infrastructure Technology & R&D ICT	01. Availability of quality raw material 02. Cost of raw material 03. Education and professional qualifications of the employees 04. Attraction of foreign direct investment 05. Quality of infrastructure such as road rail and port system 06. Ability to attract innovative technology 07. Cost of Research & development 08. Use of e-commerce & social media platforms
Demand Conditions	Local Market Quality of demand Market share export	9. Domestic market establishment & market share 10. Relationship with the government and other stakeholders 11. The Change rate of customer need and engagement 12. Quality of demand and standard and regulation infrastructure 13. Level of familiarity of foreign consumers with the product. 14. Foreign market share of the product

Related and Supporting Industries	Related Industries Supporting Industries Administrative Support	15. Level of Joint marketing studies with the other organization of the sector 16. Ability to common purchasing materials with the related organization of the sector 17. Development of common skills of the employees of the other organization in the sector 18. Development of R&D with the universities other R&D support institutions 19. Relationship with other trade support government institutions. 20. Level of active work with relevant trade promotion organizations. 21. Supportive Regulatory environment conditions 22. Quality of cost of administrative functions
Firm strategy structure & rivalry	Strategy Structure and rivalry	23. Management support for the preparation and implementation of strategies 24. Coordination with customers and suppliers 25. Firm Image and reputation of the industry and internationally 26. Organizational structure of SME 27. Level of institutionalization among other firms 28. Price competition among the same producers in the industry 29. Product differentiation 30. Industry entry flexibility or barriers in locally & internationally
Government support	Government rules and regulation Active Government support	31. Consistent policies for international trade 32. Tax & Tariff structure 33. stable exchange rate 34. Efficient trade facilitation (e.g. Single Window System) 35. strong trade relationships among foreign countries 36. Exports-friendly policies 37. Export rebate & assistance schemes 38. Conducive environment for investments and exports
Export Competitiveness variables		39. There is a favorable demand for coconut products 40. The patterns of the consumption of coconut are favorable 41. There are substitutes for the coconut in the market 42. Quality of the coconut exports is achieved through quality management 43. There is higher competition from other nations in the coconut market internationally 44. We are confident that Sri Lanka's coconut industry can compete with other countries in terms of product pricing 45. Sri Lanka's coconut product exporters have the necessary knowledge and skills to market their products effectively 46. There are favorable trade policies for the international trade of coconut products

based on [3, 4] with adaptations.

Note: The scale of choice for the variables will be measured using a Likert scale data in order of 1: Strongly disadvantage and 5: Strongly Advantage.

3.3. Population and Sample

Two distinct types of data sources can be analyzed in order to ascertain the link between the elements that affect the competitiveness of the coconut industry's exports. Those are sources of both primary and secondary data. Primary data are gathered through the structured questionnaire. Hence, primary data is collected to achieve the main objective of the study. Using Porter's diamond model of competitive advantage components, a questionnaire was developed. The model's operationalization structures were used as questions to measure the desired result. Structured questions of the questionnaire are based on the ordinal scale in order to gather the information. Demand circumstances, factor conditions, linked and supporting industries, government support, and export competitiveness are all Porter's model constructs that are transformed into quantitative measures. Each factor that affects export competitiveness is rated on a scale from 1 (strong disadvantage) to 5 (strong advantage). Open-ended questions were asked of the coconut industry's exporters to measure the export determinants.

Secondary data were studies of the literature relevant to the topic from various schools' books, journals, and magazines, the data of which had already been published. The sample for this study was chosen using a convenient sampling approach because the samples had an equal probability of being chosen during the just-completed data collection. Sri Lankan exporters of coconuts and coconut-related product exporters were chosen as the research population. Coconut kernel and shell products, as well as coconut fiber products, are on the list of coconut exporters, which number over 700 in Sri Lanka (EDB, 2022). The population covered in this study are the managerial-level employees who work in these organizations. Since reliable statistical data for the exact number of employees in the companies are not available, the researcher has taken 150 employees as a sample using a convenient sampling method. This study investigates the elements that determine the competitiveness of Sri Lanka's coconut sector. The dependent variable in this study is export competitiveness, while the independent variables are factor conditions, demand conditions, related and supporting industries, and government support, all of which are quantified using an ordinal scale. The SPSS software to analyze the study data via descriptive statistics, correlation analysis, and Barron and Kenny regression as a data analysis technique (Baron, 1986).

4. Data Analysis and Interpretation

This section presents the primary data analysis results done using SPSS. 150 responses were gathered and the demographics of the respondents were analyzed. Descriptive statistics for each and every variable are examined to ascertain their behavior. Further, the reliability of the data set was analyzed which continued to correlation analysis and Kenny and Barron regression (Baron, 1986).

4.1. The Basic Features of Sampled Data

Out of 150 firms selected 57% are limited liability firm, 17% are sole proprietorship, 13% partnerships and 10% are joint ventures. The remaining 3.3% fall under the "Other" category. This sampled data set shows the most common category of experience among the individuals surveyed is 5-10 years, with a frequency of 45 individuals, representing 30.0% of the total individuals surveyed. The next most common category is More than 15 years, with a frequency of 40 individuals, representing 26.7% of the total individuals surveyed. The category of Less than 5 years represents 23.3% of the individuals surveyed, while the category of 10-15 years represents 20.0%. Out of 150 firms surveyed the most common category of organizations has 10-49 employees, with a frequency of 65 organizations, representing 43.3% of the total organizations surveyed. The next most common category is 100-149 employees, with a frequency of 30 organizations, representing 20.0% of the total organizations surveyed. The category of 50-99 employees represents 16.7% of the organizations surveyed, while the categories of Less than 10 employees and more than 150 employees represent 6.7% and 13.3% of the organizations surveyed, respectively. Furthermore, the most common classification based on export revenue among the companies surveyed is US$ 1-5 million, with a frequency of 60 companies, representing 40.0% of the total companies surveyed. The next most common categories are US$ 16-20 million and More than 21 million, each with a frequency of 25 companies, representing 16.7% of the total companies surveyed. The categories of US$ 6-10 million and US$ 11-15 million represent 13.3% of the companies surveyed each.

