

FACTORS AFFECTING GROWTH OF LOGISTICS OUTSOURCING: A PERSPECTIVE OF THIRD-PARTY LOGISTICS PROVIDERS IN PAKISTAN

Dr. Mohammad Shaiq, and Masood Hassan

ABSTRACT

Logistics outsourcing market is globally expanding at a breakneck pace. Like other industries, the demand and supply forces of logistics service industry are also affected by external determinants. The primary objective of this research is to evaluate the behavior patterns of Logistics Outsourcing Market (LOM) in Pakistan in contrast to global demand and supply patterns of logistics industry and find out the major factors, drivers and obstacles which impact the growth of logistics outsourcing in Pakistan. For statistical analysis, this study solely relied upon the perspective of logistics service providers. A sample of 180 logistics service providers was surveyed to gather information through a semi-structured questionnaire. Results confirmed that the behavior of logistics outsourcing market in Pakistan is tilted towards local business needs and customer demands. Statistical analysis also proved that, as far as the growth of logistics market is concerned, the internal industry factors along with national business environment have more impact on the growth of logistics outsourcing than global drivers and challenges.

Keywords: Logistics; Outsourcing; Logistics Service Providers (LSP); Pakistan; Logistics Outsourcing Market (LOM).

INTRODUCTION

The rapid development in communication technology during last three decades has opened new doors of opportunity for the growth of international trade, but simultaneously it has also instigated intense competitive environment that businesses are now more focused to adopt competitive strategies. Every business tries to find out the possible efforts to get a competitive edge over others. Due to this growing competition in the global market, organizations are compelled to consider new techniques to generate additional value (Elmuti, 2003). Because of globalization,

many companies all around the world started outsourcing their non-core business activities, in order to concentrate on their core competencies (Gupta, Sachdeva, & Bhardwaj, 2011). The objective and purpose behind the decision of outsourcing the non-core business activities are always to get those benefits which otherwise are not possible (Hashmi & Mansoor, 2013). Since the primary emphasis of all business plans is to obtain cost competitiveness in domestic and international markets, an effort is made to reduce the cost of production and distribution without compromising on the quality of the product and service. Efforts are made to regularly enhance the quality and minimize the costs involved (Szuster, 2010). This philosophy of outsourcing logistics services has given birth to the concept of a new service market known as Logistics Outsourcing Market (LOM). Like all other markets, LOM is also governed by the market forces; demand and supply; where demand for service comes from manufacturers and shippers, whereas the services are supplied or provided by 3rd Party Logistics (3PL) Service Providers.

During last twenty years, substantial research work is done on the concept of outsourcing of logistics functions, but most of the work is done on the demand side perspective of manufacturers, distributors, and shippers. Previous researchers attempted to find out the answers of questions like what functions shippers usually outsource?; what services should be outsourced?; what are the factors affecting shippers' decision to outsource?; how the outsourcing decision could be made more profitable?; and what should be the criteria to select a right service provider? (Hashmi & Mansor, 2013; Zameer & Ali, 2013; Szuster, 2010; Vasiliauskas & Jakubauskas, 2007). However, research on Logistics Outsourcing Market (LOM) from the perspective of Logistics Service Providers (LSPs) is rarely found (Evangelista & Kilpala, 2007). Few studies are conducted on Third-Party Logistics (3PL) companies to know their structure and characteristics (Hertz & Alfredsson, 2003). Compared to developed economies, little research is done in Pakistan on LOM specifically on the supply side perspective, however studies could be found on the demand side perspective which focuses on the issues related to shippers and outsourcers. The prospect of producers and shippers about LOM is crucial as they are the source to generate demand for logistics services. However, the opposite market force that is the supply of services, which comes from Logistics Service Providers (LSPs), is equally critical for analyzing any LOM and this research is an effort in this direction.

There are many factors, drivers, and obstacles within the market itself or outside the market which not only affect the intensity and the direction of the demand and supply forces of logistics services, but resultantly affect the size and rate of growth of LOM. LSPs, specially Freight Forwarders (FF) in Pakistan are not working in ideal business conditions. Unavailability of proper infrastructure, unstable economic and political conditions, ambiguity in government trade policies, inefficient operations of concerned government offices and agencies and above all the over expectations from shippers regarding the quality of services make LSPs job more difficult. This consequently hinders the growth of LOM in Pakistan. How these factors affect LSPs' performance and what is the extent of their impact on the growth of LOM is the primary objective in order to assess and analyze LOM's performance.

