

# E-Commerce And Financial Performance During The Financial Crisis: A Case Study Of Small And Medium Enterprises In Lebanon

Riad Makdissi\*, Ghida Zoubaida\*, Selim Mekdessi\*

*\*(Faculty of Economics and Business Administration / Lebanese University, Lebanon)*

---

## **Abstract:**

*This research paper delves into the intricate relationship between e-commerce adoption and financial performance during a financial crisis, focusing on the context of small and medium-sized enterprises (SMEs) in Lebanon. The primary objective of this study is to elucidate whether e-commerce can serve as a strategic instrument for Lebanese SMEs, enabling them to alleviate the detrimental impacts of financial crises while bolstering their financial performance.*

*The research employs a comprehensive mixed-methods approach, combining quantitative analyses of financial data with qualitative assessments of SMEs' e-commerce strategies, challenges, and real-world experiences during times of financial upheaval, utilizing a questionnaire and the Likert scale for data collection, with SPSS employed for data interpretation.*

*Notably, a survey of 250 SMEs in Lebanon was conducted to gather data for this research. The nuanced findings derived from this study offer significant insights, providing valuable implications for SMEs in Lebanon and analogous economies. Additionally, it serves as a valuable resource for policymakers and researchers alike, shedding light on the pivotal role of e-commerce in bolstering financial resilience during periods of economic turbulence.*

*In conclusion, this research highlights the critical role of e-commerce in helping Lebanese SMEs adapt and thrive during challenging financial times. As the financial crisis continues to affect Lebanon and the world, this study underscores the importance of embracing e-commerce, engaging customers effectively, and navigating the evolving landscape of online business.*

**Key Word:** *E-commerce, SME, Financial Performance, Crisis, Online sales, Resilience, Customer Behavior*

---

Date of Submission: 26-10-2023

Date of acceptance: 06-11-2023

---

## **I. Introduction**

E-commerce involves the buying and selling of products or services through electronic intermediaries, mobile applications, and the web. Online retail sales accounted for 14.1% of all global retail sales in 2020<sup>1</sup>, and e-commerce continues to grow rapidly despite global economic uncertainty. E-commerce encompasses both online and electronic transactions and has gained significant prominence in recent years, somewhat supplanting traditional methods<sup>2</sup>. Digital transformation presents a genuine growth opportunity for small businesses, serving as a driver of performance, profitability, and competitiveness<sup>3</sup>. Digitization provides small businesses with highly effective new avenues to reach international consumers<sup>4</sup>.

Small businesses that engage in online sales are three times more likely to do business with international customers than typical small businesses<sup>5</sup>. It is now imperative for commercial enterprises to implement digital transformation to access e-commerce and remain competitive in a globalized market<sup>6</sup>. Over the years, Lebanon has faced a series of severe political, economic, financial, and health crises, compounding the situation<sup>7</sup>. The Lebanese economy has been struggling for years to generate inclusive growth and reduce poverty<sup>8</sup>.

Indeed, Lebanon suffers from financial and economic instability that contributes to systemic macro-financial dysfunction<sup>9</sup>. Inflation has surged, the Lebanese pound has plummeted in the parallel market, and dollar deposits in Lebanese banks have been frozen<sup>10</sup>. These various factors are now driving Lebanon into an economic, banking, and sovereignty crisis characterized by enormous budget deficits, macroeconomic imbalances, and a deterioration of social indicators<sup>11</sup>. In fact, e-commerce is seen as the true key to sales growth and is becoming increasingly active in today's challenging economic environment. This issue takes on particular significance during the financial crisis that has struck Lebanon. Therefore, it is important to determine how small businesses will be affected and whether they will be able to withstand financial hardships<sup>12</sup>.

The objective of this research is to examine the impact of e-commerce on the financial performance of SMEs during the financial crisis. First, it is crucial to identify the extent and measures taken by businesses to

ensure continuity during various Lebanese crises, especially the financial crisis, and then to reflect on the financial performance of SMEs.

