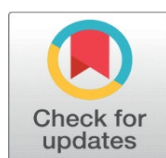
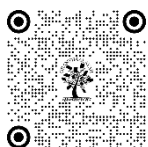


INFLUENCE OF FIRM AND MARKET CHARACTERISTICS ON EXPORT PROFIT OF AUTO COMPONENT INDUSTRY

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ABSTRACT

Exports contribute to the economic development of a country and provide a competitive edge for business organizations in the global market in earning foreign exchange. For the development of a nation, increasing export sales volume is important as it reduces the international trade gap and enhances employment and production and also facilitates the overall development of the country. The main objectives of the study are to find out the influence of firm characteristics and marketing characteristics on export profit in the auto component industry. The target respondents for the survey were the managers who have occupied the positions of export in-charge, export manager, or vice president of marketing. For this purpose, a structured questionnaire was issued to fill the data. The interaction was made with senior-level people who have knowledge about export operations. This survey was implemented by personal visits to auto component manufacturing firms. The total number of auto component companies operating in India is 647, with these firms being members of ACMA (Automotive Component Manufacturers Association of India). Of these companies, 146 auto component companies are located in South India, of which 119 companies are component-exporting companies and are actively involved in both export and domestic business out of which, 92 companies have responded. Linear regression was used as a statistical tool for the analysis purpose. The results found that firm age, firm's export experience, firm's total employees, number of innovations, number of employees deputed for export, export sales, share of outsource in export orders, number of quality certifications, number of foreign customers, and firm's total sales have found significant influence on export profit of auto component manufacturers in South India.



Keywords: Auto Component Industry, Firm Characteristics, Marketing Characteristics, Influence, Export Profit

1. INTRODUCTION

The early growth phase of export development of the Indian auto component manufacturing industry is primarily due to the implementation of the Phased Manufacturing Programme (PMP) by the Government of India and the introduction of various export-oriented schemes in the New Industrial Policy of 1991. New Industrial Policy 1991 enabled auto component manufacturing companies to implement advanced technology to improve product quality and operational efficiency and also made them as competent and quality conscious manufacturers, leading to achieving export growth (Abey, J, and Velmurugan, R. 2018). The growth of the auto component manufacturing industry in India has shown a positive trend for the past several years, and the same trend is predicted to continue for many more years. The positive trend gives an ample opportunity for auto component manufacturers in India who have risen to serve demands of OEMs across the globe in the form of exports (Aishwarya, P., Sudharani, R., and Suresh, N. 2020).

The auto component industry has posted a turnover of Rs 2.92 lakh crores between April 2016 and March 2017, up by 14.3% over the previous year (ACMA, 2017). The industry has maintained a CAGR of 7% over the last 6 years (ET Auto Report, 2018). With the help of technological advancement and a well-developed value chain system, the auto component

industry in India is shifting from low sales volume to a high degree of diversified and competitive industry (Arumugam, D. 2016). The auto component industry is primarily classified into two different segments. i. Original Equipment manufacturers (OEM) also called as organized sector that produce high-value precision instruments and they are also called as organized players. In India, the total number of organized auto component manufacturing units is 780 as of December 2018 (ACMA, 2018). These segments constitute approximately 80% of total market share. ii. The replacement market, also called the unorganized sector, offers low-value products typically belonging to the aftermarket category, and there are about more than 10,000 players operating in the unorganized market, constituting 20% of total market share. Due to the huge cost involved in manufacturing genuine auto components, this sector produces moderate-quality products, leading to less demand in the overseas markets. The drivers for these two markets are relatively distinct; Swedish Trade and Investment Council, 2015. The Indian auto component industry has witnessed growth of 8.6% on a year-on-year basis and contributes 2.6% of India's Gross Domestic Product (GDP). From the year 2012-13 to 2017-18, the number of companies increased from 647 to 780, indicating the industry's growth of 17% (Sabnavis, M. 2017; IBEF Report, 2018).

The auto component industry can be further classified into 3-tier structures (Dash, A. and Chanda, R. 2017s). Tier 1 is involved in integrated systems and is a main enabler to OEMs. Tier 2 and 3 manufacturers typically supply to the aftermarket passenger and commercial vehicle segments and Tier 1 suppliers. Tier 3 uses traditional methods of manufacturing (negligible IT systems) involved in the processing of raw material and single-component manufacturers to Tier 1 & Tier 2. Tier 3 segment manufacturing activities primarily involved high conversion costs of labor and power, which, being semi-fixed in nature, are exaggerated due to the low scale of operations (Basak, S, Sikdar, S, and Das, G. 2021). Suboptimal manufacturing scale and low technological value addition lower the pricing power of Tier 2 and 3 component manufacturers (CRISIL Report, 2017t). To some extent, OEMs are in the Tier 1 group because of the quality, technology, and brand monopoly of the components (Ghosh, S. K. and Arora, A. 2003). These are established with the brand equity and capital investments being high.

Table 1. Auto Components: Regional Clusters

Cluster	Cities
Western Cluster	Pune, Aurangabad, Nashik (Maharashtra)
Southern Cluster	Chennai & Coimbatore (Tamil Nadu); Bengaluru (Karnataka)
Central Cluster	Pithampur, Dewas, Indore (Madhya Pradesh)
NCR Cluster	Faridabad & Gurgaon (Haryana); Alwar, Bhiwadi, Khushkhera & Chopanki (Rajasthan)
Eastern Cluster	Jamshedpur & Guptamani near Kharagpur; Singur (West Bengal)

Source: www.dnb.co.in

Table 2: Auto Component Industrial Areas in India-State-Wise

State	Number	State	Number
Andhra Pradesh	1	Karnataka	2
Delhi	1	Maharashtra	5
Gujarat	5	Madhya Pradesh	1
Haryana	3	Punjab	4
Jharkhand	1	Tamil Nadu	1

Source: www.dnb.co.in

Table 3: Geographical Distribution of Auto-Components Firms

Region	OEMs	Ancillaries	Total	% Distribution of Total
North	14	315	329	45%
West	17	194	211	29%
South	15	143	158	22%
East	2	30	32	4%
	48	682	730	100%

Source: (ibid., 2017s)

2. LITERATURE REVIEW

2.1 EXPORT MARKETING DETERMINANTS

The definition for export marketing can be described as “It is the organized process of exporting auto components to the other countries by various modes of exports as per the legal procedures formulated by the importing and exporting country, the process which includes complex rules and regulations” (Devaki, S, and Chitra, C. 2018).