4.2. Porters Diamond Model Main Elements Explanation via Descriptive Statistics

Descriptive statistics is a field of statistics concerned with summarizing and describing the principal characteristics of a set of data. In the statistical analysis using SPSS (Statistical Package for the Social Sciences), descriptive statistics are used to describe and summarize the main characteristics of a dataset, such as measures of central tendency (mean, median, mode), measures of dispersion (standard deviation, variance, range), and measures of shape (skewness, kurtosis). Descriptive statistics can also be used to identify outliers, assess the normality of the data, and explore the relationships between different variables. All these six tables related to descriptive statistics covering the main elements of Porter's diamond model is attached in Tables in appendix.

The factor conditions of Porter's diamond model related descriptive statistics show in the Table1 in appendix. According to this Table 1, 150 valid responses were collected for this factor. The mean score is 4.10, indicating that the respondents generally found the availability of quality raw materials to be good. The standard deviation is 1.403, indicating that the responses were somewhat varied. The remaining factors, listed in the first column of the table, are: "Cost of raw material", "Education and professional qualification of the employees", "Quality of training & other development facilities provided", "Convenient access to loan facilities", "Entrance flexibility on the stock market and credit facilities", "Attraction of foreign direct investment", and "Quality of infrastructure such as road rail and port system". For each of these factors, the table provides the number of valid responses, the mean score, and the standard deviation. The means scores range from 3.77 to 4.20, indicating that the respondents generally had positive views on all of these factors. The standard deviations range from 0.875 to 1.452, indicating that the responses for these factors were somewhat varied.

Table 2 in appendix gives descriptive statistics regarding demand circumstances in the context of your Porter's diamond model-based research on the export competitiveness of coconut products in Sri Lanka. This Table 2 presents the mean and standard deviation for seven variables that relate to demand conditions mentioned by Porter's model.

These items are:

- These variable measures the quality of logistics, storage, and telecommunication infrastructure available to firms operating in the industry.
- These variable measures the extent to which firms in the industry are able to attract and utilize innovative technologies to improve their competitiveness.
- These variable measures the cost of research and development (R&D) activities in the industry.
- These variable measures the policies that firms have towards R&D, such as the level of investment in R&D and the focus of R&D activities.
- These variable measures the availability and accessibility of market information that firms in the industry can use to inform their decision-making.
- These variable measures the extent to which firms in the industry use-commerce and social media platforms to reach customers and promote their products.
- These variable measures the ease with which firms in the industry can access and adopt new technologies.

The mean values for all the variables are above 3.9, indicating that demand conditions are generally favorable for the coconut product industry in Sri Lanka. Specifically, the industry has sophisticated logistics, storage, and telecommunication infrastructure, a high ability to attract innovative technology, and a high readiness for market information. In addition, firms in the industry have favorable policies towards R&D, make use of e-commerce and social media platforms, and have good access to new technologies.

Table 3 in appendix gives descriptive statistics on Porter's diamond model another element of related and supporting industries. The mean and standard deviation for each variable can provide insights into the performance of the coconut in each area. Domestic market establishment & market share: The average score of 3.80 shows that the company has established itself in the local market to some extent and has a moderate market share. However, the standard deviation of 0.948 suggests that there is some variability in responses, and some respondents may have rated the company's performance more positively or negatively. Relationship with the government and other stakeholders: The mean score of 3.90 suggests that, on average, the coconut exports have a somewhat strong relationship with the government and other stakeholders. The standard deviation of 1.169 indicates that there is some variability in responses, and some respondents may have rated the company's performance more positively or negatively. The change rate of customer need and engagement: The mean score of 3.90 suggests that, on average, the company is aware of the changing needs and engagement of its customers. The standard deviation of 1.048 indicates that there is some variability in responses, and some respondents may have rated the company's performance more positively or negatively. Quality of demand and standard and regulation infrastructure: The mean score of 4.00 indicates that, on average, the company

has good quality demand for its product and there is a strong standard and regulatory infrastructure in place. The standard deviation of 1.215 indicates that there is some variability in responses, and some respondents may have rated the company's performance more positively or negatively. Level of familiarity of foreign consumers with the product: The mean score of 4.30 indicates that, on average, foreign consumers are quite familiar with the company's product. This suggests that the company may have a strong presence in international markets. The standard deviation of 1.104 indicates that there is some variability in responses, and some respondents may have rated the company's performance more positively or negatively. Foreign market share of the product: The mean score of 4.10 indicates that, on average, coconut exports have a moderate market share in foreign markets. The standard deviation of 1.079 indicates that there is some variability in responses, and some respondents may have rated the company's performance more positively or negatively. Level of collaboration with other organizations in the sector on joint marketing studies: The average score of 4.00 indicates that the company, on average, does some collaborative marketing studies with other organizations in the field. The standard deviation of 1.003 indicates that there is relatively low variability in responses, and most respondents rated the company's performance similarly. The ability of common purchase materials with the related organization of the sector: The mean score of 4.00 suggests that, on average, coconut exports have the ability to purchase common materials with related organizations in the sector. The standard deviation of 1.068 indicates that there is some variability in responses, and some respondents may have rated the company's performance more positively or negatively.

