The Impact of External Supply Chain Management on Export Performance of Kazakhstan’s Firms: Mediating Role of Export Marketing Capabilities

Sudawan Somjai\textsuperscript{a}, Puchong Pongsiri\textsuperscript{b}, Saroge Vasuvanich\textsuperscript{c}, \textsuperscript{a,b,c}Graduate School, Suan Sunandha Rajabhat University, Bangkok, Thailand, E-mail: \textsuperscript{a}sudawan.so@ssru.ac.th, \textsuperscript{c}saroge.va@ssru.ac.th

The aim of the current research paper was to investigate the impact of External Supply Chain Management on Export Performance of Kazakhstan’s Firms and as well as the mediating role of export marketing capabilities between the relationship of external supply chain management on export performance. In any country, exports play a major role and the export marketing capabilities enhance the performance of the export. It is essential for the exporters of any country to develop their export marketing capabilities. The researcher collected the data from Kazakhstani exporters who are working in various manufacturing firms. The total sample of the study was 334. The researcher collected data from the study sample group through a questionnaire. The study outcomes demonstrate that external supply chain management has a significant effect on export performance and in addition, the results show that export marketing capabilities significantly mediate the relationship between external supply chain management and export performance. This research article includes theoretical implications resulting from the findings and their practical significances. This study has research limitations such as the small sample size and future scholars should collect data from a larger group.

\textbf{Key words:} External Supply Chain Management, Export Performance, Export Marketing Capabilities, Kazakhstan.
Introduction

In accordance with the researchers Krasnikov and Jayachandran (2008), Morgan, Slotegraaf, and Vorhies (2009) and Weerawardena and Mavondo (2011) the role of the activities of the marketing and the deployment of capability in driving the performance of manufacturing firms has gained significant academic consideration. The researchers within the area of “Export Marketing” field have stated that the activities of export marketing assist in enhancing the performance of the export (Cadogan, Kuivalainen, & Sundqvist, 2009; Pamornmast, Jermsittiparsert, & Sriyakul, 2013; Jermsittiparsert, Pamornmast, & Sriyakul, 2014; Diamantopoulos, Ring, Schlegelmilch, & Doberer, 2014; Ellis, Davies, & Wong, 2011; Lisboa, Skarmeas, & Lages, 2013; Ottosson & Kindström, 2016). Past studies have investigated different activities of export marketing such as the use of the information of export and market-oriented behavior of export and their impacts on the performance of export (Cadogan, 2012; Chung, 2012; Diamantopoulos et al., 2014; Sutduean, Harakan, & Jermsittiparsert, 2019). Cadogan (2012) notes that the circumstances in which the “Export Marketing Capabilities” are advantageous for manufacturing firms require more academic consideration. According to Ellis et al. (2011), past research on the subject of export marketing capabilities was conducted in the developed nation market organizations.

None of the above cited research investigated the impact of external supply chain management on export performance along with the role of market export capabilities. In addition, the existing research did not address the question of how manufacturing exporting firms in less emerged marketplaces might gain advantage from export marketing capabilities deployment. Sheth (2011) stated that this negligence is disturbing as business transactions in less emerged economies are increasing and these economies are inclined to experience wider diversity in the functionality of infrastructural and industrial firms, situations that have been illustrous to shape the degree to which capabilities direct the export performance (Blonigen, 2015; Krammer, Strange, & Lashitew, 2018).

Therefore, the existing literature studies, from both a theoretical point of view and as practical evidence used to describe the export marketing capabilities of manufacturing businesses functioning in already emerged state marketplaces, are insufficient in enlightening or envisaging the performance results of “Export Marketing Activities” of manufacturing firms in less emerged markets such as Kazakhstan. In this research, this identified gap will be investigated by inspecting how external supply chain management and in particular, export marketing capabilities, are used to direct the performance of export in Kazakhstan. These findings will add to export marketing capability and performance research, with results about external supply chain management impact on export performance and the mediating role of export marketing capabilities in Kazakhstan. This is the purpose of the research and the topic is of further interest in the context of enhanced national export performance.
Figure 1. Gross Domestic Product with regard to the export performance of Kazakhstan

Source: Committee on Statistics of the State of Kazakhstan

The above Figure 1, demonstrates the patterns of export of Kazakhstan state. The export pattern of Kazakhstan has both a downward and upward pattern in recent years. In order to have a significant export performance, the exporters of the state need to have more advanced export marketing capabilities.