RESEARCH QUESTIONS

This research is an effort to find out the answer to two fundamental questions related to logistics outsourcing in Pakistan.

- What is the overall condition of the 3PL market in Pakistan and how it compares with the trends in the global market?
- What are the major challenges, logistics capabilities, and local factors, within and outside industry, which help or hinder the growth of Logistics Outsourcing Market in Pakistan?

LITERATURE REVIEW

Logistics encompass all processes related to procuring, converting or producing and distributing raw material or final goods to customers meeting their satisfaction, maintaining the quality of goods and services in a cost-effective manner (Sheikh & Rana, 2014). The most common services which come under the umbrella of logistics and are usually outsourced by producers and shippers are domestic haulage, international transportation, warehousing, customs brokerage, freight forwarding, reverse logistics (defective, repair, return), freight bill auditing and payment, product labeling, packaging, assembly and kitting, cross-docking, inventory management, order management and fulfillment (Langley, 2015). These services, though apparently look very ordinary to leave any prominent impact on the productivity or affecting company's competitive status but in present days, better logistics management is considered to be a primary source to make money or save money and the last frontier to maintain or enhance a company's competitive advantage (Vasiliauskas & Jakubauskas, 2007). The technological innovations and

communication advancement have created a bizarre scenario for trade today, that is, “cooperate to compete” both within the geographical boundaries of countries and beyond. This scenario gave birth to the concept of Supply Chain Management (SCM), and currently, even large companies are have entered into supply chains to achieve competitive advantage (Noor, Saeed, & Lodhi, 2013). The advancements in communication technology, consequent virtual shrinkage of distances and globalization of trade has established emphasis on customers’ satisfaction along with the quality of the product, the quality of distribution channels, timeliness, and customer convenience.

Initially, the concept of the supply chain was presented in 1982 and the term was first used in management literature (Noor, Saeed, & Lodhi, 2013). Supply Chain Management (SCM) is defined as a sort of connectivity between mutually supplementing and supporting organizations to add value to the interrelated processes through timely and accurate flow of material, money and information, for the benefit of all parties, right from the point of origin to the point of final usage or consumption of product. (Christopher, 2016). It is the philosophy of management which starts from the doorstep of the supplier to provide material and information down the stream up to the end user (Noor, Saeed & Lodhi, 2013). The logistics activities cover the whole supply chain, so it becomes imperative to enhance the performance of total supply chain for the benefit of all members in the chain (Sheikh & Rana, 2014).

Logistics management within the supply chain is the name of holding and moving right material to make available in the right quantity at the right place. The third party logistics provider is an external partner not the part of a trade deal between two parties, but providing and executing logistical needs on behalf of the suppliers or shippers (Hertz & Alfredsson, 2013). Definitions of third-party logistics presented by Evangelista, Cioffi, and Sweeney (2005); Berglund, Van Laarhoven, Sharman, and Wandel (1999), are amalgamated together to extract refined definition which says that the logistics activities executed and performed by some other person/organization on behalf of, and under the name of actual shipper, and comprise of at least transportation activity are known as third party logistics.

In other words, the middle party which never possesses the title of the product but handles short-term storage and helps moving goods from one party to other is called a third-party logistics service provider (Hertz &

Alfredsson, 2003). The third-party logistics also undertake other activities including inventory management, warehousing, tracking, tracing and some other value-added activities like installation, after sale service, assembly and knitting (Evangelista & Kilpala, 2007). It was initially mentioned by Bolumole (2001), that the third-party logistics are those who provide various services like warehousing, distribution, transportation and inventory control but all in a customized way, as and when required by the customer (Green, Turner, Roberts, Nagendra, & Winger, 2008). The quality of performance of 3PLs increases due to the ability to cooperate with supply chain partners both vertically and horizontally (Sheikh & Rana, 2014). In this capacity 3PLs provide services like inland transportation, short or long-term storage and in case of international trade the consolidation and deconsolidation also becomes an essential function. Other than this the tracking and tracing facility, cargo insurance, pick and pack, border and custom related functions, contacting and contracting with the carrier are regular services provided by these providers (Ajakaiye, 2012).