For the past decade, more research studies on export marketing strategies of various industries have been done (Pradhan, J.P. et al., 2011; Abdul Batavia, A.R. and Kolachi, N.A., 2012; Sefnedi, 2007). Most of the research articles addressed the problem of factors affecting export performance. Many of the research authors have streamlined many numbers of determinants of export behavior, which supports the export performance and decreases the failure rate of their export venture (Sichtmann, C. et al., 2007). The influence of export marketing information supports managerial decision-making in the context of both domestic and international contexts (Hart, S.J. et al., 1994). As the competition at the international level increases, innovation and knowledge base understanding of export performance have gone beyond the measurements of competitive advantage and stressed the role of marketing strategies affecting international competitiveness, especially in the auto component manufacturing industry (Teresa S. M. and Caparas, D. 2006). The auto component industry in India is focusing on innovation and design to flourish and survive in the industry to position itself in the foreign market through organizing trade shows and exhibitions and attending auto expos (Kush, M. and Raj, T. 2022). Many such initiatives, the industry is preparing itself to the next level and emerging to graduate as world-class auto component suppliers (Gupta, U. 2012; Axel India Ltd Annual Report, 2016-17; Mishra, M. and Sahay, A 2010).

To gain an attractive market position in the international market, the South Indian auto component manufacturing firms are using IT industry support to develop export competence in the form of developing product simulation and testing software (Devi, R S, and Kumar, M.A. (2022). The Advances CAD software for product design and drawings made to install embedded systems in luxury vehicle segments with the help of chip designs (Deshpande, M. and Baporikar, N. 2013; Rune, A. 2008).

The industry has created value for the automotive industry by convincing and proving engineering skills across global markets (Ionescu, R.-V 2022). This has become a marketing strength to many auto component suppliers in South India. The MNCs like Delphi and Bosch are using this opportunity along with the setting up of their research centers with the support of South Indian auto component suppliers to meet their global client's demands (Jain, M. Shukla, A. and Gupta, S. 2019). Component manufacturers are using cost leadership strategy to attract foreign customers. If the South Indian component manufacturers are not in a position to meet specific requirements, then they are accessing technology through technical collaborations with OEMs (Kamran, Quazi. 2020). Those firms that are financially stable are setting up their manufacturing subsidiaries close to OEMs to serve them. South Indian auto component manufacturers are in a position to find huge prospects for the products, such as casting, forging, brake lines, sheet metals, pistons, and piston rings (Kanagavalli, G. and Devi, S. R. 2018). Nowadays the industry is able to target even non-automotive and off-road vehicle segments like locomotives (Nelcast Limited, 2016-17). This fragmented business strategy of component suppliers making them contribute their revenues through earning foreign exchange. Superior quality and low-cost strategy have become the main mantras to serve in international markets (Suprajit Engineering, 2015-16). Indian auto component manufacturers are exporting to advanced countries when they find appreciation in rupee value against dollar value (Lalitha, K. (2021). Having patents, trademarks, and intellectual property rights, component manufacturers are entering into global markets to market and distribute their auto components (Tenneco Inc, 2017).

For the past many years, auto component manufacturers were exporting based on unsolicited orders, but nowadays the trend has changed; the export managers are coming forward to commit to contact and communicate with the help of business directories, advertising, trade journals, websites, and through technical presentations by personal visits to OEMs abroad (Hong Phan, A.T. 2013). The South Indian auto component manufacturers are putting efforts into increasing their product range to serve OEMs by supplying integrated systems (Kour, M., Kaur, R. et al. 2020). They also adapt their marketing strategy as per market characteristics in each country due to technical defenses in each segment. Some companies are using standardization product strategy to save costs (Kumar, S. 2014).

2.2 PRODUCT STRATEGY IN AUTO COMPONENT INDUSTRY

The auto component manufacturers are developing sophisticated market plans to place their products at an international level. Market information enables managers to decide which product category has profit potential in export markets.

Managers scan the market and carefully formulate marketing plans (Dholakia, N. and Khurana, R. 1976). The auto component industry manufactures two different products: (i) specific products and (ii) general products. Manufacture of specific products requires a high degree of adaptation. It is achieved through technological flexibility. Manufacture of general products requires a high degree of product standardization (Kumara N. V. and Abhilasha, N. 2015). Samples of design-based products are displayed before the OEMs to bag substantial orders. This is the conventional method of marketing auto components abroad. (Lim, J. S. et al., 2006; Azaze. Et al., 2008; Jalali, S.H. 2012). The industry is in a position to develop new products. This stimulates exports. Identification of new markets for the components is considered a great opportunity to export (Lim, J. S. et al., 2006). Serving niche markets is considered as export potential by many component manufacturers; for example, Maini Precision Products Pvt. Ltd. supplied only engine components to premium segments such as Audi, Mercedes Benz, BMW, etc. (Tandon, S. and Palkinot Kaur, P. 2021).

2.3 PRICING IN AUTO COMPONENT INDUSTRY

Auto component manufacturers like to export products where payments are guaranteed. A criterion for choosing an export destination is based on the GDP of the customer's country, as it is an indicator of the ability of purchase and payment. (Carlos, M. P. and Sousa, 2004f). Normally, the price for newly invented products is usually high, and it helps recover ROI as a first-mover advantage (Narman W. and Guinness, M. 1986).