Research objectives

The current study will cover the following research objectives:
The first objective of the current study is to examine the impact of external supply chain management on export performance in Kazakhstan. The second objective of the current study is to investigate the mediating role of export marketing capabilities between the relationship of external supply chain management and export performance in Kazakhstan.

The current research includes theoretical and practical significances. As there is limited research on the subject of external supply chain management and its impact on export performance, this research will contribute to the body of literature. In addition, the researcher investigated the mediating role of export marketing capabilities, which will further enrich the literature. From this investigation, the exporters of the state of Kazakhstan will know how important export marketing capabilities are to enhanced export performance and will work on their marketing capabilities to further enhance the performance of exports in Kazakhstan.
Literature Review

Critical review of literature about underpinning variables, operation definitions and relationship among the variables are presented in this section.

External Supply Chain Management and Export Performance

The literature argues about the definition of ESCM (external supply chain management) nonetheless, in this study, it is defined as those factors that are also called external or indirect factors, which indirectly and sometimes directly affect certain dimensions of companies or businesses. These factors can be for example transportation or any environmental factors that influences the outside activity. These external factors trigger the momentum of export performance, making it more efficient and competent (Stevens & Johnson, 2016; Jermsittiparsert, Sutduean, Sriyakul, & Khumboon, 2019). External supply chain management is intertwined with export performance because they work side by side in order to achieve maximum benefit.

According to the literature in this field of management (Abdallah, Obeidat, & Osama Aqqad, 2014) supply chain management is used for different purposes for e.g. to know about the supply chain efficiency and supply chain value (Jermsittiparsert & Srhiirun, 2019; Sutduean, Joemsittiprasert, & Jermsittiparsert, 2019). Therefore, competitive intensity moderates the relationship between each of internal integration, supplier integration and customer integration and export performances. Wafaa Shihadeh Al-Ghwayeen and Ayman Bahjat, (2018) explain different ESCM and export performance theories to relate the independent variable with the dependent variable. This concept is closely associated with Relational Exchange theory. External supply chain management is intertwined with export performance because they both work in order to achieve maximum benefit.

Research findings prove that ESCM positive impact on export performances is significant (He, Brouthers, & Filatotchev, 2018; Kull, Kotlar, & Spring, 2018; Sharma & Bhattarai, 2019). Hence, ESCM implementations among manufacturing companies could possibly achieve economical and financial benefit if the export increases at a high rate. ESCM is considered as promoting supply chain management (Handfield, Cousins, Lawson, & Petersen, 2015). The research has proved the importance of export at the global level which upgrades the global economy in contrast to the supplier and consumer chain. Export performance depends on export market strategies (Cousins, Lawson, Petersen, & Fugate, 2019) and these are the objectives and aims that are expected from the global market which are only achieved through appropriate development and implementation of ESCM. So, this study has proposed the following hypotheses:
**H1**: external supply chain management has a significant impact on export performance.

**Mediating Role of Pricing Capability**

ESCM connects the pricing capability in such a way that it has a strong impact on export performance (Pratono, 2018). The previous literature works through a hypothesized relationship between hierarchical developments of supply chain management with its mediators that include, pricing capabilities. Pricing capability also focuses on the market capability, investigating the strategic orientation while keeping in view different external supply chain factors like transportation, finance, economy, consumers, competitors and environment (Monczka, Handfield, Giunipero, & Patterson, 2015; Paulraj, Chen, & Blome, 2017). If the external supply chain is constructive, than the pricing capabilities of the market are also sufficient for the rise of the global economy and also for sustainability of the country’s own business market (Asgharian, Christiansen, Gupta, & Hou, 2016; KanKam-Kwarteng, Gatsi, Donkor, & Acheampong, 2018).

The rise of global economy produces a positive impact on export performance as a result. Market capability including market/pricing development and execution has direct positive impact on the firm performance of international market. If pricing capability is given advantage than it might cause increase in competitive advantage and rigid performance of ESCM and export performance. Pricing capability also focuses on market capability, investigating the strategic orientation while keeping in view different external supply chain factors like transportation, finance, economy, consumers, competitors and environment (Lu, Liu, Wright, & Filatotchev, 2014). So, this study has proposed the following hypothesis;

**H2**: external supply chain management has a significant impact on the export performance under the mediating role of pricing capability.