A job, function or process which otherwise could be performed through in-house resources of the business but instead it is contracted out to a third party for a fixed period of time is known as outsourcing (Handfield, 2006). As a strategy, management of business organizations outsource few non-core but essential business activities to efficient and specialized service providers (Elmuti, 2003). It is a strategy to get some business activities done through outside resources and releasing internal human and other capital assets traditionally occupied to perform such activities in-house (Handfield, 2006). In general, the activities which businesses usually outsource are secretarial and clerical work, accounting functions, customer support, sales marketing, I.T support function, warehousing and distribution, management services, manufacturing of components, etc. (Elmuti, 2003). Logistics outsourcing is considered to be a contractual agreement with any outside logistics service provider to execute some logistics activity, on behalf of a manufacturer or shipper against some specific costs within some definite time period, which otherwise could be or would have been performed through in-house human and capital sources (Szuster, 2010). The fundamental difference between traditional outsourcing of warehousing or transport service and the modern concept of 3PL outsourcing is that of a single activity and transactional outsourcing versus complex natured, multiple activities contracted out for a specific usually more extended time period (Szuster, 2010).

The concept of outsourcing is that “something is better left to others” (Hashmi & Mansoor, 2013) and only to do what one can do better than others. To achieve a competitive edge or advantage over the competitors, one must concentrate more on core competencies and should do only what one can do better. Although outsourcing has its demerits too, the outsourcing market for LSPs is rapidly growing (Elmuti, 2003). Of course, the obvious downside of entrusting on part of the critical business in the hand of others is like losing some control over some part of own business operation, but simultaneously businesses get benefits for using others’ assets, specialized knowledge, and professional expertise. Such business decisions have two aspects, the advantages, and disadvantages but in the good supply chain practice, one’s advantage is not a disadvantage of another partner. This is the situation which should be called the win-win situation as both parties gain something but not losing anything (Szuster, 2010). Majority of the advantages and disadvantages which various researchers have identified are mentioned in Table 1. (Green et al., 2008).

Table 1. Advantages and Disadvantages of Logistics Outsourcing

Advantages	Disadvantages
Cost effectiveness	Losing control over functions outsourced
Concentration on core competency	Possibility or discount of services
Freeing up Financial and Operational Resources	Negative impact on in-house force
Access to LSPs resources	Business culture clash
Efficiency and Flexibility	Business culture difference
Risk Sharing	Disconnection Supplier and customer
Improvement cash inflow	

Source: Green, et, al, 2008

In the recent past, the performances of LSPs have been under microscopic view. Various international research organizations have conducted numerous surveys to find the latest trends in LOM and looking at the merits and demerits of outsourcing from a different perspective. These surveys and studies identified various risk factors, challenges, capabilities, benefits, and problems faced by logistics outsourcing markets around the world. Some of the studies and surveys with important conclusion are discussed below.

Capgemini Consulting

The 21st Annual Third-Party Logistics Survey revealed that almost all 3PL providers and users were of the view that in recent days outsourcing,

instead of transactional relationship it has turned into a strategic partnership and has resulted in logistics cost reductions, improved customer service and innovative ways to improve logistics effectiveness (Langley, 2015). This survey also listed the services which shippers mostly outsource to 3PL provider. The top 10 services from their survey are listed in Table 2. The findings of this survey can be a perfect benchmark for reviewing any regional or national logistics outsourcing market and comparing the demand and supply of logistics services with the findings of this survey.

Table 2. Most frequently Outsourced Services

Logistics Services	
International transportation	Order management and fulfillment
Warehousing	Inventory management
Customs brokerage	Supply chain consultancy by 3PLs
Freight forwarding	Service parts logistics
Reverse logistics (defective/return)	IT related services
Freight bill auditing and payment	Fleet management
Product labeling, packaging, kitting	LLP / 4PL services
Cross-docking	Customer service

Source: 21st Annual Third-Party Logistics Survey (2014)

Amber Road Survey

Sponsored by Amber Road Powering Global Trade, on behalf of Supply Chain Management Review, Peerless Research Group carried out a survey of 929 top logistics and supply chain managers from all over the world and published their findings under the title “*Globalization Drives Market Need for Supply Chain Segmentation: Research & Key Strategies.*” Based on the findings of their survey they mentioned top ten challenges and threats for Logistics Outsourcing Market, which are mentioned in Table 3.

