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Outsourcing as a tool for Business Excellency and Better Quality: Moderating Role of Location in Textile Sector of Pakistan

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Abstract

The purpose of the study is to facilitate the operational management and policy managers to know the factors behind outsourcing to achieve the business excellency by focusing on core values and the moderating role of location in the textile industry of Pakistan, to serve this prime industry which is in need of major policy facilitation for its survival. A primary data survey was conducted throughout Pakistan textile industry; the study achieved sixty-eight present response rates. Five core categories of outsourcing factors were observed i.e. cost cut tool, focus on core, quality enhancement, location attraction and firm ownership. CFA analysis was used to highlight the significance of the factors, later a five-step hierarchical regression model is analyzed to identify the impact of individual factors on outsourcing of a firm. The data analysis suggests that all of the factors identified have a strong positive impact on the firm's outsourcing decision. Through hierarchical regression helped to understand that each factor is significant on individual basis. Moreover, location attraction is a significant factor and a strong moderator for outsourcing strategy in textile sector of Pakistan.

Keywords: Outsourcing, Cost Cut, Focus on Core, Ownership, Quality, Location Attraction.

1. Introduction

Like individuals' industries also need each other's support. In the late 20th century, the term outsourcing was introduced as the other side of coin of cost reduction (Hätönen and Eriksson, 2009: Linder et al., 2002). Outsourcing is considered to be the best facilitator to the management of the firm (Baatartogtokh, et al, 2018). This regards that the concept of outsourcing has expanded to number of areas i.e. knowledge gaining (Frank et al., 2016), innovation in production process (Un, 2017), research and development (Becker and Zirpoli, 2017) and many other fields which started from IT sector. A vast application of it is observed in the manufacturing sector as well.

Un and Rodríguez, (2018) used outsourcing applications in manufacturing firms and found it beneficial in improving skills, knowledge, R&D etc. in manufacturing industry. The current study focuses upon the developing nation belonging to third world countries to highlight the factors which play a significant role for outsourcing. The study aims to do so for textile industry of Pakistan. The aim is to support the core industry of this economy as 40% of the industry has moved abroad in the past few years.

The situation in Pakistan is not so contrasting when compared it to the rest of the world. Along with quality enhancement, reduction in cost, power shortage are core reasons behind outsourcing performed in or outside the country, which is followed by company focus on core which is around fifth of the total share (IAOP, 2004). In view of Aftab and Mehreen, (2010) some other reasons are global recession, export performance improvement, Prices of raw material, Lack of investment, US & EU cuts imports of textile from Pakistan, Tight monitory policy, Removal of subsidy from Textile sector, Shortage of gas and Electricity.

1.1.Study Layout

The upcoming section highlights the hypotheses built on behalf of literature and a number of economic theories described in theoretical background section along with conceptual framework of the study. Following is the methodology section describing the designing of the research, followed by result analysis picturing entire analysis by highlighting and discussing the key outsourcing factors, then results are interpreted along with a brief conclusion drawn regarding primary outsourcing factors.

2. Literature Review and Hypotheses Development

Outsourcing has been studied by a number of studies from developed states, a few literatures is highlighted in table 2 as.

Table-1: Studies about Outsourcing

| YEAR | AUTHOR | STUDY IDEAS |
|------|------------------------|---|
| 1992 | Gupta and Gupta | Assignment of in house performed business processes outward (another entity) but still the main organization is responsible for the operations, so it just precisely defines the other how to carry out the assigned task |
| 1999 | Gary Gereffi | The firms upgrade by trade i.e. handing over some of their tasks to areas with low cost of production in the world |
| 2002 | Bailey et al. | Transfer of one or more business activities to a third- party organization for performance of a defined task |
| 2016 | Höglund and Sundvik | Some processes, which are subject to management biasness, could be less risky when outsourced instead of performing in-house |

| 2017 | Charles et al | Outsourcing of firm's confidential and sensitive matters |
|------|---------------|--|
| | | like; finance, auditing etc result to better management, as the third party is not subjected to any biasness |

A number of factors were observed in the literature which are motivating firms to outsource like managerial efficiency, cost reduction, profit motives, specialization etc. In context of Pakistan following variables were considered significant based on past literature discussed in table below:

Table-2: Literature support for Factors behind outsourcing

| VARIABLE | YEAR | AUTHOR | THEMATIC IDEAS |
|------------------------|------|-----------------|--|
| Cost cutting tool | 2009 | ómez et al. | Cost is one of the motivating factors behind outsourcing |
| | 2013 | Denning | Due to cost saving, the percentage of outsourcing is increasing |
| Focus on business core | 2006 | Bryant | Management becomes efficient and targets to specialize by outsourcing some production segment. |
| | 2012 | Maelah et al | Outsourcing vacates resources for a business which it can utilize to specialize in a production segment. |
| Quality enhancement | 2009 | Gómez et al. | Firms improve their serving ability due to outsourcing |
| | 2015 | Lin et al., | Outsourcing improved reputation of the firm for being responsible |
| Location attraction | 1998 | Dunning | Highlighted the importance of geography before outsourcing |
| | 2006 | Gereffi | Firms are more likely to outsource in the areas with lower cost dimensions |
| | 2015 | Claus et al | Cost effective locations are attractive for outsourcing |
| Firm ownership | 2006 | Kremic et al | Firm owners outsource to fulfill their commitment of providing quality product. |
| | 2017 | Kittipong et al | Firm owners are concerned of the firm up gradation so they outsource |

2.1.Cost of Production

Cost saving perspective is one of the chief factors behind outsourcing; around 30 to 40 percent cost cuts may be enjoyed by a firm, which undoubtedly triggers outsourcing (UNCTAD, 2004). (McIvor, 2009) in his study consider outsourcing as an important tool to reduce cost of production in the context of various economic theories i.e. TCE, RBV.

Farrell (2005) supports outsourcing as cost cutting tool by studying different markets that could be discovered in order to get the process done at the least possible cost. Developing countries are raising their level of exports around 40% than past few years (UNCTAD, 2004), In this scenario the importance of exports from Pakistan cannot be kept a side as its importance in contributing in world's GDP is of vital importance. Pakistan on the other hand would certainly aims to reduce production cost and raise its production, would certainly outsource the production process in which it has less comparative advantage at.

(Klein et al.1978) divided cost in various sub groups i.e. asset, human and site specificity, under the head of transaction cost. In order to closely examine the production process and dig out the exact strengths of a business Many studies have been carried out which support outsourcing as an outcome of cost cutting (McIvor, 2009). (Kakabadse & Kakabadse, 2000; Kelleher, 1990; Kremic, Tukel, & Rom, 2006; Abdur & Sheng, 1998, Liu and Tyag, 2017) found in their study that it is outsourcing that converts fixed cost into variable one, once the firm outsource that activity, its cost disappears, which ultimately reduce the cost of production. Therefore it is hypothesized as;

H1- Production Cost Cut being factor behind Outsourcing has positive impact on its decision

2.2. Focus on Core Business Activities

The concept of core competence developed by Hamel and Prahalad (1994) is actually one of the finest applications of RBV, it focuses upon outsourcing the process that an organization is less competent at, in order to utilize the available resources upon the process of more competency.

(Murray and Kotabe, 1999; Grantet al., 2000; Mudambi and Tallman, 2007) supported the outsourcing of non-core business activities to other firms in order to focus all the available resources upon core business processes. (Kuada, 2007) suggests in his study that by allowing others to do what is costly to us would spare lots of resources for us that could be diverted to core business activities. However, it is important to keep dynamics in our outsourcing process to make most of it (Teeceet al, 1997).

(Dunning, 1996; Lall, 2000) found outsourcing as a major support behind up gradation of local business activities i.e. labor specialization, updated machinery, space availability etc that may be summed up to accessibility to resources for core business activities. (Dawar and Frost, 1999) questioned in their studies about the reason behind the success of some developing countries' firms and their findings reported that outsourcing of some of the business processes actually allowed them to avail the advantage of focusing up on those activities in which their business is efficient. In light of these studies, following hypothesis could be formulated:

H2- Focus on core business activities being factor behind Outsourcing has positive impact on its decision

2.3. Quality of Production

Mantell et al. (2006) presented the concept of make it or buy it, that emphasizes upon the making of what the firm has ability to produce efficiently and the term buy it signals to outsource the rest that is; manufacturing outsourcing, Business process Outsourcing, IT outsourcing, Call center outsourcing etc are various segments of any business that are outsourced for betterment of quality (Tsai et al., 2007; Zhou, 2007; Aksin et al., 2008; Gopal et al., 2003; Kalnins, 2004; King and Torkzadeh, 2008; Kenion, 2005)

Quality achievement is the core reason behind outsourcing. It is therefore keenly observed that a firm must not be undergoing the problem of moral hazard or adverse selection when it decides to outsource. (Dixit 2003 and Lizzeri 1999) developed the models for adverse selection and moral hazard so that outsourcing maintains its essence of quality assurance.