The study conducted a statistical analysis to show how Lebanese SMEs have been affected by the financial crisis and how they have used the crisis to transition from traditional jobs to modern ones. This leads us to the following research problem: "What is the impact of e-commerce on financial performance in SMEs during the ongoing financial crisis in Lebanon?"

From this research problem, the central research questions emerge as follows:

What measures have SMEs taken to transition their work online to survive during the Lebanese financial crisis?

How do SMEs use e-commerce as a growth lever in a declining market, and what is the impact of e-commerce on sales?

Will these businesses continue to sell online after the end of this crisis?

## **II. Literature Review**

E-commerce is progressing due to disruptions in markets and global distribution methods caused by recent crises. In simple terms, e-commerce refers to the use of electronic media to conduct business transactions. E-commerce encompasses the buying and selling of goods and services over the Internet using the necessary tools of the online environment. E-commerce offers several advantages, facilitating online business and allowing the establishment and development of new online relationships<sup>13</sup>. This is why e-commerce is more popular than ever. We will explore the theoretical aspects of various topics, including financial performance, small and medium-sized enterprises (SMEs), e-commerce, financial crises, and the relationship between the financial performance of SMEs during financial crises and e-commerce.

Performance has been defined by various authors and theorists. It describes the level at which individuals can achieve their goals by comparing them to the results achieved through their own efforts within the organization. Performance can be defined as the process that allows an individual to present sensory impressions based on their environment<sup>14</sup>. Financial performance is an organization's ability to generate profits, which is required by law. Some companies are obligated to produce summaries in the form of balance sheets and income statements at the end of each fiscal year. Furthermore, companies are considered effective when they create value for both their interests and their stakeholders (shareholders, employees, customers). To better understand the concept of financial performance, it is defined as an organization's ability to generate profits, create value, and achieve objectives within its strategy framework<sup>15</sup>. Financial performance can be assessed based on various criteria, using a variety of analytical tools (financial indicators, ratios, key determinants) related to the operations and financial structure of a company, as well as measures of profitability and sustainability of the business<sup>16</sup>.

Financial performance can be evaluated based on various criteria, such as efficiency, effectiveness, and resource economy, through analytical tools related to a company's operations and financial structure<sup>17</sup>.

Small and medium-sized enterprises (SMEs) are the driving force of economic activity in any country. SMEs hold a significant place in the national economy due to their ability to stimulate economic development, create jobs, their flexibility and adaptability to the market, and their capacity for innovation<sup>18</sup>. SMEs are a fundamental source of economic development and international dynamism, which applies to both developed and developing economies<sup>19</sup>. The European Union (EU) (2003) defines SMEs as those with fewer than 250 employees and an annual turnover of less than 50 million euros or an annual balance sheet total of less than 43 million euros<sup>20</sup>. According to the National Institute of Statistics and Economic Studies (2012), the definition of an enterprise refers to a legally independent economic entity structured around the production of goods or services to meet market needs. Small enterprises primarily refer to businesses with between 10 and 250 employees<sup>21</sup>.

Electronic commerce or e-commerce is defined as the online sale of goods or services through online marketplaces<sup>22</sup>. The Association for Online Commerce and Services (ACSEL) defines electronic commerce as any transaction where purchases are made over telecommunications networks. Electronic commerce encompasses both the mere acceptance of orders and purchases involving payment, involving the acquisition of both goods and services, whether they are online themselves (information services, games, etc.)<sup>23</sup>. The OECD (2000) defines electronic commerce as: This definition takes into account the nature of the operator and the nature of the media and extends it to textual, auditory, and visual data<sup>24</sup>. It particularly emphasizes the aspect of digitized data. Electronic commerce (e-commerce) refers to commercial transactions conducted over the Internet (internet, intranet, extranet). It encompasses business-to-consumer (B-to-C), business-to-business (B-to-B), and consumer-to-consumer (C-to-C) transactions<sup>25</sup>. In its broadest definition, electronic commerce primarily refers to commercial transactions, with the internet being just a means of communication between digitized data exchanges. This includes the sale of goods and services through electronic channels.

