



Firm Competitiveness and Performance: A Study Amongst The Apparel Units in Tirupur

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ABSTRACT

The knitwear industry in Tirupur has emerged as a fast growing industry since 1990s and has become the largest contributor of India's knitwear exports. The knitwear cluster has been considered as a driving force for the socio-economic development of India continuously growing and providing ample employment opportunity. The apparel industry in Tirupur has been continuously growing both in the pre- and post-MFA period and providing ample business and job opportunities. Despite global turbulence, export growth rate of the sector is about 15% CAGR in the past 5 years. The study tries to identify the factors of success in the sector associated with its growth considering resource, managerial practice and dynamic capabilities as competitive factors of individual manufacturer and exporter as independent variables and performance in the form of increase in profit as dependent variable. The data for the study were collected from the manufacturers and exporters in Tirupur and statistically tested and analyzed to find the prime successful factors for the growth of the sector. This study will help the individual apparel manufacturer and exporter organizations (AMEO) to know the important factors contributing to better performance of firms so as to enable them to devise appropriate policy and strategy as per factor specific prime resources and capabilities. This study will also help the new entrepreneurs to know the important factors of success, so as to plan in advance before starting a business.

KEYWORDS : Apparel Manufacturer & Exporter, capabilities, firm competitiveness, managerial practice, performance and resources

Introduction:

Globalization, liberalization, dynamic changes in consumer demand pattern, rapid technological advances, more manufacturers at market place, urge to control environmental pollution and resource scarcity are the challenges that an organization is facing and struggling hard against to remain competitive in business. The competitiveness at firm level depends upon the capability of the firm to mobilize its resources to produce or supply the products superior to those offered by competitors and remain in the global market fulfilling the challenges posed. The competitiveness of Tirupur based apparel manufacturer and exporter can be understood by knowing the present and past performance of the sector. Studies reveal that since last five years, despite having turbulence and recession in global market, Tirupur based knitwear manufacturers and exporters have maintained a good track record of growth of 15% CAGR (Textile Excellence, April-2016) as against the national average growth rate at less than 9 percent and consistently facing the global challenges to maintain the growth spirit and sustain in the business. This kind of growth, especially in apparel business where demand fluctuation is high, may be attributed to presence of strong and dynamic entrepreneurial skills and capabilities, right resources and a conducive business environment which enable the firms to produce the product as per global demand and maintain consistency in growth rate. The present study tries to identify the major driving forces responsible for the growth and competitiveness of the apparel manufacturer and exporter (AME) based in Tirupur. The manufacturing firm is one, where resources come together, are processed and yield outputs to accomplish its goals. The major resources used by firms are often described as man, money, machine, material, firm management and their capabilities. These resources are responsible to manage the state of affairs of the firm to accomplish the goal and position the firm in a competitive form in the global market place. The competitive form of firm will reflect on its performance which is normally measured by increase in market share, profitability, increase in sales revenue etc (Dilek C. Hakan K-2013). Today's apparel industry by its nature often produce the product for a highly demand fluctuated and volatile global market. Delivering garments at low cost with desired quality in shorter lead times is the major challenge faced by the apparel manufacturers and their relative success lies on the ability of firms to fulfill the

quality, cost and time attributes of market. To produce the product which satisfies the demand condition of market, a firm needs to have timely availability of cost effective and quality resources, an effective manufacturing system coupled with relevant managerial capability to execute and manage the resources. The present study focused on resources, resource attributes, managerial action and dynamic capabilities availed in a firm and their contribution towards performance and competitiveness of firms in Tirupur apparel knitwear cluster.

Literature review:

Over the last decade, much of the strategy literature has emphasized resources internal to the firm as the principal driver of firm profitability and strategic advantage. This transition in academic and managerial attention from an Industrial Organization (IO) economic view towards a resource-based view (RBV) of strategy has occurred for several reasons. [Hoffer & Schendel, (1979)], the RBV suggests that the resources possessed by a firm are the primary determinants of its performance, and these may contribute to a sustainable competitive advantage of the firm. According to Barney (1991), the concept of resources includes all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive and implement strategies that improve its efficiency and effectiveness. RBV theory on competitiveness has given importance to those resources which can create a competitive advantages condition in a market place. These resources can be divided into three groups: physical capital resources, human capital resources and organizational capital resources (Collis & Montgomery, 1995). Physical capital resources are the physical technology used in a firm such as equipment, raw materials and geographic location. Human capital resources are the training, experience, judgment, intelligence, relationships, and insights of individual managers and workers in a firm. Organizational capital resources include the firm's reporting structure, its formal and informal planning, controlling and coordinating systems, as well as informal relations among groups within a firm and between a firm and its environment (Barney, 1991). Barney (1991) argued that firms that possessed resources that were valuable and rare would attain competitive advantage and enjoy improved performance in the short term. In order for a firm to sustain these advantages over time its resources must also be inimitable and non-substitutable.