Zhu and Mukhopadhyay (2009) studied the dilemma of outsourcing arising due to poor management of quality; it is of concern that the firm ought to receive quality products from its outsourcing partners. A part from time and cost quality is motivation for outsourcing, Zhu, 2016 used various models to find out optimal outsourcing contracts for these factors.

(Arnold 2000) analyzed in his study that many companies accomplished better results after outsourcing activities. Specifically In quality (52.9% of outsourcing subjects were ranked `very good quality, at a lower cost (50.6% times less), less production time (55.4%). Those are in a better position than before in every sense i.e. production of better quality yields to better profits. Hence following hypothesis could be formulated;

H3- Quality of production being factor behind Outsourcing has positive impact on its decision

2.4.Location Selection

Williams (2008) brought the concept of transaction cost as a matter of concern before an organization thinks of outsourcing. McIvor, 2009 describes site selection as one of the three pillars of outsourcing keeping the TCE perspective in mind. Keeping this in view it is clear enough that an organization is more likely to outsource in the regions where it enjoys least transportation cost, in case of offshore outsourcing; favorable trade agreements (most preferred nation), geographically neighboring countries etc. While talking about captive outsourcing i.e. home region is focused more likely because of its benefits (Pongelli et. al, 2018).

The firm is more likely to outsource to the suppliers who enjoy locational advantage along with labor rates. López and Ishizaka (2017) found that location selection is the foundation of outsourcing process by analyzing it was discovered that if the location selection is not made diligently, it may ruin the essence of outsourcing. (Gylling et al, 2015) describe the importance of location selection not only in terms of profitability of client firm but also its market reputation, which is also depending upon it.

Selection of best location keeping transaction cost economics in mind includes a number of criteria i.e. transportation cost, administrative processes, qualified labor etc (Vestring, Rouse, and Reinert 2005), least diversity of production environment (Pongelli et. al, 2018). Location selection is considered so important that it is suggested to design a location portfolio before outsourcing in order to spread the chances of risk. Some studies suggest elements of transaction cost economics i.e.

operating costs, regulatory environment, domestic markets, engineering talent, political stability, currency fluctuations, facility costs, infrastructure, and language skills etc that contribute to identify best outsourcing location (Vestring, Rouse, and Reinert 2005, Gupta, Mehlawat, and Grover (2016).

Studies have been conducted to formulate location selection criteria which is based upon the TCE elements (Gigović et al, 2017, Rao, Goh, Zhao, & Zheng, 2015, Kim & Aguilera, 2016). Therefore, following hypothesis could be formulated;

H4- Suitable location selection being factor behind Outsourcing has impact on its decision

2.5.Business Ownership

Business ownership is influencing its outsourcing practices; it is one of the issues that have arisen recently. Pongelli and Basco, 2018 found in their study that family owned firms are more likely to outsource than non-family owned ones. Williamson (2010) concludes in his study that outsourcing decisions and patterns change as a company's ownership converts from public to private, it is the control of organization that decides how and what to do.

It is the nature of ownership, if it is public owned firm, it might seek to other public company for outsourcing and vice versa (Bhatti et al., 2009), or the case may be opposite, all it depends upon the decision made by the state. On the other hand, Williamson, 2010 brings the concept that the firms outsource in order to improve their efficiency. (Domberger and Rimmer, 1994) supports the view that irrespective the types of ownership, all the firms outsource to enhance their quality and gain cost efficiency.