#### Evolution of Electronic Commerce:

Discussing the history of electronic commerce is challenging due to its global scope and network structure. Furthermore, it's difficult to make valid generalizations for all economic sectors<sup>26</sup>. Many experts trace the emergence of e-commerce to the advent of the internet and the creation of online retail sites. While the internet is the most visible infrastructure for the public, e-commerce initially began with technologically advanced infrastructure, far from the internet<sup>27</sup>. It's worth noting that the internet is not the only electronic network on which commerce can be conducted. Long before the existence of the internet, France benefited from a highly effective network thanks to Minitel<sup>28</sup>. Electronic commerce is no longer limited to personal computers but is also conducted via mobile phones and tablets. Businesses didn't wait for the internet to enable e-commerce<sup>26</sup>.

The stages of e-commerce development<sup>29</sup> are as follows:

1830-1876: Significant advancements in communication took place, changing not only our way of life but also the relationships between various economic actors, especially in business. The telegraph was invented in 1774 and was in use from 1830, but the first significant revolution in customer-supplier relations was arguably the discovery of the telephone, invented by Alexander Graham Bell in 1876<sup>29</sup>.

1876-1950: Telex was sold in 1946 and automated from 1954. It was designed to send sentences over a dedicated switched network. The fax became popular due to its ease of use for sending documents over regular telephone lines after digitization<sup>29</sup>.

1950-1970: The need to exchange data between businesses led to the original development of Electronic Data Interchange (EDI) technology in the United States in the 1960s to exchange documents in a standard format. Banks used the Electronic Funds Transfer (EFT) to streamline the digital transmission of payment orders<sup>29</sup>.

1980-1990: EDI continued to develop. E-commerce has been possible in France since the early 1980s thanks to Minitel, developed by the historical operator France Telecom. Computers were popularized with the advent of microcomputers in the early 1970s and the development of microcomputers in the 1980s. Rapid technological advancements allowed these machines to offer superior performance in terms of storage space and information processing speed. With the growth of computers, the internet became popular and was created by a group of individuals from several countries with the support of international funding. The creation of the internet network arose from the need of the US government to compete with scientific and technological discoveries. Initially, this network connected various computer networks of the US Department of Defense but quickly expanded to include businesses operating in the military sector and research institutes<sup>29</sup>.

Up to 1993: The internet was known to only a few insiders, mainly academics. We commenced sales activities in 1994 and made our presence known to the world. The internet, therefore, had to improve to meet international expectations. This is why we saw the web develop over the years.

#### Lebanese Crisis:

The Lebanese crisis has plunged the country into an unprecedented economic turmoil characterized by a severe financial crisis. This crisis is characterized by the alarming depreciation of the Lebanese currency, hyperinflation, and staggering unemployment rates<sup>30</sup>. Political instability, governance failures, and an ever-mounting public debt have all played a significant role in the erosion of investor confidence, contributing to a sharp decline in economic activity. As a result, the crisis has severely affected businesses across the nation<sup>31</sup>. Disruptions in supply chains, reduced consumer purchasing power, and limited access to foreign exchange have taken a heavy toll on businesses, hampering their operations and sustainability<sup>32</sup>. This multi-dimensional crisis has given rise to profound social unrest and has exacerbated existing inequalities, creating substantial obstacles to Lebanon's economic recovery and development.

Lebanon's economic woes are compounded by political instability, inadequate governance, and increasing public debt, all of which have fostered a bleak business environment. Businesses in the country have grappled with the repercussions of this crisis, with their operations severely hampered by disrupted supply chains and decreased consumer purchasing power. The scarcity of foreign exchange further complicates matters for businesses reliant on international trade. Additionally, the crisis has exposed and amplified pre-existing inequalities, which are now more pronounced and challenging to address. The overarching impact of the Lebanese crisis has not only undermined the nation's economic vitality but has also ignited social unrest and strife, making it even more imperative to seek solutions to drive the country's economic recovery and foster equitable development<sup>33</sup>.