The prices for the export market are determined in the auto component industry based on negotiations, quotations, closed bids, quality conditions, distance, credit policy, size of the orders, duration of commitment to place export orders, level of middlemen intervention, government policies of both countries, economic conditions like inflation and business cycles, corporate policies, cost of materials, feasibility analysis reports by engineers, taxes and tariffs, technical complexity in manufacturing, level of competition, etc. (Saxena, M. 2022). Sometimes the industry follows standardized price strategy to suit customers. In most of the cases, prices are fixed as per the pricing practices of domestic markets (Lado, N. et al., 2004).

2.4 DISTRIBUTION STRATEGY IN AUTO COMPONENT INDUSTRY

Auto component manufacturers' distribution strategies across the globe are by setting up their own subsidiaries close to OEMs. It reduces cost and avoids procedural barriers abroad. If the OEMs place a large volume of export orders for a short period of time, then a third-party warehouse arrangement will be made (Sandhya, S. and Reddy, G.S. 2022). They distribute components by appointing local representatives. Sometimes companies may have their own sales offices abroad to identify market opportunity. In the process of distribution of auto components, manufacturers identify foreign brokers on a commission basis to find export potential (Koh1, A. K. et al., 2014). Many component manufacturers prefer direct exports to save costs. Supplying components through joint ventures and technical collaboration is a widely accepted distribution strategy in this industry (Preeta, P. 2020). With respect to logistics, the majority of manufacturers use marine transportation. The industry gets moderate institutional support in the form of information exchange related to foreign markets. Distribution adaptation and standardization depend upon export market characteristics (Ranjithkumar, M S, and Eahambaram, C. 2018).

2.5 PROMOTION STRATEGY IN AUTO COMPONENT INDUSTRY

The promotion strategy for exports that the South Indian auto component manufacturers are using is visiting the clients and explaining the technical expertise they possess. The majority of the component suppliers attend international exhibitions and participate in international trade shows (Gupta, U. 2012; Axel India, 2017; Mishra, M. and Sahay, A. 2010). Customer networks are built through e-mails, video conferences, etc. Industry supports foreign representatives in the form of promotional support such as financing, training, collaborative advertising, etc. (Patel, B., and Jigar A. 2022). Visiting cards and technical brochures are used to communicate with foreign clients. Managerial language proficiency is one of the key strengths in communicating with foreign customers (Melwani, CMA Dr. Rekha 2019). The degree of standardization and adaptation of promotion strategy of the auto component industry is determined by the nature of the export market.

2.6 MARKETING STRATEGIES AND EXPORT PROFITS

Two different methods of export measurements can be found. First, economic measures of export performance, which include export sales, export profit, and export market share. Second, non-economic measures, which include product-related, market-related, and managerial perception-related export satisfaction, etc. (Mathur, S. and Agarwal, K. 2016).

It is strongly believed that the chances of getting an accurate outcome are better when managers use economic measures of export performance. The most commonly used export performance measure is the ratio of export sales to the total sales, which is also called export intensity (Manokaran, P., and Paramasivam, J. 2016). For the present study, export profit after tax of South Indian auto component manufacturing companies is considered as export performance as an additional support for the objective (Majumdar, V., and Sharma, P. 2022).

3. RESEARCH GAP

Many auto component manufacturing firms in South India have commenced export operations without understanding foreign markets thoroughly. There might be huge potential and opportunities for marketing their auto components across the globe, but they just export randomly or sometimes export based on unsolicited export orders. After an intensive literature review, it is understood that South Indian auto component manufacturing firms have not followed specific marketing strategies and do not have specific export performance measures. There might be better opportunities for exports, but manufacturers cannot enter into international markets with overexcitement without understanding the factors and forces that influence the marketing strategies of them. Due to poor export planning and a lack of market attention with regard to adaptation and standardization of export marketing strategies, exporting companies have found export performance below par and unsuccessful sometimes. It is very necessary to get an insight into auto component manufacturers' marketing strategies followed over the period of time to prepare for the future. It is also important to know to what extent those strategies are working successfully. There is also a need for understanding how export marketing strategies of South Indian auto component firms have evolved over the years.

In order to export auto components to other countries the manufacturer should understand and scan its internal capabilities and challenges posed in export markets to decide appropriate export marketing strategy to achieve desired level of export performance. Through the literature review, it is understood that export marketing constitutes the combination of adaptation and standardization of marketing strategies in export markets. The literature research also reveals that there is no perfect degree of adaptation and standardization that has been used to attain export goals in auto component industries with specific reference to South India. It is identified that there was an absence of specific integrated export marketing models developed related to the marketing of auto components in overseas markets in the previous studies. A study to examine the relationship between export marketing strategies and export performance would help in identifying factors that would help streamline a specific export marketing strategy. As far as the researcher is aware, there were no research articles focusing on export marketing strategies from the perspective of India and South India. The articles on the auto component industry did not examine the specific contribution or role of export marketing. There are no specific findings on which factors influence export marketing strategies. There are no suitable export marketing strategies identified to boost export performance in the auto component industry. The role of export marketing strategies on the export performance of auto component firms in South India has not been researched.

4. NEED FOR THE STUDY

Although the Indian auto component industry has been fairly successful in penetrating global markets, the importance of marketing strategies in foreign markets to find better export prospects has not been addressed in any research adequately. Such a study therefore could throw more insights on the critical drivers that could be addressed to accelerate sectoral growth. There is a need for understanding and fine-tuning the export marketing strategies based on the past and present strategies followed by South Indian auto component manufacturers due to the changing global market scenario. The success of overseas marketing strategy is dependent on various factors in overseas markets. There is a large number of auto component manufacturers in South India who are engaged in export business. However, little is known about the specific nature and drivers that contribute to the effectiveness of the implementation of marketing strategies. There is a need to understand the South Indian auto component manufacturing company's internal factors and external factors that influence standardization and adaptation of export marketing strategies. Rising competition, complexities, and foreign market uncertainties are posing challenges for the South Indian auto component manufacturers in foreign markets. To tackle these challenges, the firms should increase their marketing efficiency through formulating proper export marketing strategies to achieve the desired level of export performance. There is a need to attempt to provide more insight into marketing strategies and export performance. Many research studies have been done on export marketing, but none have developed a systematic approach specifically for export marketing for South Indian auto component manufacturers. Therefore, there is a need for developing a systematic and integrated export marketing approach to attain export goals in overseas markets.