(Renzetti and Dupont, 2004 concludes that private owners are more concerned about profits so they might take quicker decision to outsource, if it yields toward cost or quality efficiency, as compare to publically owned firms. The other side of the picture is that there are some problems arising due to outsourcing i.e. increased regulatory measures which may reduce efficiency, quality worsening, service endowment inequality (Pierre, 2009), democratic power loss etc, therefore a public owned firm might not go for outsourcing, keeping in view public welfare (Peterson 2011, Reichard and Röber (2012). Some public companies might outsource on the basis of efficient results only (Laffin et al., 2014). Whereas, Lieberherr and Leiren, 2017 report that it is actually the state and its policies that sometimes imposes its tendency to outsource upon the firms. Therefore, following hypothesis can be formulated;

H5- Nature of Business Ownership being factor behind Outsourcing has impact on its decision

2.6.Location and Firm Ownership

Because of the increasing strategic importance of outsourcing, the importance of sourcing location is increasing day by day. Bertrand, 2011; Contractor, Kumar, Kundu, & Pedersen, 2010; Di Gregorio, Musteen, & Thomas, 2009 discussed in their studies about the relocation of the business process operation from a firm to another international firm. i.e. Offshore outsourcing (Gerbl, McIvor, Loane, & Humphreys, 2015).

Family-owned firms are more likely in favor of outsourcing at home (Gu, Lu, & Chung, 2016; Hennart, Majocchi, & Forlani, 2017; Chirico et al, 2018). The nature of firm's ownership and outsourcing have

common thing in between i.e. location. Banalieva & Eddleston, 2011 found that ownership of firm as significant tool in finding its outsourcing location.

It is found in many studies that before taking decision to outsource, the location to outsource is keenly observed, and the decision is found to be different for different owner's i.e. family owned or non-family owned m (Gomez-Mejia, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007).

Pongelli et al, 2018 used location as moderator between firm ownership and its decision to outsource and it is found that family firms are more successful than nonfamily firms when undertaking offshore outsourcing, especially when sourcing is global rather than regional. Banalieva and Eddleston (2011); Ren et al., (2016); Maloni et al., (2017) found the logic of firm ownership and its outsourcing location selection. Keeping a number of studies in view, it is hypothesized as;

H6-Outsourcing location moderates the effect of firm's ownership and its decision to outsource.

2.7. Theoretical Background

The table 3 depicts the core economic theories which support the existence of the current study.

Table 3 Theoretical Background for the study

| Table 3 Theoretical Background for the study | | | | | |
|--|---|--|--|--|--|
| THEORY | RELATED STUDIES | STUDY IDEAS | | | |
| Transaction Cost Economics | Greenberg (2008); Handley & Benton (2012); Lai et al. (2012); | Opportunisms is the core of the theory which is also a motive for outsourcing | | | |
| Resource based View | Wernerfelt, (1984); Kedia and Lahiri (2007); McIvor (2009) | the activities in which firm lacks necessary resources internally can be outsourced by accessing capabilities from external providers | | | |
| Trade Economics Theory | Feenstra, 1998; Gomory & Baumol, 2000; Lall, 1998; Markusen, 2005). | The firms are enjoying benefits due to outsourcing in terms of increased trade, intermediate goods, increasing return to scale, specialization, etc. | | | |
| New Economic Geography | Lewin and Peeters, (2006); Manninget al., (2008); Jensen and Pedersen, 2011). | Outsourcing terms introduced where areas of less production cost are center of attraction by high labor cost countries | | | |
| Core Competencies Theory | Pinnington & Woolcock, (1995); Vaxevanou & Konstantopoulos, 2015 | The theory creates base to monitor outsourcing pattern to make most of it. | | | |

3. Research Methodology

Primary, secondary, and academic literatures are used to formulate the study. At the inception of the study academic literature was deeply observed to form the grounds of the study and shape the hypotheses. Later data was collected through primary and some secondary sources to evidence the literature. The study uses questionnaires as a tool for the measurement. A firm level survey was conducted by sending questionnaires to the textile companies listed in the Karachi Stock Exchange (KSE) also known as Pakistan Stock Exchange.

In total 157 textile companies are registered in Pakistan Stock Exchange whose emails and addresses were taken from business recorder of Pakistan and the questionnaire was mailed to all of them prior making personal visits to some of them.

For the study convenience sampling has been adopted (Sekaran 2000). This approach was adopted in order to get the best representation of the population, keeping in mind the time and cost constraints. The approach also helps to gather information regarding respondents promptly, professionally, and efficiently. The sample is considered as good as the population because on random it contains the personal visits to companies from all the major industrial cities of the country i.e. Lahore, Faisalabad and Karachi. All three cities are considered to be industrial hub.