#### Importance of SMEs in Normal Times and During Financial Crises:

Small businesses and entrepreneurs are significant cornerstones of the global economy. They are not only a crucial source of jobs and income but also drivers of innovation and growth. SMEs, especially in the private sector, play a significant role in the OECD region, with over 50% of employees belonging to this type of

organization. In the European Union, they represent 99% of all companies, with 91% being micro-enterprises with fewer than 10 employees. SMEs are essential for driving growth and strengthening the global economy<sup>18</sup>.

The government recognizes that even in so-called normal economic conditions, certain policies and programs are needed for the survival and growth of SMEs<sup>31</sup>. Various policies targeting SMEs exist in OECD countries. However, in the near future, small businesses will be particularly affected by the global crisis. There are various reasons why these businesses are now more vulnerable. Not only do they face funding challenges in peacetime, but new challenges are emerging, particularly on the supply side. It's important to note that small businesses are more vulnerable in times of crisis for various reasons. SMEs are small and lack the ability to downsize their workforce, these businesses have not diversified their economic activities and finally, their financial structure is not very robust, with low capital. From a credit risk perspective, their rating is low (if rated). They heavily rely on bank loans, so they neither have the opportunity nor the means. SMEs that are part of global value chains can be very vulnerable because they are often affected by the challenges faced by large corporations<sup>34</sup>.

#### Financial Performance of SMEs and E-Commerce

We will explore the relationship between sales processes, shipping methods, payment methods, and the financial performance of SMEs.

#### Sales Process and the Financial Performance of SMEs

Today, e-commerce is growing and has established itself in recent years alongside traditional in-store commerce, whether online or with modern technology. The 20th century is the era of communication where almost everything can be done online on the web. Physical shops and various retail stores have adapted their virtual activities to cater to these unique consumption trends. Adapting to virtual consumption goes beyond offering quality online shops. E-commerce takes full advantage of the online platform to serve consumers at any time, especially by encouraging them to make a purchase. Established brands on the web and online stores are visible and quickly reach customers. E-commerce is, in fact, a connected trade. Thanks to the internet, anyone can easily view and purchase products from their computer or mobile device. Customers on online shopping sites become connected users, technically protected. Even if they are mobile, these customers prefer not to visit a physical store and want to shop without constraints and time loss<sup>35</sup>.

Consumers remain loyal even as their habits change and evolve. They visit the e-commerce site of a store they are familiar with, particularly in physical form. This trust is maintained through the loyalty program of an online store. It is also a relationship in the form of collection points, gifts, or coupons that customers can earn and use for online shopping. Customers often try to stay in touch with e-retailers and stay informed about e-commerce news, including through user-friendly networks and newsletters.

The sales process for small businesses involves inquiring whether they sell their products through specific channels such as social networks, websites, messaging apps, search engines, and online stores. Moreover, this process can have an impact on the financial performance of small businesses responding to crises, including changes in social policies, such as establishing teams to deal with crisis consequences, evolving marketing strategies, and customer and supplier policies. In fact, if small businesses improve their online sales after the crisis and are satisfied with their current profits from online sales, their financial situation will be favorable<sup>35</sup>.

#### Shipping Methods and the Financial Performance of SMEs

Websites and physical stores share the same goal of providing goods and services to the end customer. E-marketing is a tool used by retailers to persuade consumers to make purchases online and generate profits. E-marketing is similar to traditional marketing but focuses on promoting products through e-commerce, allowing consumers to navigate through seller websites via hyperlinks. E-marketing aims to maintain contact with the end customer through communication channels. Its primary goal is to retain existing customers and attract new ones. To achieve these objectives, companies use classic marketing techniques such as displays, promotional brochures, and street advertising. However, the communication channels differ. During the life of the website, the advantageous features will be similar, and technology will be uniquely exchanged. They are online and interact with each other<sup>36</sup>.