5. RESEARCH METHODOLOGY

The research methodology facilitates researchers to think and make necessary arrangements to collect and analyze required data. It serves as a roadmap for executing research smoothly, thus resulting in efficiency and economy in the research process (Carrie Williams 2007). The aim of this research is to study the form and market characteristics influencing export profit of Indian auto component manufacturers. All the necessary steps in the research process have been followed to make the research presentation understandable and meaningful. The research methodology is adopted based on the descriptive analytical research approach. Each objective has been addressed in the study systematically to understand the marketing trends and factors influencing export marketing strategies. Consequently, the study continues to study the influence of marketing strategies on export performance, leading to the development of an integrated model for the export performance of South Indian auto component manufacturers.

6. OBJECTIVES OF THE STUDY

1. To analyze the trends in export marketing strategies adapted by auto component manufacturing industry in India.
2. To examine the influence of firm characteristics on export performance (Export Profit) of the auto component industry.
3. To examine the impact of market characteristics on export performance (Export Profit) of the auto component industry.

7. HYPOTHESES OF THE STUDY

- H1: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm age.
- H2: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's export experience.
- H.3: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's total sales.
- H.4: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's total employees.
- H.5: Export profit of South Indian auto component manufacturing companies is significantly influenced by number of manufacturing plants.
- H.6: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's technological competitiveness.
- H.7: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's number of innovations.
- H.8: Export profit of South Indian auto component manufacturing companies is significantly influenced by Firm's allocation of human resources for export operation.
- H.9: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's marketing communication intensity.
- H.10: Export profit of South Indian auto component manufacturing companies is significantly influenced by annual export manager's salary package and employees training expenditure for export business.
- H.11: Export profit of South Indian auto component manufacturing companies is significantly influenced by competition intensity.
- H.12: The statement: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's delivery capability.
- H.13: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's Promotional intensity and number of new markets explored.
- H.14: Statement: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's export sales.
- H.15: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's share of outsource in export orders.
- H.16: The Statement: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's Number of product lines for exports and government incentives for the export sales.

H.17: The statement: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's number of quality certifications.

8. SCOPE OF THE STUDY

This research has been focused to study firm characteristics and marketing characteristics influence export profit of auto component industry, and to study how the factors of these characteristics influence the export performance of auto component manufacturers engaging in exports in South India. The geographic area covered for the study is Tamil Nadu, Karnataka and few companies in Telangana.

9. POPULATION AND SAMPLE SIZE

The total number of auto component companies operating in India is 647 with these firms being members of ACMA (Automotive Component Manufacturers Association of India). Of these companies (table no.3.1) 146 auto component companies are located in South India, of which, 119 companies are component exporting companies and are actively involved in both export and domestic business.

Table 4: AUTO COMPONENT MANUFACTURING UNITS FOR ANALYSIS

Product Category	Total Companies in South India	Total Population (Exporters) in South India	Number of Respondents	Percentage of respondents
Engine components	53	42	27	30%
Drive Transmission & Steering components	19	18	6	7%
Suspension & Braking components	8	6	5	6%
Body & Chassis components	10	8	8	10%
Equipment's/ Tools and accessories	23	20	20	22%
Electrical components	16	12	9	10%
Other products	17	13	14	15%
Total	146	119	92	100%

Source: Primary Data through Survey and CAMA Data Base-Buyer Guide

Out of the 119 auto component manufacturing companies, 92 auto component manufacturing companies have responded to this study. These 92 exporting companies are selected from the database of "Source India" published by ACMA. As per this database, only 4 companies are engaging in export business in Telangana out of which, 3 companies' data have been captured amongst which the maximum number of auto component manufacturers locating in Tamil Nadu because most of the auto component manufacturing companies have concentrated in this region. For the present study, considering the small population size, census method was attempted.

Table 5. State wise Distribution of Auto Component Manufacturing Units

SL No.	Samples Selected in South India	Total number of Auto Component Exporters in South India	Sample size
1	Andhra Pradesh	4	3
2	Karnataka	37	30
3	Tamil Nadu	78	59
	Total	119	92

Source Primary Data through survey

From the above table it is understood that, most of the auto component manufacturing companies have concentrated in Tamil Nadu and Karnataka due to concentration of auto and automobile clusters in these regions.

10. DATA COLLECTION

I. PRIMARY DATA

The first time data has been through self-administered structured questionnaire which was developed and asked to fill. Personal interviews were also done with respondents to discuss about foreign market familiarity, awareness, or understanding of export marketing strategies, industry profile, facts and figures, information, descriptions about international operations etc.

II. SECONDARY DATA

The following are the sources that the secondary data was collected such as Automotive Component Manufacturers Association (ACMA), Database of ACMA "Buyers Guide", Export-Import Bank of India, Society of Indian Automobile Manufacturers (SIAM), Online E-Sources, Companies' Annual Reports and Journals, Thesis, Magazines, research articles, Newspapers etc.

11. RESPONDENTS

The target respondents for the survey were the managers who have occupied the positions of Export In-charge/Export Manager/Vice-president Marketing. The interaction was made with senior level people who have knowledge about export operations. This survey was implemented by personal visit to auto component manufacturing firms. Managers were requested to give their appointment for the discussion and a scheduled questionnaire was issued collect data. Questionnaire has been sent through online to the respondents but the response was very poor due to their busy schedule. In the present research out of the 119 auto component manufacturers 92 companies (Export Managers) have responded and filled the survey questionnaire.