Through e-mails, personal visits and using references, a sample of 306 questionnaires were collected, (almost sixty eight percent) of the targeted respondents considered reasonable (Klaas et al., 1999; Shih et al., 2005).

Prior visiting the firms it was kept in mind to visit the respondents when they were less busy comparatively, by making prior appointment because it is observed that busy respondents often response with lack of interest (Rafaeli & Sutton, 1990). It was also cleared to the respondents that the purpose of the questionnaire was research only not affiliated to hit the company in any way in order to avoid social desirability biasness.

The total number of participants were 306, out of which fifty three were email respondents and rest of participants were visited personally. It was bit hard to make up with them as most of them sounded like "too busy" for non-compliance on their part.

Strategic management was targeting participant for the study as they are the ones who know entire scenario of production process in the firm.

3.1.Method of Data Collection

As the respondents to the study were mostly top management people i.e. CEOs, Managers etc. professional emails were sent to them along with interviews. Prior interview proper appointment was made. The questionnaire was designed in clear English so that it could be easily understood by the participants. The data collection period was from October 2017-June 2018.

3.2.Data Collection Tool

The structured questionnaire (a multidimensional scale) was used to carry out the survey. The measurement instruments were evaluated before starting data collection. For the cognitive relevance

conformation, the questionnaire was first sent to some operational managers to test the reliability. The instrument was developed by adopting existing multi-dimensional scales to capture outsourcing decision, based upon ten related questions which were answered at five-point Likert scale. The independent terms i.e. factors responsible for outsourcing were adopted from several popular studies. Multiple items were measured at five-point Likert scale from "Strongly Disagree" to "Strongly Agree" where; 1= Strongly Disagree, 2=Disagree, 3= Undecided, 4=Agree and 5= Strongly Agree.

The adopted questionnaire from Rasheed M.A. et al. (2006) was designed to deal with the outsourcing decision measurement and magnitude of factors causing it. The questionnaire can be broken in following sections with respect to its functions.

The top most section is designed to know about the title of the company and to know about the one who is responding to the investigation about the study, since the respondents professional information assures the reliability of the information which he provides about his organization. This includes; the information regarding the respondent. The second section is designed to know about the measures that contribute towards outsourcing decision of the firm. There are ten different questions asked about outsourcing, all of them were measured at five point Likert scale (Sheehan and Cooper 2011, Kulik and Bainbridge 2008, Stone 2002, Palvia 1995, Last section is to measure factors for Outsourcing (cost cutting tool, quality, focus on business core, location attraction and ownership) a series of questions were asked. All of them were measured at 5 point Likert scale

A preliminary questionnaire was distributed before sending it to the actual respondents in order to check the reliability of the study. The pilot study was conducted with fifteen known respondents; to find out is there any need to elaborate any area of the research tool. After that a little amendment were made in questionnaire to make it more clear for respondents in context of Pakistan. After the entire process it was assumed that the questionnaire was deemed to be suitable for the data collection process.

4. Data Analysis

The data for study was analyzed through (SPSS) Statistical Package for the Social Sciences. A variety of statistical techniques were used on the data obtained through questionnaire, elaborated as under: Cronbach's alpha is the most commonly used reliability indicator of data set obtained via the questionnaires. Nunally, (1978) the Cronbach's alpha need to cross the threshold of 0.6 and the results of the analysis reflect the same, which are discussed in the results section of the study in detail.

Conformity Factor Analysis (CFA) is the most suitable statistical technique adopted to outline the relationship between variables of the study by classifying factors. This method basically shrinks the variety of large data into small number of factors explaining the relationship of variables clearly. The study analysis the impact of various factors upon outsourcing by Hierarchical Regression Analysis, specialized for identifying the contribution made by an additional predictor above and beyond those entered previously in order to observe additional validity, as a mean for statistical control. The regression involves sequential entry of the variables in the model; however, this entry order is based upon theoretical significance (Kerlinger 1986). (Henderson & Velleman, 1981) suggests in his study that the researcher knows the significance of variable order better than the computer. The technique is more useful when the variables have correlation between them, which is favorable in the current study. Change in R square is the charming feature of this method as it highlights the change in model fit caused by such variable addition (Park and Valenzuela, 2009)