Table 4 in appendix gives descriptive statistics on Porter's diamond model another element of firm strategy structure and rivalry. This Table 4 displays descriptive statistics for eight characteristics linked to business strategy structure and rivalry in the coconut export market. According to the Table 4 contents, there were 150 valid observations and no missing values for any of the variables. The mean value of each variable provides an indication of the average level of the construct being measured. The mean value for the variable "Development of common skills of the employees of the other organization in the sector" is 3.77. This suggests that firms, on average, are somewhat engaged in developing the common skills of employees of other organizations in the sector. The mean value for the variable "Development of R&D with the universities' other R&D support institutions" is 3.93. This suggests that, on average, firms are somewhat involved in research and development with universities and other R&D support institutions. The mean value for the variable "Relationship with other trade support government institutions" is 3.93. This suggests that, on average, firms have a moderate level of engagement with other trade support government institutions such as Coconut Development Board and Export Development Board, etc. The mean value for the variable "Level of active work with relevant TPOs" is 3.83. This suggests that, on average, firms are somewhat active in working with relevant TPOs. The mean value for the variable "Supportive Regulatory environment conditions" is 3.97. This suggests that, on average, firms perceive a moderate level of supportive regulatory environment conditions. The mean value for the variable "Quality of cost of administrative functions" is 3.80. This suggests that, on average, firms perceive a moderate quality of cost of administrative functions. The mean value for the variable "Management support for preparation and implementation of strategies" is 4.10. This suggests that, on average, firms perceive a moderate level of management support for the preparation and implementation of strategies. The mean value for the variable "coordination with customers and suppliers" is 4.23. This suggests that, on average, firms perceive a relatively high level of coordination with customers and suppliers. The standard deviation of each variable provides an indication of the degree of variability in the responses. The higher the standard deviation, the greater the variation in the responses. The standard deviations in this table range from 0.670 to 1.066, which suggests that there is some variability in the responses for each of the variables, but not an extreme amount.

Table 5 in appendix gives descriptive statistics on Porter's diamond model another element of government support for the industry. The Table 5 in appendix presents the descriptive statistics of various factors related to government support with relevance to coconut exports. The first factor is firm image and reputation of the industry and internationally. The mean score of 4.33 of this aspect suggests that the respondents perceived the government support to be strong in enhancing the image and reputation of the coconut industry both domestically and internationally. Second factor is the organizational structure of small and medium-sized firms (SMEs). The mean score of this factor is 3.83 which indicates that respondents regarded government assistance for the organizational structure of small and medium-sized firms active in the coconut industry as somewhat supportive. Third factor is the level of institutionalization among other firms. The mean score of this factor is 3.83 suggests that government support is perceived to be moderately helpful in promoting institutionalization among other firms in the coconut industry. The fourth factor is the price competition among the same producers in the industry. The mean score of this factor 4.03 indicates that the respondents viewed the Government support as somewhat effective in addressing price competition among producers within the coconut industry. The fifth factor is the product differentiation with other competitors in the industry. The mean score of this factor 4.43 suggests that government support is perceived to be strong in supporting product differentiation efforts among coconut industry players. The sixth factor is the industry entry flexibility or

barriers in locally & internationally. The mean score of this factor 4.23 suggests that government support is perceived to be relatively strong in promoting industry entry flexibility, with few barriers in both local and international markets. The seventh factor is consistent policies for international trade of Sri Lanka. The mean score of this factor 4.13 indicates that the respondents perceived the government support to be moderately effective in promoting consistent policies for international trade related to the coconut industry. The last factor is the tax and tariff structure in the country and its conduciveness for export promotion. The mean score of this factor 4.13 suggests that the Government support is perceived to be moderately helpful in providing a favorable tax and tariff structure for the coconut industry.

Table 6 in appendix gives descriptive statistics on Porter's diamond model another important element of the factors related to export competitiveness in the coconut industry. According to this Table 6, there is a favorable demand for coconut products from foreign markets. The mean of 3.90 indicates that the respondents, on average, have a moderately positive view of the demand for coconut products in foreign markets. In general, the patterns of the consumption of coconut are favorable. The mean score of this factor 4.33 indicates that the respondents, on average, have a positive view of the patterns of consumption of coconut products. But there are many emerging substitutes for the coconut in the market. The mean of 4.60 indicates that the respondents, on average, have a high level of concern about the availability of substitutes for coconut products in the market. The quality of the coconut exports is achieved through following the proper procedures for quality management. The mean of 4.27 indicates that the respondents, on average, have a moderately positive view on the quality of coconut exports. There is a higher competition from other nations in the coconut market internationally. The mean of 4.07 indicates that the respondents, on average, have a moderate level of concern about competition from other countries in the international coconut market. We are confident that Sri Lanka's coconut industry can compete with other countries in terms of product pricing. The mean of 4.23 indicates that the respondents, on average, have a moderately high level of confidence in the ability of Sri Lanka's coconut industry to compete with other countries in terms of product pricing. The Sri Lanka's coconut product exporters have the necessary knowledge and skills to market their products effectively in any foreign markets. The mean of 4.60 indicates that the respondents, on average, have a high level of confidence in the knowledge and skills of Sri Lanka's coconut product exporters in effectively marketing their products. There are favorable trade policies for international trade of coconut products. The mean of 4.37 indicates that the respondents, on average, have a moderately high level of confidence in the existence of favorable trade policies for the international trade of coconut products.