12. STATISTICAL TOOLS USED FOR ANALYSIS

For the present study, to determine the interactions between the various constructs, statistical tools such as tabular analysis, multiple linear regression analysis have been used to examine the export marketing characteristics of South Indian auto component manufacturers over the period. Each hypothesis has been addressed and tested individually to get statistical results.

13. DATA COLLECTION INSTRUMENT

Basic outline of the approaches used in various research articles has been helpful to develop questions for studying export behavior of South Indian auto component manufacturers. A structured questionnaire is developed according to the respondent's familiarity, awareness, or understanding of concepts which is related to their industry, such as facts, information, descriptions, or strategies or techniques etc. indicators of firm and market characteristics related to export performance have been addressed systematically in the questionnaire.

14. DATA ANALYSIS

1) FIRM AGE

The significant value is $p = .001$ and $t = -10.135$ which indicate that firm's age has significant relationship with export profit of South Indian auto component manufacturing companies.

Firm age was used to predict export profit. The analysis shows that firm age has significant relationship with export profit since significant value (p) is < 0.05 .

The regression model is $y = \beta_0 + \beta_1 \times 1 + \beta_2 \times 2 + \dots + \beta_k \times k + \varepsilon$

Export Profit = $-72.742 + (2.699 \times \text{Firm age})$

H1: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm age. is accepted.

2) FIRM'S EXPORT EXPERIENCE

The significant value is .002 which indicate that export experience has significant relationship with export profit of South Indian auto component manufacturing companies. Firm's export experience was used to predict export profit. The analysis shows that firm's export experience ($t = 12.047$, $p = .001$) is significant with export profit since the significant value (p) is <0.05 .

Export Profit = $-48.449 + (2.699 \times \text{firm's export experience})$ therefore, H2: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's export experience. is accepted.

3) FIRM'S TOTAL SALES

The significant value is .029 which indicate that total sales has significant relationship with export profit of South Indian auto component manufacturing companies.

Firm's total sales was used to predict export profit. The analysis shows that firm's total sales ($t = 3.924$, $p = .029$) is significant with export profit since the significant value (p) is <0.05 .

Export Profit = $-26.575 + (.166 \times \text{Total sales})$, therefore, H.3: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's total sales. is accepted.

4) FIRM'S TOTAL EMPLOYEES

The significant value is .048 which indicate that total employees has significant relationship with export profit of South Indian auto component manufacturing companies.

Firm's total employees was used to predict export profit. The analysis shows that firm's total employees ($t = 3.232$, $p = .048$) is significant with export profit since the significant value (p) is <0.05 .

Export Profit = $-63.602 + (.089 \times \text{Total Employees})$, therefore, H.4: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's total employees. is accepted.

5) NUMBER OF MANUFACTURING PLANTS

The significant value is .096 which indicate that number of manufacturing plants is not significant with export profit of South Indian auto component manufacturing companies. Firm's number of manufacturing plants was used to predict export profit. The analysis shows that firm's number of manufacturing plants ($t = 2.393$, $p = .096$) is not found significant with export profit since the significant value (p) is >0.05 . Export Profit = $-1.672 + (6.377 \times \text{No. of Manufacturing Plants})$. therefore, H.5: Export profit of South Indian auto component manufacturing companies is significantly influenced by number of manufacturing plants, is rejected.

6) FIRM'S TECHNOLOGICAL COMPETITIVENESS

The significant value is .020 which indicate that technological competitiveness is not significant with export profit of South Indian auto component manufacturing companies. Firm's technological competitiveness was used to predict export profit. The analysis shows that the samples provided sufficient evidence to conclude that the model is significant, but not enough to conclude that the variables such as amount of R&D expenditure to the total export sales ($t = 3.592$, $p = .070$) and number of patents registered ($t = 3.746$, $p = .064$) are significant.

Export Profit = $2.909 + (1.801 \times \text{Amount of R\&D Expenditure to the total export sales}) + (4.280 \times \text{Number of Patents Registered})$ therefore, H.6: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's technological competitiveness, is accepted.

7) FIRM'S NUMBER OF INNOVATIONS

The significant value is .025 which indicate that number of innovations has significant relationship with export profit of South Indian auto component manufacturing companies. Firm's number of innovation was used to predict export profit. The analysis shows that firm's number of innovations ($t = 4.160$, $p = .025$) is found significant with export profit since the significant value (p) is <0.05 .

Export Profit = $2.006 + (7.268 \times \text{number of innovations})$ therefore, H.7: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's number of innovations. is accepted.

8) FIRM'S ALLOCATION OF HUMAN RESOURCES FOR EXPORT OPERATION

The significant value is .004 which indicate that technological competitiveness has found significant relationship with export profit of South Indian auto component manufacturing companies. Firm's allocation of human resources was used to predict export profit. The analysis shows that number of employees deputed for export operation ($t = 12.681$, $p = .006$) have significant relationship with export profit since the significant value (p) is < 0.05 . Export Profit = $-45.856 + (.192 \times$

No. of employees deputed for export operation) $+ (4.280 \times$ Number of R&D staff) therefore, H.8: Export profit of South Indian auto component manufacturing companies is significantly influenced by Firm's allocation of human resources for export operation. is accepted.

9) FIRM'S MARKETING COMMUNICATION INTENSITY

The significant value is .051 and $t =$ which indicate that firm's marketing communication intensity has significant relationship with export profit. Firm's marketing communication intensity was used to predict export profit. The analysis shows that the samples provides sufficient evidence to conclude that the model is significant, but not enough to conclude that the variables such as number of technical presentations ($t = 2.772$, $p = .109$) and the number of international trade shows attended ($t = 1.565$, $p = .258$) are significant. The ANOVA tables indicate that the model fit the data well.