The study also adds a step of moderation in the last step of hierarchical regression. Moderation technique is basically based upon a variable that has strong influence on both dependent as well as independent variable at the same time. A cross term is found which is made by the interaction of that moderating variable with the independent variable, influenced by it. In the current study location is treated as a moderator between firm ownership and outsourcing decision.

$$OTS = \beta_0 + \beta_1 LOC + \beta_2 OWN + \beta_3 LOC * OWN + \varepsilon$$

Table 4: Hierarchical Regression Equations

Step1
$$OUT_t = \beta_0 + \beta_1 Edu + \beta_2 Gander + \beta_3 Desig + \beta_4 Exp + \beta_5 Age + \varepsilon$$

Step2 $OUT_t = \beta_0 + \beta_1 Edu + \beta_2 Gander + \beta_3 Desig + \beta_4 Exp + \beta_5 Age + \beta_6 CCT + \varepsilon$
Step3 $OUT_t = \beta_0 + \beta_1 Edu + \beta_2 Gander + \beta_3 Desig + \beta_4 Exp + \beta_5 Age + \beta_6 CCT + \beta_7 FOC_t + \varepsilon$
Step 4 $OUT_t = \beta_0 + \beta_1 Edu + \beta_2 Gander + \beta_3 Desig + \beta_4 Exp + \beta_5 Age + \beta_6 CCT + \beta_7 FOC_t + \beta_8 QLT + \varepsilon$
Step5 $OUT_t = \beta_0 + \beta_1 Edu + \beta_2 Gander + \beta_3 Desig + \beta_4 Exp + \beta_5 Age + \beta_6 CCT + \beta_7 FOC_t + \beta_8 QLT + \beta_9 LOC + \beta_{10} OWN + \beta_{11} LOC * OWN + \varepsilon$

5. Result Analysis

A total of four hundred and fifty questionnaires were distributed out of which three hundred and twenty-three returned, the study includes three hundred and six questionnaires as the rest seventeen could not function due to incomplete information or inconsistency issues. So, the overall response rate of the study is sixty eight percent.

Demographic Characteristics

Table A: Features of the Sample

| Variable | Item | Frequency | Percentage |
|-------------------|---------------------|-----------|------------|
| Designation | Manager | 123 | 40.2 |
| | General Manager | 63 | 20.6 |
| | Operational Manager | 51 | 16.7 |
| | accounts officer | 40 | 13.1 |
| | Other | 29 | 9.5 |
| Employment Period | 10 years or below | 51 | 16.7 |
| | 11-15yrs | 79 | 25.8 |
| | | | |

| | 16-20yrs | 86 | 28.1 |
|-----------|-------------|-----|------|
| | 21-25yrs | 57 | 18.6 |
| | above 25yrs | 33 | 10.8 |
| Gander | Male | 269 | 87.9 |
| | Female | 37 | 12.1 |
| Age | Up to 30yrs | 52 | 17 |
| | 31-40yrs | 127 | 41.5 |
| | 41-50yrs | 85 | 27.8 |
| | 51-60yrs | 41 | 13.4 |
| | above 60yrs | 1 | 0.3 |
| Education | Graduate | 82 | 26.8 |
| | Masters | 126 | 41.2 |
| | ACCA | 63 | 20.6 |
| | Other | 35 | 11.4 |

Table5 Correlations between Outsourcing Decision and Factors behind it

| Variable | Mean | SD | OTSM | COSTM | FOCM | QLTM | LOCM | OWN |
|----------|------|------|--------|--------|--------|--------|--------|-----|
| OTS | 4.16 | 0.28 | 1 | | | | | |
| CCT | 4.03 | 0.45 | .371** | 1 | | | | |
| FOC | | | .334** | | 1 | | | |
| | | | | .476** | 221** | 1 | | |
| | | | | | | | | |
| LOC | 4.14 | 0.32 | .273** | .208** | .344** | .168** | 1 | |
| OWN | 4.23 | 0.43 | .344** | .336** | .240** | .398** | .210** | 1 |

Table 6 reports the reliability index for both the dependent and independent variables along with the number of measures used to construct them. All of the items are significant statistically ($\alpha > 0.6$) (Field, 2009)