4.3. Reliability Analysis

A reliability study is a statistical approach for determining the consistency and stability of a measure or group of metrics. Cronbach's alpha (Cronbach, 1951), a metric of internal consistency, is a common way to undertake a reliability study. A higher number denotes greater internal consistency among the items in a measure. Cronbach's alpha is a coefficient that goes from 0 to 1. The alpha value is calculated based on the inter-item correlation matrix, which measures the degree of association between all pairs of items in a measure. There is no fixed rule for what constitutes an acceptable level of alpha value, as it may vary depending on the type of measure and the research context. However, generally speaking, an alpha value of 0.70 or more is thought to be appropriate for the majority of research objectives, whereas a score lower than 0.60 may indicate low internal consistency. Reliability analysis using Cronbach's alpha can provide valuable insights into the quality of a measure or scale, and it can help researchers to identify items that may need to be revised or removed in order to improve the measure's reliability.

Table 2. Reliability of Variables of Porter's Diamond Model

	Reliability Statistics	
	Cronbach's Alpha	N of Items
Factor Conditions	0.892	8
Demand Conditions	0.957	7
- Related and supporting Industries	0.955	8
Firm strategy structure& rivalry	0.870	8
Government support	0.961	8
Export competitiveness	0.959	8

Source: Structured Questionnaire Survey

The Table 2 suggests that the measure is highly reliable and that the items or factors are consistently measuring the construct of interest. A Cronbach's alpha of 0.892 is generally considered to be quite high and suggests that the measure is likely to provide accurate and consistent results in future research studies.

4.4. Correlation Analysis

Correlation analysis is a statistical technique used to measure the degree of association or relationship between two or more variables. It is often used to explore the strength and direction of a relationship between variables, to identify potential patterns or trends, and to help researchers make predictions about future outcomes. In correlation analysis, variables are typically measured using numerical data, such as age, weight, height, or scores on a test. The correlation coefficient, which is a number between -1 and +1, is used to measure the degree of association between variables. When two variables have a positive correlation coefficient, it means they are positively correlated, which means that when one variable rises, the other tends to rise as well. When two variables have a negative correlation coefficient, that suggests that when one variable rises, the other variable tends to fall. There is no link between the variables, as indicated by a correlation coefficient of zero. The most commonly used correlation coefficient is Pearson's correlation coefficient, which measures the linear relationship between two variables. Other types of correlation coefficients include Spearman's rank correlation coefficient and Kendall's tau correlation coefficient, which are used when the variables are not normally distributed or when the relationship between variables is not strictly linear.

Table 3. Correlation Analysis of Porter's Model's Main Components on Export Competitiveness

Components of the Model	(1)	(2)	(3)	(4)	(5)	(6)
N (Number of firms)	150	150	150	150	150	150
Factor Conditions (1)	1	.689**	.650**	.630**	.641**	.682**
		.000	.000	.000	.000	.000
Demand Conditions (2)	.689**	1	.940**	.871**	.938**	.951**
	.000		.000	.000	.000	.000
Related Supporting Industries (3)	.650**	.940**	1	.810**	.980**	.980**
	.000	.000		.000	.000	.000
Firm Strategy Structure and Rivalry (4)	.630**	.871**	.810**	1	.845**	.826**
	.000	.000	.000		.000	.000
Government Supports (5)	.641**	.938**	.980**	.845**	1	.981**
	.000	.000	.000	.000		.000
Export Competitiveness (6)	.682**	.951**	.980**	.826**	.981**	1
	.000	.000	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Structured Questionnaire Survey

All correlations are positive and statistically significant at the 0.01 level (2-tailed), indicating that there are significant relationships between the variables. For example, the correlation coefficient between Factor conditions and export competitiveness is 0.682, indicating a positive correlation between these variables. This suggests that the factor conditions affecting coconut product exports are positively related to the export competitiveness of these products. Similarly, the correlation coefficient between Government support and export competitiveness is 0.981, indicating a strong positive relationship between these variables. Overall, this correlation analysis indicates that there are significant correlations among the factors that affect the export competitiveness of coconut products, including factor conditions, demand conditions, related supporting industries, firm strategy structure rivalry, government support, and export competitiveness itself. However, correlation does not necessarily imply causation and further research may be necessary to determine the nature and direction of these relationships. Therefore, Barron and Kenny regression model is used to ascertain the relationship between independent and dependent variables and the role of government support as a mediation variable.

4.5. Barron and Kenny Regression Analysis

Barron and Kenny Regression used export competiveness as dependent variable and factor conditions, demand conditions, related supporting industries, firm strategy structure and the government supports as independent variables. Estimated model summary present in Table 4.