**Mediating role of Distribution Capability**

Distribution capability depends on the market business where products are being produced, manufactured and then supplied to different consumers. ESCM depends on the international market and trade that includes the distribution of multiple products. The main focus of relational exchange theory is to combine the ESCM and its fellow mediators on the same platform (Pereira, Schwanen, & Banister, 2017). The effectiveness of firm competencies depends on manufacturing ability which further depends on the sales and advertising potential, which directly influence the export performance capability. ESCM is initiated only if the distribution and production of the products is adequate (Abdallah et al., 2014; Cosar &
Sahinoz, 2018; Perić & Sorić, 2018). Therefore, ESCM sometimes also positively affects distribution capability of market products (Garza-Vázquez & Deneulin, 2018) which gradually increases the marketing capability at international level. ESCM depends on the international market and trade and includes the distribution of multiple products. Relational exchange theory’s main focus is to combine the ESCM and its fellow mediators on the same platform. So, this study has proposed the following hypothesis;

**H3**: external supply chain management has a significant impact on the export performance, focusing on the mediating role of distribution capability.

**Mediating Role of Product Development Capability**

ESCM in product development capability has also played a fundamental role in affecting the performance of product development and its implications on firm value. Product development capability focuses on the relationship between rational investment and management learning capability (Gutierrez-Gutierrez, Barrales-Molina, & Kaynak, 2018). It involves the new product development performance to gain excess to the export performance at international level. According to different studies, new product development leads to the companies sustainability (Grünbaum & Stenger, 2018) and its continued existence. The product development capability takes advantage from ESCM and the available business opportunities that arise in the economic growth sector. The changes made in the marketplace also affect the ESCM which directly affect the product distribution capability (Laari, Töyli, Solakivi, & Ojala, 2016; Stevens & Johnson, 2016).

ESCM is based on the specific strategy to identify the good quality products, hence it follows few steps before the production: firstly product idea is conceived; secondly it is tested and further developed; thirdly after complete satisfaction of the producers, designers and manufacturers the product is introduced into the market. This study basically indicates the role of such mediators as distribution capability in the setting of ESCM (Zaefarian, Forkmann, Mitręga, & Henneberg, 2017). The product development capability takes advantage of ESCM and the available business opportunities that rise in the economic growth sector. The changes made in the marketplace also affect the ESCM which directly affects product distribution capability (Baier, Hartmann, & Moser, 2008). So, this study has proposed the following hypothesis;

**H4**: external supply chain management has a significant impact on export performance, utilizing the role of a mediator such as distribution capability.
Methodology is the way in which any examiner or researcher plans his or her study. Methodology is basically a means by which the entire research is carried out. In the domain of research, there are three methods. The first method is quantitative, the second method is qualitative and the third method is a mixed method. In this paper, quantitative method has been selected. This method has been selected because it is the method particularly linked with numbers and figures and as a result data is presented in numeric form which was the best fit for this study. In addition, explanatory research design has been chosen to explain the relationships of variables with each other. There are other research designs such as descriptive and exploratory but for this study the explanatory research design is appropriate because in this paper the relationship of variables with each other is explained, necessitating this research design choice (Bryman & Bell, 2011; Kline, 2015).

This study is a cross-sectional study. However, while there are other time horizons such as time series and longitudinal, in this study cross sectional time horizon was selected as this study was conducted by the researcher just once. Moreover, the data has been collected by the researcher from the sample of the study only one time and thus, this study is cross sectional in nature (Bryman & Bell, 2011). There are numerous techniques for gathering data from participants. For example, focus groups, interviews and questionnaires. This paper presents the findings of a questionnaire method used to gather respondent data. The experts who were employed in different manufacturing firms of Kazakhstan were considered as the sample of the present study and the sample size is 300. Approximately 350 questionnaires were distributed among the employees of the manufacturing firm but just 320 were returned and used for the data analysis.