Table 6 Reliability Statistics for Variables of the Study

| Variable name | No of Items | Cronbach's Alpha |
|---------------------------|----------------|---------------------|
| Outsourcing Decision OTSM | 10 | 0.704 |
| Quality Enhancement QLT | 4 | 0.703 |
| Cost Cutting Tool CCT | 4 | 0.683 |
| Focus on Core FOC | 4 | 0.712 |
| Location Attraction LOC | 4 | 0.813 |
| Firm Ownership OWN | 2 | 0.838 |

Factor analysis was applied upon a number of factors behind outsourcing decision which are based upon the past literature which become part of the questionnaire used for the study. The theory of factor analysis is based upon the issuance of elements and categorization of dimensions contained by the factors for outsourcing.

From the table 7 core factor loadings behind outsourcing decision could be seen clearly, quality enhancement, cost cutting tool and focus on business core come up to be most prominent factors that affect outsourcing decision. Location selection and firm ownership follow with less factor loadings than the other three.

Table 7 Factor Analysis: Factors behind Outsourcing Decision

| | Component | | | |
|---------------------|-----------|-------|--|--|
| Variables | 1 | 2 | | |
| Quality Enhancement | 0.875 | 0.285 | | |
| Cost Cutting Tool | 0.846 | -0.06 | | |
| Focus on Core | 0.043 | 0.829 | | |
| Location Attraction | 0.17 | 0.767 | | |
| Firm Ownership | 0.716 | 0.138 | | |

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

. Rotation Converged in three iterations

In order to check whether the sample chosen for the study is adequate Keiser-Meyer-Olken test for sample adequacy and Bartlett's test of sphericity was performed (Hutcheson and Sofroniou, 1999). The KMO statistic as per table 8 falls in the region of a good i.e. factor analysis is good to be performed on this data set. Bartlett's test report to be significant as well (p<0.001) proving that factor analysis is appropriate.

| Table 8 KMO and Bartlett's Test | | | | | | |
|---------------------------------|-------------------------------|---------|--|--|--|--|
| Kaiser-Meyer-Olkin | Measure of Sampling Adequacy. | .765 | | | | |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 307.663 | | | | |
| Sphericity | Df | 15 | | | | |
| | Sig. | .000 | | | | |

Table 9 depicts the summary of contribution made by each of them in motivating a company to opt for outsourcing. In stage one each model hold the control variables (designation, age, experience, education and gander of the respondents) later in stage two CCT is added to analyze its impact upon outsourcing decision, which is found significant statistically (p<0.05) i.e 1unit increase would push outsourcing up to 0.16 units. In stage three FOC is added to analyze its impact upon outsourcing decision, which is found significant statistically (p=0.05) i.e 1 unit increase core focus would push outsourcing up to 0.26 units along with cost cut tool. In stage four QLT is added to analyze its impact upon outsourcing decision, which is found significant statistically (p<0.05) i.e 1 unit increase in quality would push outsourcing up to 0.24 units along with cost cut tool and company focus on core. In last stage firm ownership and location attraction are added to the model along with their moderation effect to analyze their impact upon outsourcing decision, which is found significant statistically (p<0.05) showing up highly significant impact of all of the factors i.e. cost cut tool, company focus on core, quality enhancement, firm ownership, location attraction for outsourcing and the moderator upon outsourcing decision of the firm. It is clear from the results that all of the models are statistically significant i.e. each of the outsourcing factor used by the study has a significant impact upon the outsourcing decision making of the textile company. It can be seen that with addition of a factor the explaining power of the model increases. R square rises drastically.

Table 9 Hierarchical Regression Analysis

| Predictors | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|------------|---------|---------|---------|---------|---------|
| (Constant) | 2.12*** | 3.49*** | 3.56*** | 4.07*** | 4.16*** |
| | 0.09 | 0.16 | 0.23 | 0.22 | 0.29 |