Table 3. Top Ten Challenges and Threats to Logistics Outsourcing

International Challenges	
Rising transportation rates	Ability to find, trained and right skilled people
Fluctuation in customer demand	Access to accurate, time-sensitive information
Increasing customer expectations	Ability to form relationship with SC partners
Global economic turmoil and uncertainty	Keeping up with new technology & innovation
Changing regulatory requirements	Globalization of customers and suppliers

Source: Amber Road 21st Annual Third-Party Logistics Study, 2014

World Bank Logistics Performance Index (LPI)

The international bank for reconstruction and development and the international trade unit of the World Bank, based on an international survey of all exporting and importing countries, calculate LPI and rank all countries by their logistics performance. It was started in 2007, and since then five surveys have been carried out which are published in report form. According to the survey, Pakistan stands 68th out of 160 countries (Arvis et al., 2016). This study used six indicators, shown in table 4, to judge logistics performance of all countries.

Table 4. LPI Indicators

World Bank Logistics Performance Indicators	
Efficiency of customs and border clearance	Ability to track/trace consignments
Quality of transport infrastructure	Competence and quality of logistics services
Arranging competitively priced shipments	Frequency shipments reach in time

Source: Arvis et al. (2016).

Based on the review of various other studies; research carried out on logistics outsourcing market; and the knowledge gained through formal and informal discussion with various logistics service providers and experts in this field, few more factors, related to business environment with Pakistan's logistics industry, are identified and are shown in Table 5. These factors affect the growth of the logistics industry and outsourcing trends.

Table 5. Pakistan Specific Issues

Customer Related Issues	
Internal security situation and restlessness	Hold of foreign logistics companies
Attitude of customs staff and border officials	Delaying payment habit of clients
Lack of local LSPs mutual cooperation	Lack of financial resources
Undefined and undeclared Govt. policy changes	Personal liking and disliking
Demand for commission from clients staff	

Source: Authors' Conceptualization

Research Hypotheses

Various research studies and recognized global surveys from professional consultants and organizations highlighted different factors which help the growth of logistics outsourcing markets around the world. Similar surveys and research studies have identified various issues and obstacles which discourage shippers in outsourcing logistic activities to 3PL providers. As Capgemini two-year survey (Langley, 2015), mentioned that some customers reported increased use of

logistics services while others indicated that they might return to their in-house resources for services, there are always factors which incite shippers to outsource more, but simultaneously there are few risk factors which stop shippers from doing so. For the sake of studying any regional or national market, one needs to take into consideration all global, regional and local issues and external and internal industry concerns. In order to conduct the study on LOM in Pakistan, few research questions were raised and mentioned above. Based on the previous research and surveys, following research hypotheses were formulated.

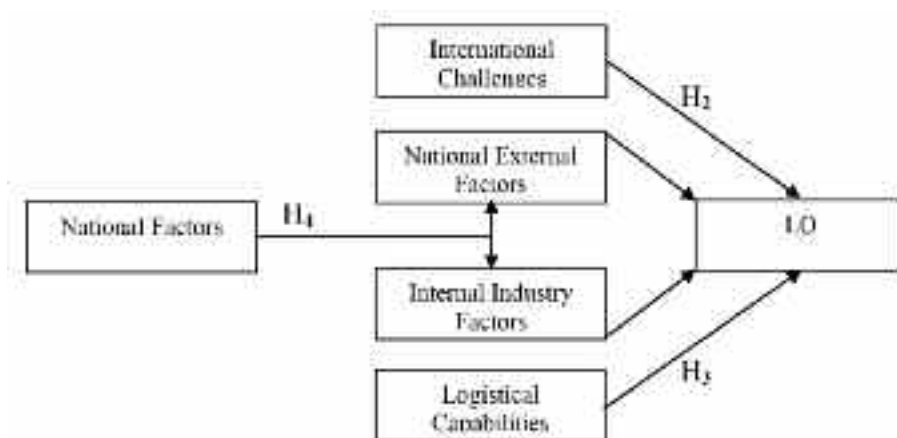
H₁: Logistics services offered by LOM in Pakistan are globally competent and shipping industry is looking for similar logistics capabilities in LSPs in Pakistan.

H₂: Global challenges in logistics industry significantly impact the growth of logistics outsourcing in Pakistan.

H₃: Logistics performance indicators identified by the World Bank significantly impact the growth of logistics outsourcing in Pakistan.