Today's world is one of progress and development, and traditional displays, brochures, and promotional materials are not sufficient. We need emails, homepages, or posters. All these means together constitute e-marketing. In fact, depending on the shipping method, if a small business has a contract with an official shipping company, if the company accepts deliveries in all regions of Lebanon, and the shipping costs if the goods are delivered in perfect condition, and the company bears the cost. If the delivery goes smoothly under the agreed conditions and on time. Furthermore, the way services are provided can impact the financial performance of small businesses responding to the crisis. This includes changing employee policies, establishing a dedicated team to deal with crisis consequences, and adjusting marketing strategies and customer and supplier policies. In fact, if

small businesses improve their online sales after the crisis and are satisfied with their current profits from online sales, their financial situation will be favorable<sup>36</sup>.

#### Payment Methods and the Financial Performance of SMEs

Several parameters determine the choice of the most suitable payment method for consumers among the different payment methods. This choice raises certain legal issues. Among the various trading tools, none have yet emerged as a standard. Several types of payment instruments can be distinguished<sup>37</sup>:

**Credit card:** The most commonly used method on the internet, where users provide their card number and expiration date. The risk of interception of your credit card number is low.

**Electronic tokens and e-wallets:** Some companies offer "virtual currencies" designed to help commercial websites retain their customers. This practice is well known among marketing specialists, and many websites offer gifts ("virtual designers") to reward loyal visitors.

**Offline brokerage:** Payment instruments also use offline brokerage. When connecting, the customer receives a secret number from a third party and provides their credit card number. This places the transaction on the merchant's server. Using this third party enhances trust between sellers and buyers, ensuring payment security and exchange authentication.

**PayPal:** An electronic payment service for settling purchases, receiving payments, or sending and receiving payments, managed by the American company PayPal Inc.

In fact, consumers should be able to navigate to a convenient location and easily find the various items they are looking for. Therefore, it is imperative for online stores to keep their website simple. This also applies, among other things, to the payment of purchases. In addition to the security of the proposed payment methods, users suddenly expect to be able to pay easily and freely (e.g., with credit cards, PayPal, etc.). Depending on the payment method, the SME ensures that the customer is satisfied with the online purchase (i.e., a refund in case of an error or other compensation) or offers a refund service if the customer makes a purchase. If the SME accepts customer payment by various means (cash, credit card, check) and different currencies (LBP, USD, Euro), return the desired product.

Furthermore, payment methods can have an impact on the financial performance of small businesses in response to crises, such as supplier policies. In fact, if small businesses improve their online sales after the crisis and are satisfied with their current profits from online sales, their financial situation will be favorable<sup>38</sup>.

### **III. Research Methodology**

In this section, we present the comprehensive research methodology employed in our study to investigate the impact of e-commerce on the financial performance of SMEs during the ongoing Lebanese financial crisis.

Our research methodology follows a hypothetical deductive approach, with an emphasis on integrating the body of knowledge in the field of e-commerce and financial performance. The chosen methodology is quantitative in nature, involving the distribution of questionnaires to owners and managers of small and medium-sized online businesses located in Lebanon. Subsequently, the collected data will be subjected to statistical analysis using SPSS software to evaluate the hypotheses formulated.

The central aim of our study is to assess the influence of e-commerce on the financial performance of SMEs amidst the backdrop of the Lebanese financial crisis. To accomplish this objective, we will conduct a quantitative investigation by administering questionnaires to leaders within the online SME sector.

Our deductive logic approach guides the methodological framework. We will elucidate the measurement scales for both the three independent variables (sales processes, delivery methods, and payment methods) and the dependent variable, which pertains to the financial performance of online SMEs.

The selection of a quantitative research method is attributed to the necessity of surveying a substantial sample size. This approach enables the presentation of findings through tables and graphical representations.