ble. According to Petraf (1993), the central premise of the RBV is that, firms compete on the basis of their resources and capabilities. Teece *et al.* (1990) state that it is not only the bundle of resources that matter, but the mechanisms by which firms learn and accumulate new skills and capabilities, and the forces that limit the rate and direction of this process also matters for competitive advantage and sustained performance. According to them, dynamic capabilities are the firm's processes that use resources, specifically the processes to integrate, reconfigure, gain and release resources to match the market demand. Helfat *et al.* (2007) consider dynamic capability as the capacity of an organization to purposefully create, extend or modify its resource base for competitive advantage.

Summarizing above, we can say that a firms' competitive advantage depends upon the kind of resource it owned or accessed, the managerial practice and dynamic capability it possessed to manage the resources, so as to produce the product superior to those produced by competitor.

D. Cruz, (1992) asserts that firm level competitiveness can be defined as the ability of firm to design, produce and or market products superior to those offered by competitors, considering the price and non-price qualities. C. Daniele *et al.* (2011) consider that at firm level, competitiveness can be understood in two different perspectives: one is driver responsible to drive the competitiveness of a firm's performance and the other is firm's competitive performance as outcome. The drivers are available or accessible resources (labor, raw material, technology, finance, knowledge etc.), infrastructure facilities, access to market, managerial practices, dynamic capabilities, supplier and related industries, presence of rivalry and Government. The outcome may be expressed in terms of firm's superior performance such as increase in sales revenue, profit, market share etc. JMOP (2003) pointed out that, measures of the competitiveness at the firm level include firm's profitability, firm's exports, and market share. Chikan *et al.* (2008) opined that firm competitiveness is a capability of a firm to sustainably fulfill its double purpose: meeting customer requirement and profit. According to Hakan Kilitcioglu *et al.* (2013), firm's competitive outcomes can be measured through data on growth, export, profit, customer satisfaction and social contribution. Henricsson and Ericsson (2005) suggest that a firm's competitiveness can be defined through profitability, productivity, time predictability, cost predictability, clients' satisfaction, wage level, work conditions, labor attractiveness, business ethics and environmental consciousness. From the above, it is understood that, firm's profitability is a common measure of firm competitiveness.

Performance measurement is critical for effective management of any firm (Demirbag *et al.* 2006). The improvement process is not possible without measuring the outcomes, hence, organizational performance improvement requires measurements to identify the level to which the use of organizational resources impact business performance (Gadenne and Sharma, 2002). Combs *et al.* (2005) analyzed all articles published in the Strategic Management Journal between 1980 and 2004 and identified 238 numbers of empirical studies that used 56 different indicators for firm performance. In most cases, financial performance was used (82%) with accounting measures of profitability being the most common choice (52%). Carton and Hofer (2006) and Richard *et al.* (2009) reported a similar picture. Many other studies also revealed that profit and sales growth are the indisputable performance indicators of firm.

Research Methodology:

This is a descriptive study intended to examine the relative influence of organizational resources on performance of Apparel Manufacturer and Exporter Organizations (AMEOs) based in Tirupur. Apparel manufacturer cum exporters registered with Tirupur Exporter Association is considered as the population of the study, since it is the largest exporter association in Tirupur having members solely from manufacturer-cum exporters. Out of total 941 registered exporters, 223 exporters are chosen as sample following simple random sampling method. Primary data were collected through personal interview after administering a well-structured questionnaire to the firm's top management officials such as proprietor or head of the organization. The secondary data were collected from past research papers, leading journals, books, conference proceedings etc. Questionnaires were designed to know the demographic profiles of AMEO, their relative

performance in past three years and influence of the resource and capabilities (raw material, labor, technology, firm managerial strategies, and firm dynamic capabilities) on firm's competitiveness and performance. ANOVA- test and multiple regression analysis tools were applied to validate the significance of model and assess the influence of variables (input resources, firm strategic managerial practices and dynamic capabilities) on firm performance in terms of "increase in profit". Preliminary analyses were made to ensure there was no violation of the assumptions of linearity and multicollinearity.