Export Profit = $-22.587 + (.998 \times$ Number of technical Presentations) $+ (.547 \times$ Number of international trade shows attended) therefore, H.9: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's marketing communication intensity is accepted.

10) ANNUAL EXPORT MANAGER'S SALARY PACKAGE AND EMPLOYEES TRAINING EXPENDITURE

The significant value is .059 which indicate that export manager's annual salary package, employees training expenditure for export business is found significant with export profit of South Indian auto component manufacturing companies. Export manager's annual salary package, and employees training expenditure for export business was used to predict export profit. The analysis shows that the samples provides sufficient evidence to conclude that the model is significant, but not enough to conclude that the variables such as annual salary package of export manager ($t = 2.685$, $p = .115$) and training expenditure ($t = -.988$, $p = .427$) for export business are significant.

Export Profit = $-26.834 + (2.630 \times$ export manager's Salary Package) $+ (-1.212 \times$ No. Training Expenditure for Export business). therefore, H.10: Export profit of South Indian auto component manufacturing companies is significantly influenced by annual export manager's salary package and employees training expenditure for export business, is accepted.

11) COMPETITION INTENSITY

The significant value is .099 which indicate that competition intensity does not have significant relationship with export profit. Competition intensity was used to predict export profit. The analysis shows that marketing competition intensity does not have significant relationship with export profit since the significant value (p) is > 0.05 .

Export Profit = $-17.511 + (2.090 \times$ No. of competitors analyzed) $+ (-.989 \times$ No. of Indian Competitors overseas) therefore, H.11: Export profit of South Indian auto component manufacturing companies is significantly influenced by competition intensity, is rejected.

12) FIRM'S DELIVERY CAPABILITY

The significant value is .035 which indicate that competition intensity has significant relationship with export profit of South Indian auto component manufacturing companies. Firm's delivery capability was used to predict export profit. The analysis shows that Firm's ability to serve number of foreign customers have significant relationship with export profit since the significant value (p) is < 0.05 . the number of foreign customers ($t = 4.186$, $p = .053$) is significantly contributing export profit.

Export Profit = $-9.800 + (1.355 \times$ number of foreign customers) $+ (-2.429 \times$ number of

sales offices abroad) therefore, H.12: The statement: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's delivery capability, is accepted.

13) NUMBER OF NEW MARKETS EXPLORED

The significant value is .082 which indicate that competition intensity does not found significant with export profit. Firm's promotional intensity, number of new markets explored were used to predict export profit. The analysis shows that promotional intensity includes promotion budget ($t = 1.740$, $p = .224$), number of new markets explored ($t = -1.114$, $p = .381$) does not found significant with export profit since the significant value (p) is > 0.05 .

Export Profit = $14.378 + (7.771 \times \text{promotional intensity}) + (-1.974 \times \text{No. of new markets Explored})$ therefore, H.13: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's Promotional intensity and number of new markets explored. therefore, is rejected.

14) FIRM'S EXPORT SALES

The significant value is .025 which indicate that competition intensity is found significant with export profit. Firm's export sales and number of export managers were used to predict export profit. The analysis shows that firm's export sales ($t = 4.157$, $p = .053$) is significant with export profit since the significant value (p) is < 0.05 .

Export Profit = $-2.116 + (-1.374 \times \text{Number of Export managers}) + (.446 \times \text{Export sales})$ therefore, H.14: Statement: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's export sales, is accepted.

15) FIRM'S SHARE OF OUTSOURCE IN EXPORT ORDERS

The significant value is .025 which indicate that competition intensity has significant relationship with export profit of South Indian auto component industry. Firm's technical collaboration and share of outsource in export orders were used to predict export profit. The analysis shows that share of outsource out of total export orders ($t = 6.686$, $p = .022$) has significant relationship with export profit since the significant value (p) is < 0.05 .

Export Profit = $-5.626 + (-2.762 \times \text{No. of Technical collaboration}) + (1.497 \times \text{Share of outsource in export orders})$ therefore, H.15: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's share of outsource in export orders, is accepted.

16) NUMBER OF PRODUCT LINES FOR EXPORTS AND GOVERNMENT INCENTIVES

The significant value of .076 which indicate that the firm's number of product lines for exports and government incentives for the export sales does not found significant with export profit of South Indian auto component industry. Firm's number of product lines for exports and government incentives for the export sales were used to predict export profit. The analysis shows that firm's number of product lines for exports ($t = 1.536$, $p = .264$) and government incentives ($t = 1.479$, $p = .277$) for the export sales have not found significant relationship with export profit since the significant value (p) is > 0.05 .

Export Profit = $-4.776 + (2.650 \times \text{No. of Product lines for exports}) + (.495 \times \text{Government Incentives for the export sales})$ therefore, H.16: The Statement: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's Number of product lines for exports and government incentives for the export sales, is rejected.

17) FIRM'S NUMBER OF QUALITY CERTIFICATIONS

The significant of F change is 9.403 which indicate that number of quality certifications has significant relationship with export profit of South Indian auto component manufacturers. Firm's number of quality certifications was used to predict export profit. The analysis shows that Firm's number of quality certifications ($t = 3.066$, $p = .055$) has significant relationship with export profit since the significant value (p) is < 0.05 .

Export Profit = $-2.294 + (5.309 \times \text{No. of Quality certifications})$ therefore, H.17: The statement: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's number of quality certifications is accepted.

FIRM'S NUMBER OF NEW PRODUCTS

The significant value of .096 which is > 0.05 so that firm's number of new products launch for export business does not have significant association with export profit. Firm's number of new products launch for exporting was used to predict export profit. The analysis shows that firm's number of new products launch ($t= 2.393$, $p= .096$) for exporting does not found significant with export profit since the significant value (p) is >0.05 . Export Profit= $-1.672+ (6.377 \times \text{Number of new products launched})$ therefore, H.18: Export profit of South Indian auto component manufacturing companies is significantly influenced by firm's number of new products launched is rejected.