| Desg | -0.02* | -0.02 | -0.02* | -0.02 | -0.02 |
|-----------|--------|---------|---------|---------|---------|
| | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Exp | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 |
| | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Gender | 0.08 | 0.06 | 0.07 | 0.07 | 0.08 |
| | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 |
| Age | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 |
| | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Edu | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 |
| CCT | | 0.16*** | 0.16*** | 0.17** | 0.18** |
| | | 0.03 | 0.03 | 0.03 | 0.03 |
| FOC | | | 0.26*** | 0.28*** | 0.29*** |
| | | | 0.05 | 0.05 | 0.05 |
| QLT | | | | 0.24*** | 0.25*** |
| | | | | 0.04 | 0.04 |
| OWN | | | | | 0.20*** |
| | | | | | -6.52 |
| LOC | | | | | 0.08** |
| | | | | | -1.95 |
| OWN*LOC | | | | | 0.31*** |
| | | | | | -3.62 |
| | | | | | |
| R2 | 0.025 | 0.087 | 0.172 | 0.259 | 0.323 |
| R2 Change | 0.025 | 0.062 | 0.085 | 0.087 | 0.064 |
| | | | | | |

High LOCM

Change in F 1.512 20.431*** 30.488*** 34.959*** 13.434***

Geographical location attraction is concerned while deciding to outsource. Hypothesis 4 is fully supported by the results (significant at 5% confidence interval). In view of Pakistan economic geography does play a vital role since the nation prefer to outsource in trade free zones or the areas with least transaction cost and cultural & production diversity etc. the results support the literature discussed above like Williams (2000) . (Pongelli et. al, 2018) recently brought the idea of benefits from captive outsourcing which is strongly implied in Pakistan. The theories like trade economic theory and theory of new economic geography are evidenced by textile sector as well.

Ownership of the firm has association with outsourcing (significant at 1% confidence interval) strongly supports hypothesis six (Williamson 2010); Pongelli et al; 2018) etc. The textile companies of Pakistan where families own the companies and intend to outsource for better profits, the results are in light of RBV and Stewardship perspective, hence support hypothesis six for the study. Hypothesis seven is about the moderation effect of location in association between firm ownership and outsourcing and is also strongly supported by the model (statistically significant at 1% confidence interval). Gu, Lu, & Chung, (2016) Banalieva et al; (2011) etc discussed that location selection does impact the owner's aptitude towards outsourcing.

Table 10 shows that high geographical attractiveness has significant effect upon the association between firm ownership and its outsourcing decision (p<.001). This is supported by various theories of new economic geography that various attractive places with less production, transaction cost motivates firm owners to opt for outsourcing.

Table 10 Regression Results for Conditional Effect of Ownership on

Outsourcing at different Values of Location Attraction

Factor Effect SE t-value P-value

Low LOCM 0.08 0.04 1.76 0.08

0.04

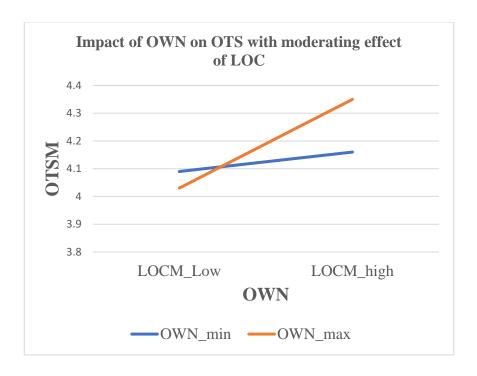
0.32

Figure 1 depicts that when firms are publically owned they have little effect of geographical attraction upon their outsourcing decision. Whereas when the firms are privately owned they highly consider geographical attractiveness to opt for outsourcing decision.

7.02

0

Figure-1: Impact of OWN on OTSM with moderating effect of LOCM



Conclusion

Outsourcing decisions are affected by a number of internal and external factors whether at micro or macro level. The purpose of this study was to examine the effect of various firm level factors that may have influence on outsourcing decision. The study targeted the textile industry of Pakistan due to its major loss making it important to outsource to control the situation on immediate basis. The study focused on bringing out the firm level factors behind outsourcing, survey method was adopted to do it in best way.

Results analysis describes that all of the selected factors i.e. cost cut tool, focus on core, quality enhancement, and location attraction, firm ownership has strong positive relationship with outsourcing.

This study provides an insight about the micro factors that can influence the outsourcing strategy. Results are consistent with the literature and remarkable economic theories.

6. Research Limitations and Recommendations

The research is limited to textile industry of a third world country, a cross industry analysis in the same country could be done in further research to find out if the factors are same in other industries or not. Beside this a cross country analysis of third world economies could be made to check out the factors of both the countries as there is still much gap in paradigm of developing specially third world countries.

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