H₄: At the national level, Internal and external industry-related factors significantly impact the growth of logistics outsourcing in Pakistan.

The conceptualized model to test these hypotheses and to get answers to the questions raised in the introductory section is presented in Figure 1. The factors, issues, capabilities, drivers, and obstacles identified through research surveys will be used as independent variables (IV) or predictor to assess their causal impact on LO as dependent variable (DV).



Independent Variables: International Challenges (IC), Logistics Capabilities (LC), External Factors (EF), Industry Factors (IF), **Dependent Variable:** Logistics Outsourcing Market (LOM)

Figure1. Conceptualized Model

RESEARCH METHODOLOGY

To analyze Pakistan's logistics outsourcing market, the findings of globally recognized international surveys of significant producers, shippers and logistics professionals about the factors, challenges, issues and problems faced by logistics outsourcing are taken into consideration. The findings of these surveys shall be used as a benchmark to compare the capability of domestic logistics service providers in Pakistan. Also, another quality research work is reviewed to establish the major indicators to measure the impact of these indicators on the growth of logistics outsourcing in Pakistan. For the purpose of analysis, various challenges, factors issues and problems referenced above are categorized in the following four categories

- International Challenges
- Logistical Capabilities
- National Industry Related Factor
- National Non-industry Related Factors

This research is based on the knowledge and findings of global surveys on pragmatic grounds supported by numbers and values through a collection of psychometric data, so the method used here is mixed research method (Creswell, 2003). There are hypotheses about measuring the effect of various internal and external factors on LOM, so the regression analysis is conducted to measure the impact of various factors (IV) on the growth and performance of LOM (DV) in Pakistan.

Participants and Sample

As mentioned above, this study is based upon the perspective of LSPs on the importance and effectiveness of the above factors and reasons and their impact on the growth of LOM in Pakistan. Selection of a valid representative sample for the collection of primary data is always a tricky step, and this becomes further difficult when it comes to select a sample where the actual size of the population is either underestimated or misreported. In less developed economies like Pakistan, where many other sophisticated logistics activities like warehousing, customer orders, inventory control, etc. are not frequently and widely outsourced, International Freight Forwarder (FF) is another term for 3PL service providers (Szuster, 2010). Due to the nature of logistics industry in Pakistan, many local LSPs might not be registered with the federal board of revenue or with other related government agencies. Thus, for population determination, we took members of Pakistan International Freight

Forwarders Association (PIFFA) as our population. PIFFA is the recognized Pakistani chapter of Fédération Internationale des Associations de Transitaires et Assimilés (FIATA). Chin, Bae, and Kim (2007), used the same criterion and took the members of Shanghai International Forwarders Association as total population while surveying Chinese LSPs. Currently, in total, there are 648 registered members of PIFFA, out of which 449 are registered in Karachi. Since so far Karachi is the only port city of Pakistan, most of the remaining 200 LSP belonging to other cities also have their branch offices in Karachi. Considering time and resource constraints, through systematic random sampling method, a sample of 250 possible respondents, that is 38% of the total population was drawn.

Instrument and Data Collection

For data collection, this study used a standard questionnaire survey method to get a response from informants who are strategic or tactical managers working for LSPs in Pakistan. The questionnaire was mainly comprised of closed questions in order to get simple and straightforward responses from respondents. The first two sections of the questionnaire contained questions related to information about demographics and the capability and flexibility of the responding company and its span of services provided to its clients. The next section was comprised of the questions regarding the current state of outsourcing market and various challenges and problems faced by Pakistan's LOM. A 5-point Likert scale was used to carry out statistical inference analysis, for questions related to the level of agreement and satisfaction of respondents. Questionnaires were mailed to all possible respondents, followed up emails were sent, and calls were made, but the response was feeble. After a continuous effort of four and a half month, 193 questionnaires were filled. The response from 13 LSPs was not up to the mark, so responses only from 180 respondents were included in the final analysis.

Data Analysis

Other than some descriptive statistics to test hypothesis H_1 , multiple regression analysis was the main inferential tool to test hypotheses H_2 , H_3 and H_4 . Using Statistical Package for Social Sciences (SPSS), the necessary tests to check the reliability, validity, and multicollinearity were carried out being the prerequisite before running regression analysis between the four latent categories as independent variables and LOM as the dependent variable. The internal consistency and reliability were tested by computing Cronbach's Alpha (α) for each scale. According to Nunnally

and Bernstein (1994), and cited by many empirical business studies, the Cronbach's alpha coefficients of 0.70 and above are required for established scales as used in this research.