Questionnaires were distributed via email and some were self-administered. The respondents were well informed about the aim of the study. During the entire process of this study and
during data collection procedure, all the ethical and moral considerations were maintained. For example before data gathering, the scholar of this paper obtained consent from the research gatekeepers, such as firm management consent to obtain the data from the respondents. Moreover, to design the questionnaire for this paper, the researcher obtained permission from the scale author. To perform the analysis various tests and software were used, specifically Amos and SPSS software were used as these were identified as best and most user friendly for quantitative study. Further tests conducted in this research included regression analysis, correlation analysis and descriptive statistics.

**Research Findings**

To analyze the empirical effect of female entrepreneurial education on growth intention, data was collected from the tourism sector. After eliminating the rough and complete questionnaire, there were 334 questionnaires used for analysis. There were 157 male and 181 females participated, of which 109 respondents have a masters degree in education and the majority of respondents were young, aged between 21 years and 40 years old.

**Data reliability**

To check the reliability of the data, Cronbach Alpha test was used for each construct, the ideal value for Cronbach Alpha is .80, however, .70 is also acceptable, see Table 1 below.

### Table 1: Reliability Test

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPC</td>
<td>5</td>
<td>0.914</td>
</tr>
<tr>
<td>PDC</td>
<td>5</td>
<td>0.936</td>
</tr>
<tr>
<td>PPC</td>
<td>3</td>
<td>0.943</td>
</tr>
<tr>
<td>ESC</td>
<td>4</td>
<td>0.873</td>
</tr>
<tr>
<td>EP</td>
<td>4</td>
<td>0.912</td>
</tr>
</tbody>
</table>

Outputs showing that each construct of our study has its value greater than .70. so, the data is normal and constructs reliability is okay so further analysis was possible.

**Confirmatory factor analysis**

Confirmatory factor analysis was applied in order to check the fitness of the research model as well as also to analyze the discriminate and convergent validity. There are 5 indicators which prove the fitness of model and their threshold value is displayed in Table 2 below.
Table 2: CFA

<table>
<thead>
<tr>
<th>Indices</th>
<th>Range</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
<td>&lt;3</td>
<td>2.228</td>
</tr>
<tr>
<td>GFI</td>
<td>&gt;.80</td>
<td>.906</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt;.90</td>
<td>.976</td>
</tr>
<tr>
<td>IFI</td>
<td>&gt;.90</td>
<td>.976</td>
</tr>
<tr>
<td>RMESA</td>
<td>&lt;.08</td>
<td>.061</td>
</tr>
</tbody>
</table>

Table 2 above is proof that the current study research model is good fit because all indicators have their value within indices threshold range and the discriminate and convergent validity are tested. Figure 2 below depicts the measurement model screenshot;

Figure 2. CFA

Discriminate and Convergent Validity

In Table 3 below, the results of discriminant and convergent validity are given. Discriminant validity shows the discrimination of each construct from other constructs, whereas convergent validity proves the internal consistency of the measurement.

Table 3: Discriminate and Convergent Validity

<table>
<thead>
<tr>
<th></th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>DPC</th>
<th>PDC</th>
<th>PPC</th>
<th>ESC</th>
<th>EP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPC</td>
<td>0.904</td>
<td>0.824</td>
<td>0.384</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDC</td>
<td>0.956</td>
<td>0.814</td>
<td>0.384</td>
<td>0.620</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPC</td>
<td>0.933</td>
<td>0.825</td>
<td>0.235</td>
<td>0.431</td>
<td>0.485</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESC</td>
<td>0.870</td>
<td>0.631</td>
<td>0.266</td>
<td>0.493</td>
<td>0.484</td>
<td>0.475</td>
<td></td>
<td>0.794</td>
</tr>
</tbody>
</table>
If the CR is greater than .70 and AVE is greater than .50 then the convergent validity of the data is proved. These findings show that each variable has CR value greater than .70 and AVE value greater than .50. and so the convergent validity is proved. The other columns show that each construct has acceptable discrimination from others, so there is no chance of multicollinearity in the data and the data has validation of discrimination.