OBJECTIVE MEASURES OF EXPORT PERFORMANCE AN INTEGRATED MODEL

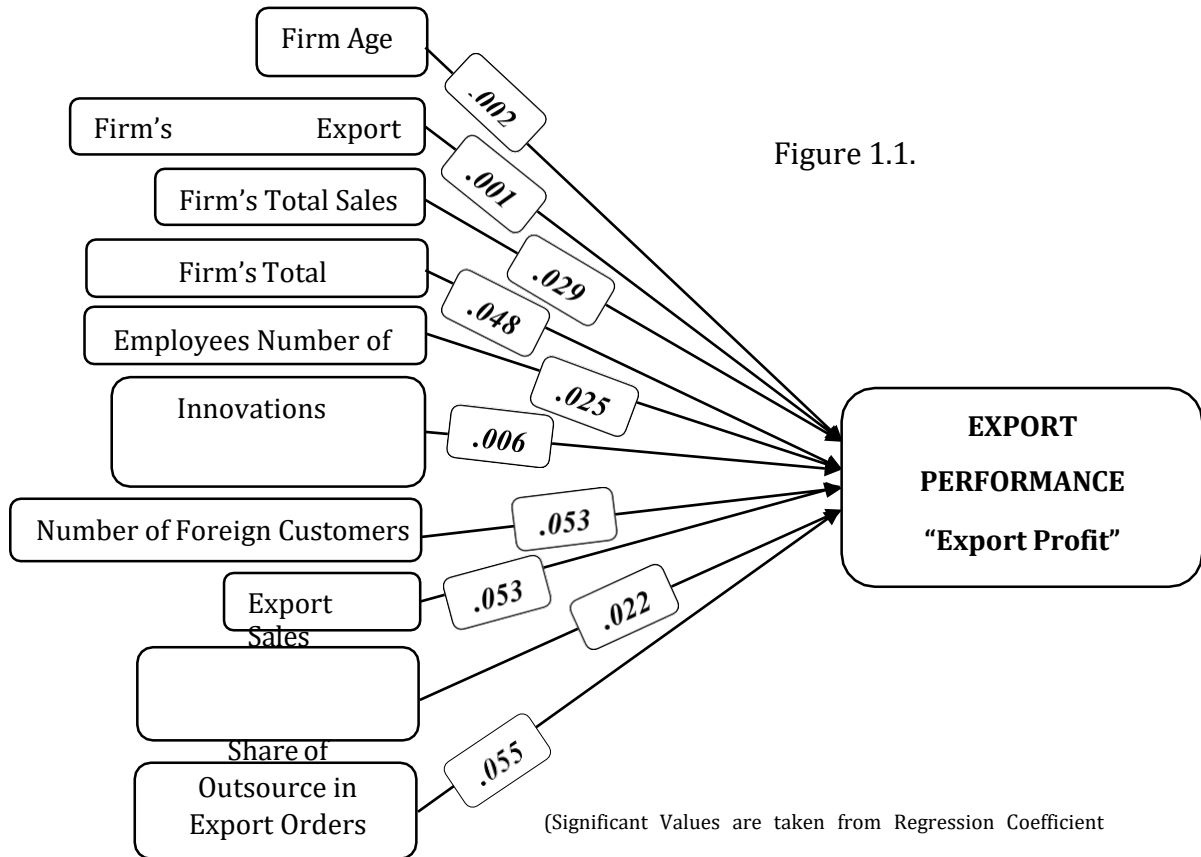


Table 6: The results of objective measures of export marketing strategy and its relationship with export profit has been described as follows

Objective Measures Marketing Strategies	t-Value	Sig.	R	R ²
Firm Age	-10.135	.002**	.990	.980
Firm's Export Experience	12.047	.001**	.990	.980
Firm's Total Sales	3.924	.029*	.915	.837
Firm's Total Employees	3.232	.048*	.881	.777
Number of Manufacturing Plants	2.393	.096	.810	.656
R&D Expenditure to the Total Export Sales	3.592	.070	.990	.980
Number of Patents Registered	3.746	.064		
Number of Innovations	4.160	.025*	.923	.852
Number of employees deputed for export operation	12.681	.006**	.998	.996
Number of R&D staff	1.245	.339		
Number of Technical Presentations	2.772	.109	.974	.949
Number of International Trade Shows Attended	1.565	.258		

Annual Export Manager's Salary Package	2.685	.115	.970	.941
Employees Training Expenditure for Export Business	-.988	.427		
Number of Competitors Analyzed	1.890	.316	.949	.901
Number of Indian Competitors Overseas	-.965	.568		
Number of Foreign Customers	4.186	.053*	.982	.965
Number of Sales Offices Abroad	-1.034	.410		
Promotion intensity	1.740	.224	.958	.918
Number of new markets explored	-1.114	.381		
Number of Export Managers	-1.787	.514	.987	.957
Export Sales	4.157	.053*		
Technical Collaboration	-1.601	.251	.988	.975
Share of Outsource in Export Orders	6.686	.022*		
Number of Product Lines for Exports	1.536	.264	.961	.924
Government Incentives for the Export Sales.	.495	.277		
Number of Quality Certifications	3.066	.055*	.871	.758
Number of New Products Launch	-.432	.096		
Note: *p < 0.05 = 95 %, **p < 0.01= 99%; ***p < 0.001= 99.9%				

As the firm become older in terms of number of year, it gains international exposure through its experience over a period of time leading to earn substantial export profit. If the total sales of an organization are significantly high in volume it implies that the firm has an ability to serve foreign clients too due to capacity utilization. It is also evident that the human resources that are available in South Indian auto component manufacturing firms has significant relationship with export profit. Number of product and process innovation is also strengthening to increase export performance of component manufacturing firms. It is understood that, the relationship between foreign customers and export profit is significant which implies that more the number of customers that the firm serves in foreign markets higher the export profits. It makes sense to understand more the export sales of South Indian auto component manufacturers one could find significant contribution to export profit. In order to reduce cost and save time the firms are out sourcing some extent of production related to non- core products to increase export profit contribution. In addition to this, Quality certification such as ISO-9000, TS-16949 and ISO-14001 have found significant with export profit after tax.