RESULTS AND DISCUSSION

This section discusses the results of statistical analysis performed through SPSS, to test the hypotheses. Table 6 provides the necessary descriptive information related to age and staff size of sample companies and the percentage of companies which own assets, like a warehouse and delivery vehicles. Table 7 gives LSPs perspective about what makes shipper outsource logistics services or stops them from outsourcing. This table also shows what capabilities shippers prefer LSPs to have before shippers decide to hire LSPs services.

Table 6. Descriptive Statistics

Descriptive Information	
Range of Company Age	From Max = 35 years Min = 2 years
Average Company Age	12 years
Average Staff Size	14 Heads
Percentage of Companies having Own Warehouse	9%
Percentage of Companies having own vehicles	17%

Table 7. LSP's Perception About Shippers/Customers

LSPs Perspective about Client	
Top 3 factors shippers consider most while outsource logistics activity to LSP	1- Service quality 2- Cost saving 3- Ease of operation
Top 3 reasons why Shippers are afraid of or reluctant to outsources logistics activity.	1- Hidden cost 2- Inefficient management 3- Leakage of latent information
Top 3 qualities shippers emphasize while qualifying LSPs for outsourcing logistics activity.	1- Past track record 2- Competence and experience 3- Reputation enquiry from other shippweers
Top 3 services which LSPs further sublet to other LSPs in Pakistan.	1- Past track record 2- Competence and experience 3- Reputation enquiry from other shippers

Statistical Analysis

To satisfy the assumptions for the appropriateness of the data, few tests as advised by Hair, Black, Babin, Anderson, and Tatham (2006), were carried out. Cronbach's alpha coefficient was calculated to check reliability and internal consistency of data for the scales or subscales used

in the analysis. The value of Cronbach's alpha was 0.78 which is within the acceptable range from 0.70 to 0.95 (Tavakol & Dennick, 2011). Although Kaiser-Meyer-Olkin Test of Sampling Adequacy (value of 0.61) and Bartlett's test of sphericity (value of 262.59, Sig .000) were run, however, since this study mostly uses established and internationally validated scales, so no component analysis was required.

Before running the regression analysis between independent variables and LOM, the multicollinearity of all factors was checked. All factors having a tolerance value between 0.377 and 0.604 and Variance Inflation Factor (VIF) values between 1.65 and 2.65 were found free from multicollinearity. A value of 10 has been recommended as the maximum level of VIF (Hair, Anderson, Tatham, & William, 1995). For hypotheses testing, multiple regression was run using SPSS. The results of hypotheses testing are discussed below:

Hypothesis Testing. Four hypotheses were formulated to study the LOM in Pakistan. The first hypothesis was about the comparison of local service offerings with global offerings, and the other three hypotheses were about the impact of national and international challenges and logistics capability on the growth LOM in Pakistan.

Hypothesis H₁. This hypothesis was about the span of services offered by LOM in Pakistan to be in line with the global pattern presented by Langley (2015), survey of global organizations. Figure 2 depicts the comparison, and it is observed that the pattern of the services offered by LOM in Pakistan is significantly different from LOM of other countries especially for major services like *Domestic Transportation, Warehousing, Freight Forwarding, Customs Brokerage, and Customer Service*. Possibly this difference is due to the following reasons.

- 1) Road transport in general, within the country, and most of the Afghan Transit Trade (ATT) is handled by private small truck owners and not by LSPs. Our survey shows that almost 90% of formal logistics companies usually do not own or maintain vehicle fleet so are seldomly directly involved in domestic transport.
- 2) Our survey also reveals that 90% of the firms do not own warehouses, so most of the manufacture in Pakistan take private storage space on rent and are maintained by themselves. For this function too, LSPs are not directly involved.

- 3) As shown in our sample survey the freight forwarding is the single most offered service by almost all LSPs to help businesses in their export and import activities.
- 4) Customs clearance is one of the most regulated activities, and usually, this function cannot be performed in-house by shippers, so LSPs are necessarily hired for this function.