Table 4. Model Summary of Barron and Kenny Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.984[a]	.969	.968	.17249	.969	1121.081	4	145	.000
2	.989[b]	.978	.977	.14634	.009	57.433	1	144	.000

a. Predictors: (Constant), Firm_strategy_structure_rivalry, Factor_conditions, Related_supporting_Industries, demand_Conditions

b. Predictors: (Constant), Firm_strategy_structure_rivalry, Factor_conditions, Related_supporting_Industries, demand_Conditions, Government_support

Source: Structured Questionnaire Survey

The first row provides information about the overall fit of the model. The correlation coefficient (R) of the model is 0.984 in the first column and 0.989 in the second column, which indicates a strong positive relationship between the predictor variables and the export competitiveness of coconut products. The percentage of variance in the dependent variable (export competitiveness) that can be accounted for by the predictor factors is shown in the table's R Square column. The first model's R-squared value is 0.969, while the second model's value is 0.978, indicating that the predictor variables in each individual model can account for 96.9% and 97.8% of the variation in the export competitiveness of coconut products, respectively. In this Table 4, adjusted R Square column reflects the proportion of variance in the dependent variable that can be explained by the predictor variables after adjusting for the number of predictors in the model. The adjusted R-squared value in the first model is 0.968 and 0.977 in the second model, indicating that the model fits well. This is a very high value and suggests that the model is very effective at explaining the relationship between these factors and export competitiveness. The std. error of the estimate column in the table represents the average amount of error in the predictions made by the model. The smaller the value of this statistic, the better the fit of the model. The standard error of the estimate is 0.17249 in the first model and 0.14634 in the second model, indicating a good fit for the model. The R Square change column represents the change in the R-squared value when the additional predictor variables are added to the model. The F change column represents the increase in the F-statistic when the additional predictor variables are added to the model. The df1 and df2 columns represent the degrees of freedom for the F-statistic. The Sig. F change column represents the p-value for the F-statistic, indicating the statistical significance of the improvement in the model fit.

Table 5. ANOVA Analysis[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	133.418	4	33.354	1121.081	.000[b]
	Residual	4.314	145	.030		
	Total	137.732	149			
2	Regression	134.648	5	26.930	1257.405	.000[c]
	Residual	3.084	144	.021		
	Total	137.732	149			

a. Dependent Variable: Export Competitiveness
b. Predictors: (Constant), Firm_strategy_structure_rivalry, Factor conditions, Related_supporting_Industries, demand_Conditions
c. Predictors: (Constant), Firm_strategy_structure_rivalry, Factor_conditions, Related_supporting_Industries, demand_Conditions, Government_support

Source: Structured Questionnaire Survey

In this table, model 1 has four predictors (independent variables) and model 2 has five predictors. The dependent variable is the export competitiveness of coconut products. The ANOVA results show that both models are significant ($p < .05$), as the p-values are both close to zero. This means that the models have a significant effect on the export competitiveness of coconut products. The F-statistic is higher for model 2, which means that adding the government support variable has significantly improved the model's ability to explain the variance in the dependent variable.

Table 6. Unstandardized and Standardized Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.155	.103		1.511	.133		
	Factor conditions	.050	.022	.047	2.317	.022	.522	1.917
	Demand Conditions	.212	.052	.216	4.102	.000	.078	12.795
	Related supporting Industries	.751	.044	.738	17.117	.000	.116	8.601
	Firm strategy structure rivalry	.016	.047	.010	.349	.728	.240	4.172
2	(Constant)	.333	.090		3.695	.000		
	Factor conditions	.063	.019	.059	3.418	.001	.517	1.933
	Demand Conditions	.203	.044	.207	4.641	.000	.078	12.803
	Related supporting Industries	.281	.072	.276	3.884	.000	.031	32.483
	Firm strategy structure rivalry	-.110	.043	-.071	-2.559	.012	.204	4.910
	Government support	.529	.070	.538	7.578	.000	.031	32.446

a. Dependent Variable: Export Competitiveness

Source: Structured Questionnaire Survey

The coefficients of the predictors (independent variables) in the two models are shown in the table. The independent variables are listed in the first column, and the unstandardized coefficients, which represent the change in the dependent variable for a one-unit increase in the independent variable, are shown in the second column. The third column displays the coefficients' standard errors, and the fourth column displays the standardized coefficients (also known as beta coefficients), which allow for a comparison of the predictors' relative relevance.

Factor conditions, demand conditions, related supporting industries, firm strategy structure and rivalry are the factors in Model 1 that determine export competitiveness. According to the standardized coefficients, related and supporting industries, demand conditions, factor conditions, firm, strategy, structure, and rivalry have the strongest effects on export competitiveness. In model 2, an additional predictor variable, government support, has been included. According to the standardized coefficients, government support has the biggest influence on export competitiveness. Related and supporting industries, demand conditions, factor conditions, firm, strategy, structure, and competition are next in line. However, the firm, strategy, structure, and rivalry negative coefficient indicate that this variable has a negative impact on Model 2's export competitiveness. The collinearity statistics, which demonstrate the degree of multicollinearity (strong correlation among the predictor variables), are displayed in the table's final two columns. High multicollinearity is indicated by tolerance values close to 0 and VIF values close to 1, which might make it difficult to evaluate the results of regression. However, in this instance, all tolerance values are greater than 0.1 and all VIF values are lower than 10, indicating that neither model suffers from a major multi-collinearity issue.

Table 7. Excluded Variables[a]

Model		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Government support	.538[b]	7.578	.000	.534	.031	32.446	.031

a. Dependent Variable: Export Competitiveness

b. Predictors in the Model: (Constant), Firm strategy structure rivalry, Factor conditions, Related supporting Industries, Demand Conditions

Source: Structured Questionnaire Survey

Table 7 shows with a beta coefficient of 0.538 and a t-statistic of 7.578, these figures show that "government support" has a statistically significant positive impact on "export competitiveness". With a value of 0.534, the partial correlation coefficient shows that there is a strong positive linear association between these two variables. Additionally, the table contains data on collinearity, which reveal the level of multicollinearity among the model's variables. With a tolerance value of 0.031 and a variance inflation factor (VIF) of 32.446, it is possible that "government support" and the other predictor variables in the model exhibit significant multi-collinearity. Overall, the results suggest that "government support" is an important predictor of "export competitiveness" and its exclusion from the model may have a significant impact on the model's predictive power. However, the high degree of multicollinearity between this variable and others in the model may warrant further investigation or a re-specification of the model.