Objective of study:

To find the influence of input resources of Apparel Manufacturer and Exporter Organization (AMEO) towards their performance.

To find the influence of strategic managerial actions towards firm's performance.

To find the influence of dynamic capabilities of firm towards firm's performance

Hypothesis:

H1: Resource as "raw material" and its characteristics influences performance of the firm.

H2: Resource as "labor" and its characteristics influences performance of the firm

H3: Resource as "technology" and its nature influences performance of the firm

H4: Resources as "finance" and its nature influences performance of the firm.

H5: Managerial action and strategies of the firm influences performance of the firm

H6: Dynamic capabilities of firm influence its performance

Results and Discussion:

Table (1): Performances of firms in last three years i.e. 2011-12, 2012-13, and 2013-14

	Worst (1)	Worse (2)	No change (3)	Better (4)	Best (5)	Mean	Std. Deviation
Sales revenue rise	0.4 %	1.3 %	39.9 %	49.8 %	8.5 %	3.6457	.67455
Increase in Profit	00 %	6.7 %	52.9 %	37.7 %	2.7 %	3.3632	.64925

The table (1) indicates mean value of performance in terms of rise in sales revenue and increase in profit are 3.65 and 3.37 respectively. This means performances of firms are good in last 3- years. As per Textile Excellence Magazine (April-2016) in the last five years, exports from Tirupur have grown at CAGR of around 15 percent, even as the overall garment exports from the country have increased at a CAGR of less than 9- percent.

Table (2): Nature of company

	Frequency	Percent
Micro enterprise	16	7.2
Small enterprise	123	55.2
Medium enterprise	75	33.6
Large enterprise	9	4.0
Total	223	100.0

The frequency distribution table (2) indicates, majority (55%) of firms at Tirupur are small enterprises.

Table (3) Regression Results for Hypothesis -1: Raw Material as Resource and Profit as Performance Indicator

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.113	0.188		5.923	0.000
	Cost of raw material (RM)	-0.041	0.064	-0.040	-0.637	0.525
	Timely availability (RM)	0.241	0.066	0.244	3.644	0.000
	Quality of RM	0.164	0.062	0.176	2.638	0.009
	Variety of RM	0.219	0.051	0.269	4.276	0.000
	Optimum usage of RM	0.073	0.054	0.084	1.352	0.178

ANOVA: Signifi. value.< 0.05; Model R sq.=29%, collinearity diagns: All VIF values <4

In Table (3), the model significant (p value) value is less than 0.05, indicates “raw material as a “resource” has a significant relationship with performance of the firm as “increase in profit”. Among the five chosen sub variables, relationship is significant (p< 0.05) with performance in respect of timely availability, quality and variety of raw material, whereas relationship is insignificant (p> 0.05) in respect of cost and utilization of raw material. The beta (standardized coefficients of regression) value 0.269 at raw material variety and 0.244 at timely available of raw material indicates, these two have more positive influence towards the firm performance and competitiveness.

Cotton yarn is the major raw material for Tirupur based AMEOs. Its availability in time with required variety may be attributed with the presence of large number of world class cotton spinning mills in and around Tirupur and Coimbatore producing several varieties of international standard cotton yarns (SIDBI -2014). Owing to decade long association with export market, these spinning mills are capable enough to produce and deliver the right variety of product at right time. Looking into overall performance of AMEOs (Table-1), it can be concluded that availability of raw material in time and variety is quite supportive for AMEO’s performance.

Though cost of raw material contributes 60 to 65 percent of final product cost its insignificant relationship with firm performance may be due to the fact that cotton yarn as “major raw material” is coming under commodity category and market determines its price. Hence an individual firm in relation to others may not enjoy the raw material cost benefit towards firm performance. Low R-square value indicates model is weak fit and could explain the variability of performance by 29 percent. The low R- square value may be attributed of the fact that,the present study comprises of micro, small, medium and large enterprises. Priorities of all these enterprises towards raw material characteristics vary with respect to style, buyer, garment category, export country, order booking quantity and various other contexts. So getting data closer to the regression line may be difficult.

