The Relationship between Entrepreneurial Orientation and Business Performance: Exploring the Moderating Role of Supply Chain Management in SME Sector of Iraq

Liqaa Miri Habeeb¹, Batool Abd Aii Ghali², Thaer Hasan Kadhim Alharguse³

¹,²,³ Department of Accounting, College of Administration & Economics, University of Al-Qadisiyah, Iraq

¹liqaamiri@qu.edu.iq
²batool.ghali@qu.edu.iq
³thaer.alhargose@qu.edu.iq

Abstract- The primary objective of this paper is to examine and explore the relationship between Entrepreneurial Orientation and Business Performance in small and medium size enterprises (SMEs) with the moderating role of supply chain management style. The role and importance of SMEs in the overall economic development and employment generation has been an area of great interest for researchers and policy makers. The data was analyzed using structural equation modeling (SEM). It is noted that a positive relationship among Entrepreneurial Orientation and Business Performance is persisting. Furthermore, supply chain management plays an important moderating role in this framework. This study focus on SME’s working in Iraq and provides guidelines for policy makers to consider the importance of supply chain management development for SME’s performance.

Key Words- Entrepreneurial Orientation, Business Performance, SMEs, supply chain management, Iraq.

1. Introduction

The role of Small and medium enterprises (SMEs) is significant in the development and prosperity of any country. After investigation of 45 countries Beck, [1] confirmed that there is positive and strong relationship in the GDP per capita growth and respective importance of SMEs. [2] concluded that SMEs become the great source of employment creation and also once of the common choice in terms of option as a business. Growth of SMEs is also considered as one of the indicator that can be used to gauge the health of economy of any country, booming SME will result is enhanced productivity of the nation, more job creation and overall increase in the quality of life in any country. The role of SMEs become more critical in case of developing nations as for them the importance of economic growth is more critical as compare to developed nations. The present study will be aimed at exploring the association between Entrepreneurial Orientation and performance of SME sector or Iraq with the moderating impact of supply chain management style. Before proceeding further, it is imperative to create some theoretical foundation of Entrepreneurial Orientation and related research studies.

Research on Entrepreneurial Orientation (EO) can be located back to Aston group, UK in 1960s as it proposed “There has been almost no systematic exploration of the causal connection between contextual factors and certain administrative systems rather than others, or certain group and individual behaviors rather than others. … In our view, the present study of work organization and behavior can no longer be content with a priori postulations or a continuing succession of one-case studies”. [3] proposed that Entrepreneurial Orientation is a multidimensional construct in contract with the earlier conceptualization of [4], they presented Entrepreneurial Orientation as one-dimensional construct. [5] describes Entrepreneurial Orientation as the magnitude “top managers are inclined to take business related risks, to favour change and innovation in order to obtain a competitive advantage for their firm, and to compete aggressively with other firms”. Performance in small and Medium Enterprises (SMEs) is a topic of great interest of academics, practitioners and researchers. Supply chain management is critical factor for better performance. Based on this initial deliberation on the Entrepreneurial Orientation and Business Performance in SMEs and supply chain management, the proposed study will be aimed at investigating the relations this triangle in Iraqi perspective.

The present study is tried to examine the established phenomena of existence of positive relationship between Entrepreneurial Orientation and Business Performance in SMEs. These established phenomena will be deliberated...
in literature review section of the paper. Secondly the paper will also focus in context of Iraq and effort is made to create an indigenous theoretical perspective of Iraqi SME sector. The rest of paper is structured as, the next section is designated to the literature review of Entrepreneurial Orientation, Business Performance of SMEs, followed by a section on role of supply chain management on the association of Entrepreneurial Orientation and Business Performance. Next section will provide methodological details of the present study along with the conceptual model adopted. Subsequent section will share results of discussion of the study, succeeding section will provide some implications, future research directions and limitations of the study and final section will conclude the paper.

2. Literature review

This section of the paper will provide literature review on the contracts under investigation, the role Entrepreneurial Orientation and Business Performance will be discussed along with the existing research carried out of the role of supply chain management style and its possible impact of the relationship of Entrepreneurial Orientation and Business Performance is shared to create foundation for present study.

2.1 The Role of Entrepreneurial Orientation and Business Performance

Entrepreneurial Orientation (EO) is a widely measure used in Entrepreneurial literature to examine its relationship with various variables. Entrepreneurial Orientation (EO) has been classified with three dimensions of innovativeness, risk taking and pro activeness, and it has received substantial amount of empirical and theoretical consideration. [6] presented set of contingency relationship to describe how Entrepreneurial Orientation impacts on performance. They also stated that there are two classifications of such variables that can have a moderating impact on the relationship of Entrepreneurial Orientation with performance and it can be divided into two broad types, environmental factors and organizational factors. Environmental factors comprise of environmental and industry features and organizational factors top management, culture, strategy, structure, firm resources and strategy-making processes. [7] further examined the sustainability of the relationship between Entrepreneurial Orientation with performance with a longitudinal study spanned over two years in SMEs. The practical implication that can be drawn for this study is the investment of time and resources in Entrepreneurial Orientation overtime can provide long term benefits to the firms. There has been a consistency in entrepreneurial literature among the empirical evidence that there exists a relationship between Entrepreneurial Orientation and performance. A study conducted by [8] also found a positive impact of Entrepreneurial Orientation and performance and sales growth of 110 manufacturing businesses. Conceptualized as an organizational paradigm, several research studies have concluded a strong and positive relationship between Entrepreneurial Orientation and Business Performance. Based on the aforementioned research literature a hypothesis is proposed as,

H1: Entrepreneurial Orientation has a positive relationship with Business Performance in SMEs.