**Structural Equation Modeling**

Structural Equation Modeling is the mixture of multiple regression analysis which gives the all results of direct, indirect and total effect concurrently and the Table 4 below describes the current findings;

<table>
<thead>
<tr>
<th>Total effect</th>
<th>ESC</th>
<th>DPC</th>
<th>PPC</th>
<th>PDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPC</td>
<td>.536***</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>PPC</td>
<td>.498***</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>PDC</td>
<td>.461***</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>EP</td>
<td>.550***</td>
<td>.161**</td>
<td>.207***</td>
<td>.228***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Direct effect</th>
<th>ESC</th>
<th>DPC</th>
<th>PPC</th>
<th>PDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPC</td>
<td>.536***</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>PPC</td>
<td>.498***</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>PDC</td>
<td>.461***</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>EP</td>
<td>.256***</td>
<td>.161**</td>
<td>.207***</td>
<td>.228***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect effect</th>
<th>ESC</th>
<th>DPC</th>
<th>PPC</th>
<th>PDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPC</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>PPC</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>PDC</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>EP</td>
<td>.294***</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of structural equation modeling show that external supply chain management has positive and significant direct impact on export performance which means that if one unit of external supply chain management increased it will bring 25.6% positive impact in export performance. The findings also show that price performance capability, distribution performance capability and product development performance capability also significantly
mediate between external supply chain management and export performance. The indirect effect of external supply chain management on export performance via these 3 mediators is 29.4% so the all the hypotheses of the study are accepted. Moreover, Figure 3 below also shows the standardized effect of each variable on export performance.

**Figure 3. SEM**

![SEM Diagram](image)

**Discussion and Conclusion**

The aim of this paper was to examine the impact of external supply chain management on export performance with the mediating role of export marketing capabilities. The role of the activities of marketing and the deployment of capability in driving the performance of manufacturing firms has gained significant academic consideration. However most of the previous studies considered in the literature review were in the domain of internal supply chain management and were carried out in developed nations. Due to this limitation in the existing literature, this research identified the gap in the literature and conducted a study on the subject of external supply chain management in a developing economy such as Kazakhstan (Rauer & Kaufman, 2015). In this study quantitative method has been selected and the time horizon was cross-sectional.

The employees of Kazakh manufacturing firms were the study respondents and questionnaire technique was used to collect data. The data analysis was performed using Amos and SPSS software. The results show that the impact of external supply chain management on export performance is significant because the significance value is less than (0.05). Additionally, the findings depict that export marketing capabilities play an important role in the relationship between external supply chain management and export performance. The findings propose
that export marketing capabilities significantly mediate the relationship between external supply chain management and export performance because the significance value is less than (0.05). All the research hypotheses of the study are accepted. In order to enhance the performance of the export the manufacturing companies of Kazakhstan must ensure appropriate export marketing capabilities such as pricing capability, distribution capability and product development capability (Krammer et al., 2018; Kull et al., 2018). All the study findings of this research are in accordance with the existing literature which also indicated that to improve the performance of export pricing capability, distribution capability and product development capability were a focus.

Research Implications

Both theoretical implications and practical implications are included in this paper. This paper inspected the impact of external supply chain management on export performance and export marketing capabilities. Manufacturing firms will benefit from this study as they will realize how vital export marketing capabilities are in boosting export performance. In this study, different export marketing capabilities that have not been analyzed previously were examined, such as pricing capabilities, delivery capability and product development capability. Hence, this study enriches the literature on the subject of external supply chain management, export performance and export marketing capabilities. In addition, scholars will benefit from this study as a basis from which to conduct the same study in another nation. The managers of manufacturing firms should build export marketing capabilities among their company labour force such that employees have more marketing capabilities and are capable of increasing company performance. Therefore managers should work on employee marketing capabilities to enhance firm performance.

Limitations and suggestions

Every study encompasses a number of limitations and suggestions as does this study. First, the researcher collected data only from three hundred respondents. Future researchers should collect data from more research participants. In this paper a few variables has been researched: external supply chain management, export performance and export marketing capabilities. Future scholars should add more variables to the existing framework such as the impact of internal supply chain management and external supply chain management on export performance with the mediation of marketing capabilities. This study is based on the time horizon of cross sectional design because of the experienced time limitation. Further studies should conduct more detailed and comprehensive research so as to have a greater understanding and comprehension regarding the present research area. This study was conducted in Kazakhstan and future studies should be conducted in other developing economies such as China. In addition, the same study should be carried out by other
researchers in other nations to observe whether the findings of this paper and their results are scalable and replicable.

REFERENCES