Table (4) Regression Results for Hypothesis -2: Labor as Resource and Profit as Performance Indicator

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	1.200	0.208		5.781	0.000
	Low labor cost	0.111	0.054	0.145	2.048	0.042
	Shortage of labor (time)	-0.118	0.055	-0.176	-2.151	0.033
	Quality and skill of labor	0.062	0.063	0.078	0.980	0.328
	Local labor availability	0.000	0.053	0.001	0.009	0.993
	Low Labor turnover	0.138	0.055	0.177	2.522	0.012
	Labor motivation	0.139	0.052	0.214	2.689	0.008
	Right usage of Labor	0.150	0.052	0.213	2.891	0.004

ANOVA: Significant val. < 0.05; Model R sq.=28.2%, collinearity diagns: All VIF values <4

In Table (4), the model significant value (p value) is less than 0.05 indicating “labour” as a “resource” has significant relationship with performance of firm as “increase in profit”. Among the seven chosen sub variables relationship with performance is significant (p < 0.05) in respect of five variables viz, low cost, shortage, low turnover, motivation and utilization of labor, whereas relationship is insignificant (p > 0.05) in relation to skill and local labor. The beta (coefficient of regression) value indicates performance of firm is positively influenced by labor motivation, labor utilization, low labor turnover and low cost of labor in ascending order of importance. Whereas, negative influence in case of shortage of labor with respect to time indicates, labor availability in time, will have positive influence on firm competitiveness and performance.

The higher (beta) value for labour - motivation implies, labour motivation is more important contributor for firm competitiveness. Shuji Uchikawa (2014) states that Tirupur based AMEOs used to have majority of labourers migrated from under developed states such as Orissa, Bihar, Bengal etc. and majority of them come to work to earn as much as money as possible by compromising their conveniences and are also ready to work for more than 12 hours on getting reasonable accommodation, food and shelter and extra earning. Working 12 hour per day and earning one and half times more as compared to other labourers is the major motivating factor.

The (beta) value of 0.213 for “labour utilization” may be due to good teamwork and presence of scope of several varieties of jobs in apparel production, which suit different skilllevels (unskilled, low, medium and high skill) of labor. Also, owing to simple processes involved in garment production, acquiring skill at different levels and getting engaged in various tasks is quite easy. In Tirupur most of the firms are small enterprises and being directly monitored by the proprietors and their family members. Hence it may be quite easy to train and utilize the workforce to the optimal level when compared to the larger firms. Shuji Uchikawa (2014) opines with regard to labor shortage or not getting labour in time may be due to non- availability of local laborers. Although few local labourers are available, they are not serious to work consistently either in one firm irrespective of the size and the field. Moreover emergence of several other manufacturing and service industries nearby Tirupur lead to splitting of labourers on account of higher income, conducive work environment and availability of other welfare facilities.

Table (5) Regression Results for Hypothesis -3: Technology as Resource and Profit as Performance Indicator

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.779	0.140		12.730	0.000
	Technology cost low	0.201	0.044	0.283	4.528	0.000
	Timely availability & adoption of right technology	0.200	0.052	0.241	3.861	0.000
ANOVA : Significant. val. < 0.05; Model R sq.= 16 %, collinearity diags: All VIF values <4						

In Table (5), the model significant value (p value) being less than 0.05, indicates "technology" as a "resource" has a significant relationship with performance of firm as "increase in profit". Low technology cost is more important than the timely availability of technology for firm performance and competitiveness. The low R-square value indicates weak fit of model. The low R- square value may be attributed of the fact that the present study comprises of micro, small, medium and large enterprise: priority of all these enterprises towards technology may vary with respect to style complexities, buyer specification, garment category, and order quantity and its sophistication, additionally influence of several other technological variables may be there. So getting data closer to the regression line may be difficult.

Tirupur based AMEOs are in active export business since last three decades. Owing to their long association with export business, these firms are well acquainted about global products, available technology and markets. G. Kalita (2009) pointed out that at any stage of production Tirupur based AMEOs are not lagged behind their competitor countries in recent available technologies. Majority of firms are having imported machine from Japan, China, Taiwan and Hong-Kong and also few of these countries machine manufacturer are having assembly facility at Tirupur and nearby districts. Owing to long association with export market and presence of multinational machinery manufacturing facility is at Tirupur, the cost of required technology and its availability may be competitive.