2.2 Role of Supply Chain Management Skills

[9] defines supply chain management as “process of inspiration, influence among the team of subordinates in order to accomplish organizational goals”. [10] identified three distinct types of supply chain management in academic and research discussion, Transactional supply chain management, Transformational supply chain management and Laissez-faire supply chain management. The present study is also trying to explore the moderating impact of supply chain management skills on the relationship of Entrepreneurial Orientation with performance in SMEs operation in Iraq. [11] concluded through a meta-analysis study that, there exist a positive relationship between transformational supply chain management and organizational performance. [12] found that there exist a relationship between entrepreneurial orientation, supply chain management skills and performance of any business; moreover it was observed that supply chain management has an obvious impact on performance. There has been a growing body of research literature on the examination of various antecedents of supply chain management with organizational outcomes, attitude, psychological wellbeing and behavior of the employees of the firm. After the examination and exploration of existing literature on organizational performance, Entrepreneurial Orientation and supply chain management is seems clear that supply chain management plays an importance role in the overall performance of both small and large organizations. The effective supply chain management creates an impact of the work efficiency, satisfaction, commitment of the employees and supply chain management of the organization. [13] also concluded that supply chain management plays a critical role of the development and growth of any organization. Moreover, the literature on failure of SMEs also reveals that one of the critical factor that caused the failure in case of SMEs is the poor supply chain management skill of the top management [19].

H2: Supply chain management moderates the relationship between Entrepreneurial Orientation and Business Performance in SMEs. Hence, the proposed model for this investigation is presented in Figure. 1.
3. Research Methodology and Conceptual Framework

The current study has adopted the model of Entrepreneurial Orientation from [15]. The model was initially proposed by [16] Figure 1 is showing the proposed Conceptual Framework. The data on entrepreneurial orientation was collected from owners and top managers of small and medium enterprises. Whilst, the performance was measured by profitability of SME’s. Return on assets (ROA) and return on investment (ROE) was taken as the key performance indicators. Furthermore, reliability and validity analysis was also carried out to measure the effectiveness and efficiency of measurement model [17], [18].

3.1 Measurement Model

Validity and reliability of instrument is measured by Average Variance Extracted, Factor Loading and Cronbach’s Alpha respectively. Table 1 presents the results of validity and reliability analysis. It is noted that cronbach’s alpha scores for all the dimension of entrepreneurial orientation are within acceptable limit (0.7) (Nunnally, 1978). Similarly, factor loading score for all dimensions of entrepreneurial orientation is significant by meeting the criteria of >0.6.

<table>
<thead>
<tr>
<th>Construct</th>
<th>AVE</th>
<th>CR</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competative Aggressiveness</td>
<td>0.724</td>
<td>0.985</td>
<td>0.982</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>0.889</td>
<td>0.936</td>
<td>0.702</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.793</td>
<td>0.812</td>
<td>0.825</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.810</td>
<td>0.876</td>
<td>0.927</td>
</tr>
<tr>
<td>Risk Taking</td>
<td>0.724</td>
<td>0.823</td>
<td>0.732</td>
</tr>
<tr>
<td>Supply chain management</td>
<td>0.671</td>
<td>0.763</td>
<td>0.823</td>
</tr>
</tbody>
</table>

Where: ROA= Return on Assets; ROE= Return of Equity; CA= Competitive Aggressiveness; IN= Innovativeness; ANT=Autonomy; PR= Proactiveness; RT= Risk Taking; SCM= Supply chain management.

4. Data Analysis

For the purpose of data analysis to provide empirical evidence to support proposed framework regression equation was carried out. Moderating analysis proposed by Baron and Kenny (1986) was adopted for this investigation. Equation 1 & 2 illustrates the econometric model.

\[ \text{ROA}=B_0+B_1 \text{CA}+B_2 \text{IN}+B_3 \text{ANT}+B_4 \text{PR}+B_5 \text{RT}+B_6 \text{SCM}+\epsilon \quad \text{(Eq.1)} \]

\[ \text{ROE}=B_0+B_1 \text{CA}+B_2 \text{IN}+B_3 \text{ANT}+B_4 \text{PR}+B_5 \text{RT}+B_6 \text{SCM}+\epsilon \quad \text{(Eq.2)} \]
entrepreneurial orientation with five dimensions and by taking mean values of dimensions we measure entrepreneurial orientation.