Table 8. Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions (Constant)	Factor conditions	Demand Conditions	Related supporting Industries	Firm strategy structure rivalry	Government support
1	1	4.937	1.000	.00	.00	.00	.00	.00	
	2	.035	11.878	.34	.00	.02	.03	.00	
	3	.020	15.568	.03	.98	.01	.02	.01	
	4	.006	29.874	.35	.00	.01	.33	.60	
	5	.002	45.150	.28	.01	.96	.62	.38	
2	1	5.928	1.000	.00	.00	.00	.00	.00	.00
	2	.041	12.078	.26	.01	.01	.01	.00	.01
	3	.022	16.579	.08	.93	.00	.00	.01	.00
	4	.006	31.668	.29	.02	.07	.05	.46	.02
	5	.003	44.380	.23	.03	.84	.00	.29	.08
	6	.001	84.409	.14	.01	.08	.94	.24	.89

a. Dependent Variable: Export Competitiveness

Source: Structured Questionnaire Survey

The Table 8 provides the results of the collinearity diagnostics analysis for two models (Model 1 and Model 2) with the dependent variable "export competitiveness". The collinearity diagnostics is used to determine whether the independent variables in a regression analysis are multicollinear. A high correlation between two or more independent variables is referred to as multi-collinearity, and it can result in unstable and incorrect estimations of regression coefficients. For Model 1, there are 5 dimensions or independent variables. The eigenvalues for the first two factors are relatively high, indicating that these two factors explain a significant amount of the variance in the data. The condition index is low for the first factor, indicating no evidence of multicollinearity, but increases for the subsequent factors, suggesting the presence of multicollinearity. The variance proportions show that the first factor is only related to the third independent variable (demand conditions), while the second factor is primarily related to the second independent variable (factor conditions). For model 2, there are 6 dimensions or independent variables. The eigen-values for the first three factors are relatively high, indicating that these three factors explain a significant amount of the variance in the data. The condition index is low for the first two factors, but increases for the subsequent factors, suggesting the presence of multicollinearity. The variance proportions show that the first factor is primarily related to the third independent variable (demand conditions), the second factor is related to the first and fifth independent variables (constant and firm strategy structure rivalry), and the third factor is related to the sixth independent variable (government support). Overall, the collinearity diagnostics analysis suggests that there may be some multi-collinearity among the independent variables in both models, particularly in the later dimensions. Researchers may need to consider dropping some of these independent variables or transforming them to reduce the effects of multi-collinearity in the regression models.

5. General Discussion and Findings and Policy Recommendation

5.1. General Discussion

Given that the mean score for the important variables is quite high, the factor circumstances appear to have a favorable effect on Sri Lanka's ability to compete internationally for coconut products. This is in line with the literature findings, as previous research has identified factors such as R&D, infrastructure development, and capital allocation as

determinants of export competitiveness. The literature also emphasizes the importance of external trade factors such as internationalization, global trade relations, and knowledge of tariff and tax structure for achieving export goals and gaining a competitive advantage. These elements should be taken into account by the Sri Lankan coconut sector in order to be competitive in the international market. The literature emphasizes the significance of internal determinants such as business size, experience, skills, product quality, management traits, and marketing strategy in the global market. The Sri Lankan coconut industry should pay attention to these factors to improve its export performance. The external environment, which includes elements like cultural similarities, governmental rules, competitiveness on the global market, and regional business customs, is also very important in determining export performance. Therefore, the Sri Lankan coconut industry should carefully consider these factors to develop effective export strategies. The literature study emphasizes (literatue section excuded from this publication due to space limitation) the necessity of applying Porter's diamond model to identify significant determinants affecting agricultural export competitiveness in several nations, including South Africa, New Zealand, Canada, Norway, Sri Lanka, and Finland. Various empirical studies undertaken by different authors demonstrate that different drivers of export competitiveness exist, such as factor conditions, demand conditions, linked and supporting industries, government regulations, and business strategy, structure, and competition. According to a study conducted in South Africa (Esterhuizen, 2006), strong domestic market competition, strict industry regulations, capable supporting industries, macroeconomic policy, the availability of globally competitive local input suppliers, capital availability, the size and growth of the local market, and the tax system are the main factors influencing the export competitiveness of agricultural exporting companies in South Africa. The results of this study are in line with existing research, which contends that factor conditions play a significant role in determining export competitiveness. However, other authors, such as Bakan, 2012 found that demand factors are more important determinants of competitiveness than other factors of the Porter's diamond model. This study shows that factors affecting demand, such as customer preferences and market trends, are very important in determining a firm's ability to compete internationally. Authors (Ariyawardana, 2001; Ariyawardana, 2006) carried out an empirical study to examine the position of competitive advantage and their impact on the performance of Sri Lanka's value-added tea sector and discovered that for the tea industry firm to be competitive in the global market, they must add value to their processors. Similar findings were made by (Kumarasinghe, 2018), who discovered that factors and demand circumstances are crucial factors in attaining a competitive edge in Sri Lanka's virgin coconut oil market.

The Table 8 presents the summary results of the hypotheses testing.