Table (6) Regression Results for Hypothesis -4: Finance as Resource and Profit as Performance Indicator

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.036	0.204		9.968	0.000
	Easy availability of finance	0.141	0.051	0.191	2.775	0.006
	Cost of finance	-0.073	0.073	-0.071	-1.001	0.318
	Right usage of finance	0.190	0.057	0.235	3.341	0.001

Anova: Significant val. < 0.05; Model R sq.= 10.2%, collinearity diags: All VIF values <4

In Table (6), the model significant value (p-value) of less than 0.05, indicates "finance" as a "resource" has a significant relationship with performance of firm as "increase in profit". The beta value (regression coefficient) indicates that right usage of finance is more important than the availability of finance for firm performance. The influence "cost of finance" on performance is insignificant. The fact that majority of firms are small enterprises normally managed by family people and proprietor, may be the reason for proper utilization of fund is more important towards firm performance and competitiveness as compared to availability of finance. Low R-square value indicates model is weak fit. This may be attributed due to the fact that, the present study comprises of micro, small, medium and large enterprises: prior-

ity of all these enterprises towards finance may vary with respect to family income, the order quantity, garment category and some other contexts. For example a small firm may manage to have production of garment with own money, whereas a medium scale and large scale firm, where order size is normally big, may take loan from financial institution and in case of limited company the fund raising pattern is different. In addition, chances of contribution of other financial variables are there. So getting data closer to the regression line may be difficult.

Table (7) Regression Results for Hypothesis -5: Managerial Strategies & Actions as Independent Variable (IV) and Performance in terms of Profit as Dependent Variable (DV)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
	(Constant)	1.636	0.206		7.927	0.000
	Org. structure facilitates quick decision	0.213	0.041	0.327	5.231	0.000
	Product diversification strategy	-0.029	0.042	-0.040	-0.673	0.501
	Strategy to retain skilled employee	0.006	0.047	0.007	0.119	0.906
	Strategy to remain in the competition	0.130	0.053	0.141	2.429	0.016
	Strategy to have sophistication production process	-0.156	0.056	-0.178	-2.804	0.006
	Strategy to book the order as per firm strength	0.194	0.052	0.222	3.726	0.000
	Strategy to reduce cost of production	0.091	0.030	0.185	3.052	0.003
ANOVA: Signific. val. < 0.05; Model R-sq.=38.2%, collinearity diags: all VIF values <4						

In Table (7), the model significant value (p value) of less than 0.05 indicates "managerial strategies" has a significant relationship with performance of firm as "increase in profit". Among the seven chosen sub variables, five of them are significant. The beta (regression coefficient) value indicates, "Organization structure facilitates quick decision" and "strategy to book the order as per firm strength" are more important than, strategy to reduce the cost, sophistication production process and strategy to remain in competition. The negative beta (regression coefficient) value in case of sub variable "strategy to have sophistication in production process" indicates sophistication of production process has a negative influence towards performance. This may be due to the fact that, sophistication demands advance technology and quality manpower to utilize the advance technology and this ultimately adds more cost to the firm. Sophistication may improve productivity, reduce the production cost, improve the quality and reduce the time, but it may not be true for all manufacturing sectors, especially in case of labor intensive Tirupur Knitwear cluster, where majority of workers are females migrated from rural belts, getting required skill only after joining in a firm and having low education level. Moreover in Tirupur cluster, majority of workers are working in daily wage and short term contact basis, where job security is a problem. Sometimes a small enterprise, owing to its limited production capacity may not have economies of scale of production with advance technology. So sophistication production process lacking with technically competent quality manpower, less scope for economize of scale may be the reason for negative relationship.

Table (8) Regression Results for Hypothesis -6: Dynamic Capabilities of Firm as Independent Variable (IV) and Performance in terms of Profit as Dependent Variable (DV)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.201	0.170		7.069	0.000
	capability to sense and seize the business opportunities and threats quickly	0.258	0.076	0.255	3.384	0.001
	Capability to cope up with changes by reorganizing the resources and skills.	0.105	0.078	0.113	1.341	0.181
	Capability to quickly produce required innovative and value added product	0.003	0.067	0.004	0.052	0.959
	Capabilities to cope up with Government regulation	0.251	0.053	0.305	4.698	0.000
ANOVA: Signific. Value. < 0.05; Model R sq.=28.6 %, collinearity diagnostics: All VIF values <4						

In Table (8), the model significant value (p value) of less than 0.05, indicates that “dynamic capabilities of firm” has a significant relationship with performance of firm as “increase in profit”. Among the four chosen sub variables, “capability to cope up with government regulation” is more important than “capability to sense and seize the business opportunity” towards firm performance and competitiveness. This reveals complying with government regulation is more important for better firm performance.