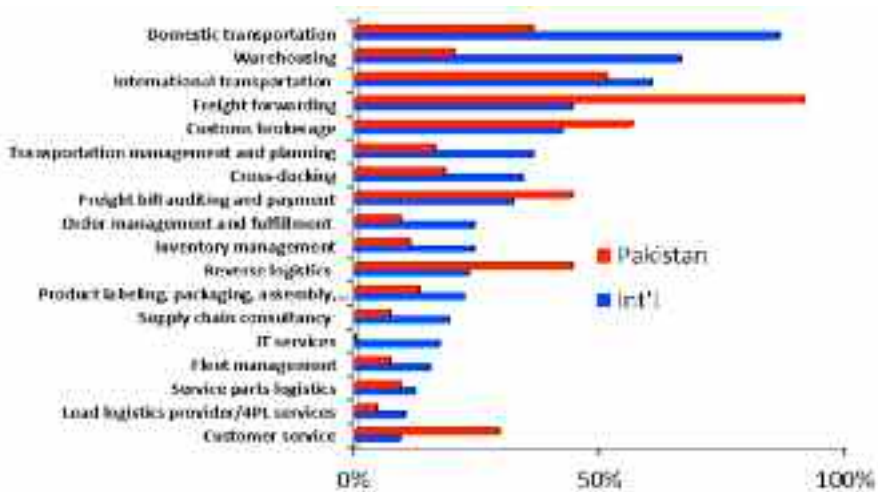


Figure 2. Services offered by LSPs in Pakistan

Hypothesis H₂, H₃, and H₄: These three hypotheses were about the impact of *International Challenges (IC)*, *Logistics Capabilities (LC)*, *Industry External Factors (EF)*, and *Industry Internal Factors (CF)* on *Logistics Outsourcing (LO)* in Pakistan. Multiple regression was conducted to assess the impact of above mentioned four independent variables on LO as the dependent variable. This model was found statistically highly significant $F_{(4, 175)} = 11.094; p < .000$ with the value of coefficient of multiple determination (R^2) of 0.202, which means that all four independent variables collectively explained 20.20% of the variance in the logistics outsourcing. Out of these four independent variables only *Industry External Factor (EF)* ($t = 2.697, \beta = 0.226, p < .008$) and *Industry Internal Factors (IF)* ($t = 4.004, \beta = 0.410, p < .000$) made a statistically highly significant unique contribution to the model, clearly confirming hypotheses H₄, which was about Pakistan’s local factors. *International Challenges (IC)* although showed a positive impact on LO but was not statistically significant, while *Logistics Capabilities (LC)* showed a non-significant negative impact on logistics outsourcing in Pakistan.

CONCLUSION

Through the results, it could be concluded that growth of Pakistan's logistics outsourcing market is more affected by local or national factors instead of global challenges, contrary to the identification by various global surveys. National factors can be divided into two major categories: problems within the industry which we call the industry's internal factors, and others are general factors of macro-level outside the industry. Issues related to industry include factors like price war within LSPs, payment of commissions to get business, kickbacks, credit payment issues, service quality, hidden costs, confidentiality of information, etc. Other external macro-level national factors which include security issues, political stability, government policies, exchange rate stability, the customs department's efficiency, etc. International challenges like an international regulatory requirement, rising transport rates, global economic turmoil, complex demands of importing countries, globalization issues did not show a direct impact on the growth of logistics outsourcing in Pakistan. One can say that such international factors can harm the growth of international trade in general, but logistics functional complexities remain same whether logistics is performed by shipper using in-house resources or through outsourcing such activities to 3PL, so logistics outsourcing within Pakistan is not affected by such global factors. Another critical variable was about logistics capabilities and six indicators used by World Bank for the calculation of the Logistics Performance Index were also used in this research. This variable showed a negative impact not accepting the null hypothesis, although this researcher was expecting these factors to play a vital role in the growth of logistics outsourcing which this study did not prove right. Again, as said in the case of international challenges, logistics capabilities measured by World Bank are at national level, so good or bad those will be same whether logistics activity is sourced out or performed in-house.