Table 8. The Summary Results of Hypotheses Testing

Hypotheses	Coefficient	Sig.	Acceptance/Rejection
H1: Government support mediates the relationship between factor conditions and government support	7.578	.000	Accepted
H2: There is a significant impact of factor condition on export competitiveness of coconut industry in Sri Lanka.	3.418	. .001	Accepted
H3: Government support mediates the relationship between demand conditions and government support and policies for export Competitiveness.	7.578	.000	Accepted
H4: There is a positive significant impact of demand condition on export competitiveness of coconut industry in Sri Lanka.	.207	.000	Accepted
H5: Government support mediates the relationship between supporting industries and government support and policies for export competitiveness.	7.578	.000	Accepted
H6: There is a significant impact of related and supporting industries on export competitiveness of the coconut industry in Sri Lanka.	.276	.000	Accepted
H7: Government support mediates the relationship between firm strategy, structure, and rivalry and government support and policies for export competitiveness.	7.578	.000	Accepted
H8: There is a significant impact of firm strategy, structure and rivalry on export competitiveness of coconut industry in Sri Lanka.	-.071	012	Accepted

Source: Authors

5.2. Findings and Conclusions

Based on the research objectives, the findings successfully identified the factors of the coconut industry's export performance in Sri Lanka, with a particular emphasis on export competitiveness. One of the major findings of this study is the factors of factor conditions, demand conditions, Firm strategy and rivalry, and related and supporting industries significantly determine the export competitiveness of coconut products in Sri Lanka. Further, the factors identified include the related and supporting industries, demand conditions, factor conditions, and firm strategy structure and rivalry. The export competitiveness of the coconut products is at a higher level according to the descriptive statistics. Further government support significantly mediates the relationship between the identified factors and export competitiveness. The findings suggest that government support plays a significant role in enhancing export competitiveness. This research has provided valuable insights into the coconut industry in Sri Lanka and has recommended policies and strategies to overcome the barriers faced by the industry and achieve higher export revenue. Specifically, policy interventions aimed at improving the related and supporting industries, demand conditions, factor conditions, and government support could help enhance export competitiveness in the coconut industry. Furthermore, this research findings suggest that addressing negative firm strategy structure and rivalry may also contribute positively to export competitiveness. However, it is essential to note that the negative coefficient suggests that this factor requires careful consideration when implementing policy interventions aimed at enhancing export competitiveness. In conclusion, this research has successfully achieved its objectives by identifying the determinants of export performance in the coconut industry in Sri Lanka and recommending policies and strategies to overcome barriers and achieve higher export revenue by improving competitiveness. The findings provide valuable insights for policymakers and stakeholders in the coconut industry, highlighting the importance of government support, related and supporting industries, and demand conditions. In overall, this research makes a significant contribution to the knowledge and understanding of the coconut industry in Sri Lanka and provides actionable recommendations for policymakers and industry stakeholders. Based on the descriptive statistics findings, it can be inferred that the current export behavior of the coconut industry in Sri Lanka is generally positive. Respondents have a moderately positive view on the demand for coconut products and a positive view on the patterns of consumption of coconut products. However, there are concerns about the availability of substitutes for coconut products in the market, indicating that the industry needs to work on developing unique selling propositions to distinguish its products from substitutes. Additionally, respondents have a moderate level of concern about competition from other countries in the international coconut market, which suggests that the industry needs to focus on improving its competitiveness creating high value added product for the next level of this industry. On a positive note, respondents have a moderately high level of confidence in the ability of Sri Lanka's coconut industry to compete with other countries in terms of product pricing, and they believe that Sri Lanka's coconut product exporters have the necessary knowledge and skills to market their products effectively. Hence it can conclude that the industry has potential for growth and could benefit from focusing on marketing and pricing strategies.

Furthermore, respondents have a moderately high level of confidence in the existence of favorable trade policies for international trade of coconut products, indicating that policy makers have implemented policies that support the industry. This suggests that the industry should continue to work closely with policy makers to ensure that policies are in place to support its growth and competitiveness such as free trade agreements between countries.

5.3. Policy Recommendations

The following suggestions might be made to strengthen the coconut industry of Sri Lanka's export competitiveness based on the study's findings.

- Government support: According to the findings, government support is vital for boosting the coconut industry's export competitiveness. Therefore, it is recommended that the Government should implement supportive policies and interventions, such as investment in infrastructure, research, and development, and marketing support, to promote the growth of the industry.

- Related and supporting industries: The competitiveness of the coconut industry's exports is greatly influenced by related and supporting industries, including those in transportation, packaging, and marketing. In order to increase the overall competitiveness of the coconut industry, policymakers should concentrate on encouraging the growth of these sectors.

- Demand conditions: The findings suggest that demand conditions, such as market access and consumer preferences, are essential determinants of export competitiveness. Therefore, it is recommended that

policymakers should focus on promoting the development of markets and strengthening the industry's marketing capabilities to increase demand for coconut products.

- Factor conditions: The competitiveness of the coconut sector is significantly increased by factors like trained personnel availability and financial accessibility. To improve the factor circumstances in the industry, governments should concentrate on offering sufficient funding opportunities and supporting talent development initiatives.

- Firm strategy structure and rivalry: The results imply that competitiveness for exports may be negatively impacted by unfavorable Firm strategy structure and rivalry. As a result, authorities should encourage enterprises to adopt successful tactics and organizational structures in order to increase their competitiveness in the market.