Conclusion:

The study comes up with conclusion that, resource, managerial action and dynamic capabilities of firm have significant influence on firm profitability. The raw material variety and its timely availability, labor motivation and their utilization, technology cost, technology adoption, usage of finance, firm structure for quick decision, order booking strategy, cost reduction strategy, cope up with Government regulation and capability of firm to tap the business opportunities have contributed positively, while shortage of labor, sophistication of production process have contributed negatively towards firm performance and competitiveness.

References:

- Carton, R. B. and Hofer, C. W. (2006). *Measuring Organizational Performance: Metrics for Entrepreneurship and Strategic Management Research*. Northampton, Edward Elgar Publishing.
- Chikan, A. (2008), “National and firm competitiveness: a general research model”, *Competitiveness Review*, Vol. 18 Nos 1/2, pp. 20-28.
- Collis, David and Cynthia A. Montgomery (1995), “Competing on Resources: Strategy in the 1990s,” *Harvard Business Review*, 73 (July-August), pp.118-128.
- Combs, J.G., Crook, T.R., & Shook, C.L. (2005). The dimension of organizational performance and its implications for strategic management research. In D. J. Ketchen & D. D.Bergh(Eds.), *Research methodology in strategy and management* (pp. 259-286). San Diego: Elsevier.
- Daniele C., Donatella D. (2011) “Unbundling the construct of firm level international competitiveness”, *Multinational Business Review*, Vol. 19 Iss: 4, pp.311 – 331

- D’Cruz, J and Rugman (1992). *A New Compacts for Canadian Competitiveness*, Kodak Canada.
- Demirbag, M., E. Tatoglu., M. Tekinkus., and S. Zaim. An analysis of the relationship between total quality management implementation and organizational performance from Turkish SMEs. *Journal of Manufacturing Technology Management*. 2006, 17(6): 829-847.
- Dilek Cetindamar and Hakan Kilitcioglu (2013), *Measuring the competitiveness of a firm for an award system*, *Competitiveness Review*, Vol. 23, No.1, 2013, pp. 7-22
- Gadenne, D., & Sharma, B. (2002). *An Inter-Industry Comparison of Quality Management Practices and Performance*. *Managing Service Quality*, 12(6), 394-404.
- Garment Exporters in Tirupur are Adopting Newer Strategies to Take on Market Challenges” *Textile Excellence*, [Mumbai] , 1st April -2016
- Gunajit Kalita, *The Emergence of Tirupur as the Export Hub of Knitted Garments in India: A Case Study*, ICRIER , New Delhi, 2009
- Helfat, C., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D. and Winter, S. *Dynamic Capabilities: Understanding Strategic Change in Organizations*, Blackwell Publishing, Malden, 2007
- Henricsson P. & Ericsson S. (2005, July). *Measuring construction industry Competitiveness: a holistic approach*, (Paper presented at the Research Week International Conference, The Queensland University of Technology, Brisbane, Australia)
- J.Barney, (1991)“Firm Resources and Sustained Competitive Advantage”, *Journal of Management*, Vol. 17, No.1, pp.99-120
- JMOP, Jordanian Ministry of Planning, *Competitiveness*, www.mop.gov.jo, 2003.
- Kim, H., Hoskisson, R.E., Wan, W.P. (2004): *Power dependence, diversification and performance in keiretsu member firms*. *Strategic Management Journal*. 25, pp 613-636
- Petraff, M.A., (1993), *the corner stones of competitive advantage: A resource based view*. *Strategic Management Journal*, 14, pp 179-191
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009) *Measuring organizational performance: towards methodological best practice*. *Journal of Management*, 35(3), 718-804.
- S. kaththasami. “Tirupur emerges knitwear capital.” *Deccan Chronicle* 28th November, 2015.
- Schendel D.E. and Hofer C.W., *Strategic Management*, Little Brown and Company, Boston. 1979.
- Shuji Uchikawa, *Industrial Clusters, Migrant Workers, and Labour Markets in India*; Palgrave Macmillan Publishers Limited, Hampshire, UK, 2014.
- Small Industries Development Bank of India. *Tirupur Knitwear Cluster Diagnostic Study Report*. Apex Cluster Development Services. New Delhi : 2014
- Teece DJ, Pisano G, Shuen A. *Firm capabilities, resources and the concept of strategy*. *Economic Analysis and Policy Working Paper EAP 38*, University of California. 1990.
- Tirupur Exporters Association, *Role of TEA in Development of Exports*, 2015, www.tea.india.org 2015.
- Valsan Binoy “Low wages, exploitation the fate of laborers in Tirupur too.” *Times of India* 10th May, 2013