### Table 3
Regression Analysis (Dependent Variable ROA)

<table>
<thead>
<tr>
<th>Steps</th>
<th>Model</th>
<th>Un-Stand. B</th>
<th>Un-Stand. S.E</th>
<th>Stand. B</th>
<th>Stand. S.E</th>
<th>R2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IV-DV</td>
<td>0.54</td>
<td>0.085</td>
<td>0.473</td>
<td>0.224</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>IV-MV</td>
<td>1.11</td>
<td>0.118</td>
<td>0.682</td>
<td>0.465</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>MV-DV</td>
<td>0.542</td>
<td>0.022</td>
<td>0.519</td>
<td>0.814</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td>IV, MV-DV</td>
<td>0.308</td>
<td>0.051</td>
<td>0.411</td>
<td>0.529</td>
<td>0.010</td>
<td>0.000</td>
</tr>
</tbody>
</table>

### Table 4
Regression Analysis (Dependent Variable ROE)

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-Stand. B</th>
<th>Un-Stand. S.E</th>
<th>Stand. B</th>
<th>Stand. S.E</th>
<th>R2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>IV-DV</td>
<td>0.614</td>
<td>0.073</td>
<td>0.562</td>
<td>0.224</td>
<td>0.000</td>
</tr>
<tr>
<td>Step 2</td>
<td>IV-MV</td>
<td>0.832</td>
<td>0.921</td>
<td>0.769</td>
<td>0.465</td>
<td>0.000</td>
</tr>
<tr>
<td>Step 3</td>
<td>MV-DV</td>
<td>0.411</td>
<td>0.242</td>
<td>0.384</td>
<td>0.814</td>
<td>0.000</td>
</tr>
<tr>
<td>Step 4</td>
<td>IV, MV-DV</td>
<td>0.271</td>
<td>0.190</td>
<td>0.394</td>
<td>0.592</td>
<td>0.002</td>
</tr>
</tbody>
</table>

The result of regression analysis explained that entrepreneurial orientation has a significant and positive association with business performance with \( b = 0.473 \) and \( 0.562 \). It also noted that the relationship of independent variable with ROE is more elevated and significant. Further, to prove moderating effect of supply chain management, the relationship among moderating variable and independent variable is depicted in step 2 of table 3 & 4. It is noted that moderator variable has a positive relationship with entrepreneurial orientation having \( b=0.682 \) and \( b=0.769, p<0.00 \). In third step the relationship between moderating variable is also checked as explained by baron & Kenny (1986). The relationship among supply chain management (MV) and Business Performance (ROA, ROE) is also positive and significant \( (b=0.519, b= 0.384) \). In the last step the moderating variable is controlled by taking moderator (supply chain management) as an independent variable combined with actual independent variable (entrepreneurial orientation). The results show that the relationship among entrepreneurial orientation and business performance become weaker and the values of beta are decreased. The decrease in beta values proved the moderation relationship of supply chain management style among the relationship of entrepreneurial orientation and business performance while the relationship is still significant after controlling moderator. This investigation proves the role of supply chain management style to enhance business performance. Similarly, the role of supply chain management is also important to enhance the effect of entrepreneurial orientation on business performance. The performance of business can be elevated by developing the supply chain management qualities in top management of SME’s.

### 6. Conclusion

This study intends to explore the role of entrepreneurial orientation on business performance. In addition to this, the role of supply chain management skill is also investigated in the proposed framework. This investigation proves the moderating role of supply chain management in the relationship of entrepreneurial orientation and business performance [20]. The overall conclusion of the present study is in line with the existing findings of the previous research literature on the subject indicating a strong and positive relationship in Entrepreneurial Orientation and performance. This study contributes by investigating supply chain management with the moderating impact in the framework of entrepreneurial orientation and business performance in the special context of SMEs working in Iraq.

### 7. Future Research Directions and Limitations of the Study

The examination on the role of Entrepreneurial Orientation with performance has been area of great
research activity for last couple of decades and found substantial evidence of the positive relationship amount the variables, there is need to also explore the relationship between Entrepreneurial Orientation and failure of the firms. Moreover, the study of non-financial factors such as motivation, loyalty with the firm and low attrition rate that also needs to test with special contextualization of Entrepreneurial Orientation. Additional research can also be designated on the question, will the performance would decline if Entrepreneurial Orientation is restricted or declined. The data for current research was collected from SMEs located in Iraq only so that results cannot be generalized over the globe from the present study, although same model can be applied in various other settings to contextualize the results and form a more rich and rigor results on the relationship between Entrepreneurial Orientation and performance with the moderating impact of supply chain management style. Regarding the methodological aspect, it is imperative to used mixed approaches while examining the relationship between Entrepreneurial Orientation and performance with the moderating impact of supply chain management in the SMEs. This will provide a grounded base for the researchers to develop new supply chain management theories with relation to Entrepreneurial Orientation and performance.

References