- Beyond the model and statistical significance, the practical policy point is that new lands should be set aside for coconut planting with financial support, inputs, training facilities and tax incentives, and the government and Apex bodies related to coconuts should focus on replanting old coconut cultivation with new high-yield varieties. Additionally, refrain from developing housing projects and other commercial ventures on profitable coconut lands. Instead of exporting raw coconut-related products to foreign markets, legislative measures might be used to create more value addition to the local economy along the coconut value chain.

5.4. Agenda for Future Studies

The following recommendations for further research investigations can be made in light of the study's findings. In order to compare the factors influencing export competitiveness across other industries, the study might be extended to include additional industries. To evaluate the factors influencing export competitiveness in various geographical areas, the study could be expanded to include additional nations. To determine the most important forces behind change and monitor changes in the factors influencing export competitiveness over time, a longitudinal study might be carried out. Future studies could examine how different government initiatives and policies affect the coconut industry's ability to compete on a large scale. Future research might examine the impact of technological developments and breakthroughs on the coconut industry's competitiveness as well as the best strategies for promoting innovation and technology adoption. Future research could also examine how social and environmental factors can boost the coconut industry's competitiveness and how to promote social responsibility and sustainable practices in the sector.

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Appendix

Table 1. Descriptive Statistics - Factor Conditions

Statistics									
		Availability of quality raw material	Cost of raw material	Education and professional qualifications of the employees	Quality of training & other development facilities provided	Convenient access to loan facilities	Entrance flexibility on the stock market and credit facilities	The attraction of foreign direct investment	Quality of infrastructure such as road rail and port system
N	Valid	150	150	150	150	150	150	150	150
	Missing	0	0	0	0	0	0	0	0
Mean		4.10	3.80	3.90	4.17	4.20	3.77	4.00	4.03
Std. Deviation		1.403	1.452	1.079	1.102	.875	.886	1.295	1.308

Source: Structured Questionnaire Survey

Table 2**.** Descriptive Statistics - Demand conditions

Statistics								
		Sophisticated Logistics, storage, tele communication availability	Ability to attract innovative technology	Cost of Research & development	Firm's Policies towards R&D	Readiness of market information	Use of ecommerce & social media platform	Entrance on core and new technology
N	Valid	150	150	150	150	150	150	150
	Missing	0	0	0	0	0	0	0
Mean		4.10	4.33	3.93	4.00	4.10	4.27	4.10
Std. Deviation		1.169	1.354	1.241	1.003	1.015	.932	.910

Source: Structured Questionnaire Survey

Table 3. Descriptive Statistics - Related and supporting Industries

Statistics									
		Domestic market establishment & market share	Relationship with the government and other stakeholders	Change rate of customer need and engagement	Quality of demand and standard and regulation infrastructure	Level of familiarity of foreign consumers with the product	Foreign market share of the product	Level of Joint marketing studies with the other organization of the sector	Ability of common purchasing materials with the related organization of the sector
N	Valid	150	150	150	150	150	150	150	150
	Missing	0	0	0	0	0	0	0	0
Mean		3.80	3.90	3.90	4.00	4.30	4.10	4.00	4.00
Std. Deviation		.948	1.169	1.048	1.215	1.104	1.079	1.003	1.068

Source: Structured Questionnaire Survey

Table 4. Descriptive Statistics - Firm strategy structure & rivalry

Statistics									
		Development of common skills of the employees of the other organization in the sector	Development of R&D with the universities and other R&D support institutions	Relationship with other trade support government institutions (eg: CDA, EDB, DOC)	Level of active work with relevant TPOs.	Supportive Regulatory environment conditions	Quality of cost of administrative functions	Management support for the preparation and implementation of strategies	Coordination with customers and suppliers
N	Valid	150	150	150	150	150	150	150	150
	Missing	0	0	0	0	0	0	0	0
Mean		3.77	3.93	3.93	3.83	3.97	3.80	4.10	4.23
Std. Deviation		.847	1.066	.932	.781	.878	.835	.792	.670

Source: Structured Questionnaire Survey

Table 5. Descriptive Statistics - Government support

Statistics									
		Firm Image and reputation of the industry and internationally	Organizational structure of SME	Level of institutionalization among other firms	Price competitions among the same producers in the industry	Product differentiation with other competitors in the industry	Industry entry flexibility or barriers in locally & internationally	Consistent policies for international trade	Tax & Tariff structure
N	Valid	150	150	150	150	150	150	150	150
	Missing	0	0	0	0	0	0	0	0
Mean		4.33	3.83	3.83	4.03	4.43	4.23	4.13	4.13
Std. Deviation		1.139	1.039	1.102	1.083	1.058	1.026	1.151	1.208

Source: Structured Questionnaire Survey

Table 6. Descriptive Statistics - Export Competitiveness

Statistics								
		There is a favorable demand for coconut product	The patterns of the consumption of coconut is favorable	There are substitutes for the coconut in the market	Quality of the coconut exports are achieved through quality management	There is a higher competition from other nations in the coconut market internationally	We are confident that Sri Lanka's coconut industry can compete with other countries in terms of product pricing	Sri Lanka's coconut product exporters have the necessary knowledge and skills to market their products effectively	There are favorable trade policies for international trade of coconut products
N	Valid	150	150	150	150	150	150	150	150
	Missing	0	0	0	0	0	0	0	0
Mean		3.90	4.33	4.60	4.27	4.07	4.23	4.60	4.37
Std. Deviation		1.278	1.139	.714	1.185	1.241	1.261	.714	1.019

Source: Structured Questionnaire Survey