REFERENCES

- Ajakaiye, O. I. (2012). The Role of Logistics Service Providers in the Logistics Firms' Supply Chain. *Jonkoping International Business Journal*.
- Amber Road Global Trade. (2014). *Globalization Drives Market Need for Supply Chain Segmentation: Research & Key Strategies*, East Rutherford, NJ:
- Arvis, J. F., Saslavsky, D., Ojala, L., Shepherd, B., Busch, C., Raj, A., & Naula, T. (2016). *Connecting to Compete for 2016: Trade Logistics in the Global Economy – the Logistics Performance Index and its Indicators*. World Bank.
- Berglund, M., Van Laarhoven, P., Sharman, G., & Wandel, S. (1999). Third-party logistics: is there a future? *The International Journal of Logistics Management*, 10(1), 59-70.
- Bolumole, Y. A. (2001). The supply chain role of third-party logistics providers. *The International Journal of Logistics Management*, 12(2), 87-102.
- Chin, F. C., Bae, J. H., & Kim, G. O. (2007). A survey on the logistics service providers in Shanghai. *International Journal of Physical Distribution & Logistics Management*, 29(9), 588-605.
- Christopher, M. (2016). *Logistics & supply chain management*. Pearson: UK.
- Creswell, J. W. (2003). *Research Design Qualitative, Quantitative and Mixed Methods Approaches* (2nd ed.), Thousand Oaks, London: Lincoln SAGE Publications International Educational and Professional Publisher.
- Elmuti, D. (2003). The Perceived Impact of Outsourcing on Organizational Performance. *American Journal of Business*, 18(2), 33-42.
- Evangelista, P., & Kilpala, H. (2007). The Perception on ICT use among small logistics providers: a comparison between Northern and Southern Europe. *European Transport*, 35, 81-98.
- Evangelista, P., Cioffi, L., & Sweeney, E. (2005). An exploratory study of ICT usage in small logistics service providers.

- Green, F. B., Turner, W., Roberts, S., Nagendra, A., & Winger, E. (2008). A Practitioner's Perspective on the Role of a Third-Party Logistics Provider. *Journal of Business & Economics Research (JBER)*, 6(6), 9-14.
- Gupta, R., Sachdeva, A. & Bhardwaj, A. (2011). Criteria for Selecting 3pl Provider: A Literature Review. *World Academy of Science, Engineering and Technology*, 1(59), 2020 - 2024
- Hair Jr, J. F., Anderson, R. E., Tatham, R. L., & William, C. (1995). Black (1995), *Multivariate data analysis with readings*. New Jersey: Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*. (6th ed.). Upper Saddle River, NJ: Pearson Education International.
- Handfield, R. (2006). A Brief History of Outsourcing, Supply Chain Resource Cooperative, North Carolina State University.
- Hashmi, A. A., & Mansoor, A. (2013). Outsourcing Trends In Pakistan, *International Journal of Computer and Electrical Engineering*, 5(5), 451-455.
- Hertz, S., & Alfredsson, M. (2003). Strategic Development of Third Party Logistics Providers. *Industrial Marketing Management*. 32. 139-148.
- Langley, C. J. (2015). *Third-party logistics study: the state of logistics outsourcing - Results and findings of the 17th annual study*. Capgemini Consulting.
- Noor, N., Saeed, R., & Lodhi, R. N. (2013). Factors Affecting Supply Chain Management Effectiveness: A case of Textile Sector of Pakistan, *Journal of Basic and Applied Scientific Research*. 3(11), 56-63.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychological theory*. New York, NY: McGraw-Hill.
- Parashkevova, L. (2007). Logistics Outsourcing - means of Assuring the Competitive Advantage for an Organization. *Vadyba Management*, 2(15), 29-38.

- Sheikh, Z., & Rana S. (2014). The Role of Logistics Service Providers in Supply Chain Performance Management: A Comprehensive Literature Review. *International Journal of Academic Research in Business and Social Sciences*, 4(5), 608-613.
- Szuster, M. (2010). Outsourcing of Transport Service - Perspective of Manufacturers. *Total Logistics Management*, 3, 87-98.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53.
- Vasiliauskas, A. V., & Jakubauskas, G. (2007). Principle and Benefits of Third Party Logistics Approach when Managing Logistics Supply Chain, *Transport*, 12(2), 68-72
- World Bank. (2014). International Trade Unit. *Connecting to Compete 2014, The Logistics Performance Index and Its Indicators*, Washington, DC.
- Zameer, A., & Ali, F. (2013). Factors Influencing the Outsourcing Decision: A Study of the Banking Sector in Pakistan, *International Journal of Operation*, 2(3), 1-13.