15. RESEARCH FINDINGS

Firm age, firm's export experience, firm's total employees, number of innovations, number of employees deputed for export, export sales, share of outsource in export orders, number of quality certifications, number of foreign customers and firm's total sales have found significant influence on export profit of auto component manufacturers in south India.

16. SUGGESTIONS

Continuous improvement through product and process innovation is necessary to gain overseas markets. Along with the existing customer base, South Indian auto component manufacturers should build a strong network with OEMs. This can be achieved through ICT. It is observed that the greater the customer base, the higher the export sales. Rigorous focus is needed on export operations in order to enjoy the benefits derived from the export business, such as cost advantage and increased revenues. Firms should obtain international quality certificates in order to compete with other countries auto component suppliers. Having separate export marketing departments in an organization leads to greater export sales, which means the higher the commitment towards export business, the greater the export revenue. The ability to offer general products as well as specific customized products should be balanced according to the export market characteristics. It is recommended that export managers should get motivated to grab the opportunities available for export business by having a positive perception towards export market operations. The firm should increase its marketing capabilities by using export knowledge of managers who are well experienced in export markets. Since the auto component industry is running based on products with design-driven, utmost care is needed to avoid rejections from OEMs; this can be achieved by implementing advanced technologies. The firm should stretch its product line to meet global clients changing requirements. OEMs prefer to source components as a system model. Firms should look for pricing through Indian currency, which is most advisable due to stability in currency and financial and transactional

costs. It should be possible with countries where India has bilateral trade agreements. The firm should attend trade shows and international exhibitions so as to increase awareness regarding the availability of the components. Tracking competitors' strategies regularly enables the firm to decide its current position to prepare for the future export goals. The firm should identify reliable distributors in foreign countries to market components abroad, as they are familiar with local markets. Still, there is a great opportunity for the South Indian auto component manufacturers to have technical collaborations to source advanced technology. Collaborative partnership among small auto component manufacturers is needed to meet huge demands of global OEMs. Serving global markets through standardization by considering the entire market as similar enhances the firm's competitive advantage. But it is the responsibility of management to test the extent of adaptation or standardization of marketing strategy that is appropriate through market research. Non-price strategies such as service after sales, strong brand image, quick delivery, and zero-defect manufacturing systems enable South Indian auto component manufacturers to have a global presence. The implementation of the key accounts management concept is recommended for the auto firms.

17. LIMITATIONS OF THE RESEARCH

- 1) For the present study, companies operating export business in South India and are members of Auto Component Manufacturers Association are selected and the data have been collected.
- 2) The current study has been carried out for the organized sector only.
- 3) The main limitation of this study comes from the source of data, which was conceived for the purpose of descriptive analysis, and may lead to a bias in variable measurement. However, it has been attempted to obtain reliable and consistent data from well informed respondents in each of the respondent firms
- 4) The findings are in South Indian settings. They may not be applicable for auto component industry of other states and the other countries.

18. DIRECTIONS FOR THE FUTURE RESEARCH

The variables which are not taken into consideration might be added to the model developed for this study and that could become value added research in the perspective of export market in future research. Investigation can be done by using factors influencing (both internal and external) the export performance of some other industry which determine/selecting a suitable marketing strategy. The addition of less tested variables can also be regarded as a welcome contribution to the collective knowledge about antecedents of international marketing adaptation/standardization. It is directed to extend the study by considering more case studies in order to generalize the research findings, because export marketing strategies may vary case by case. Instead of investigating all the auto component manufacturing companies together, it is better to investigate by bifurcating small, medium and large companies to compare and find out, if there is any other strategy that influence export performance of small, medium and large sized company in the process of formulating export marketing strategy. Agreements of trade and investment with current trading partners and prospective partners that have the potential impacting on export participation by South Indian auto component manufacturing firms should be studied closely.

19. CONCLUSIONS

Demand for auto components is primarily dependent on the requirement of Original Equipment Manufacturers (OEMs) across the globe. Initially the Indian auto component manufacturing industry faced many challenges, especially in technological expertise. Gradually, with rapid changes in the global automotive industry, the Indian auto component industry entered into technological alliance and joint venture with global automotive manufactures to meet the specific requirement of OEM's. Gradually, with the support of the government, the auto component manufacturers started to find better opportunities for export across the international markets in spite of tough competition therein. In view of fluctuating market conditions in overseas markets, the auto component manufacturers had to formulate and constantly review the marketing strategies to gain strong market position and competitive edge. They needed to focus also on investment in developing state-of-the-art technology to serve a number of vehicle models in domestic and overseas markets. Many researches have been conducted to streamline export marketing strategy. The main objectives of the study are to find out the influence of firm characteristics and marketing characteristics on export profit of auto component industry. The target respondents for the survey were the managers who have occupied the positions of Export In-charge/Export Manager/Vice-president Marketing for this purpose structured questionnaire was issued to fill the data.

The interaction was made with senior level people who have knowledge about export operations. This survey was implemented by personal visit to auto component manufacturing firms. The total number of auto component companies operating in India is 647 with these firms being members of ACMA (Automotive Component Manufacturers Association of India). Of these companies 146 auto component companies are located in South India, of which, 119 companies are component exporting companies and are actively involved in both export and domestic business. Linear regression was used as statistical tools for the analysis purpose. The results found that, Firm age, firm's export experience, firm's total employees, number of innovations, number of employees deputed for export, export sales, share of outsource in export orders, number of quality certifications, number of foreign customers and firm's total sales have found significant influence on export profit of auto component manufacturers in south India.

CONFLICT OF INTERESTS

None.

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