The primary data collection method will be the questionnaire, administered to a sample size of 250 individuals exceeding the ideal sample size of 185 individuals, characterized by 90% confidence level and 6%

margin of error according to <https://www.qualtrics.com/> the online sample size calculator<sup>39</sup>, encompassing both genders, aged 18 and above. The sample structure is designed to ensure representativeness across demographic factors such as residential location, age, and gender.

We aim to test three hypotheses to assess the impact of e-commerce on the financial performance of SMEs in the midst of the Lebanese financial crisis. These hypotheses are as follows:

- H1: There is a significant impact between the sales process and the financial performance of online SMEs during the Lebanese financial crisis.
- H2: There is a significant impact between the delivery method and the financial performance of online SMEs during the Lebanese financial crisis.
- H3: There is a significant impact between the payment method and the financial performance of online SMEs during the Lebanese financial crisis.

To investigate these hypotheses thoroughly, we have employed a structured research methodology involving both quantitative and qualitative analyses, as outlined before. The results and discussions that follow will provide insights into the validity of these hypotheses and their implications for SMEs navigating economic challenges in Lebanon.

The quantification of the constructs' reliability will be ascertained through an internal consistency test, which evaluates the relationship between the number of items and the value of Cronbach's Alpha.

In the subsequent stages of data analysis, a two-fold approach will be adopted. First, a descriptive analysis will be conducted to provide a clear overview of the dataset, enabling a comprehensive understanding of the research objectives. Statistical techniques will be employed to present the data in a coherent manner. For categorical data, we will report frequencies and percentages, while continuous data will be described in terms of means and standard deviations.

Finally, the analysis will extend to the examination of the correlations between variables using statistical methods, and regression analysis will be employed to quantify the strength of these relationships.

This robust and methodically constructed research methodology ensures a comprehensive and reliable investigation into the impact of e-commerce on the financial performance of SMEs during the Lebanese financial crisis.

#### **IV. Results and Discussion**

In this section, we delve into the results and discussion of this research, shedding light on the critical findings and their implications. Our investigation has revolved around the relationship between e-commerce adoption and the financial performance of small and medium-sized enterprises (SMEs) in Lebanon during the ongoing financial crisis. The results of this study offer invaluable insights into the role of e-commerce in SMEs' financial resilience amidst unprecedented challenges.

This section is divided into distinct segments, each aligned with the research objectives and hypotheses, providing a comprehensive examination of how e-commerce has impacted various aspects of SMEs' financial performance during the crisis. We analyze the effects of different factors, including the e-commerce process, delivery methods, and payment modes, on financial outcomes. The data collected from our survey of 250 SMEs operating in Lebanon will be presented and thoroughly scrutinized, offering a comprehensive understanding of the situation. Furthermore, our discussion will explore the broader implications of these results, not only for SMEs but also for policymakers and researchers interested in harnessing e-commerce as a strategic tool to navigate financial crises and enhance economic resilience.

The survey was predominantly completed by male respondents, with 66% of the participants being men, while women accounted for 34% of the sample. These findings reflect a male-dominated response group.

The survey encompassed a wide range of age groups, with 12% of respondents falling below the age of 25, 40% aged between 25 and 35, 38% between 36 and 45, and the remaining 10% between 46 and 50. It is noteworthy that the majority of respondents belong to the adult age category.

Marital status within the survey group revealed that 32% of respondents were single, 62% were married, and 6% had experienced divorce. This data highlights the predominance of married participants in the sample.

The educational background of the respondents showed diversity, with 12% holding a high school diploma, 54% holding a bachelor's degree, 30% having completed a master's degree, and 4% attaining a Ph.D.

In terms of the number of years spent working in SMEs, 16% of respondents had less than one year of experience, 58% had worked between 1 to 3 years, 24% had between 4 to 7 years, and the remaining 2% had 8 to 11 years of experience.

The surveyed SMEs represented various sectors of economic activity, with 30% operating in the commerce sector, 26% in construction, 18% in industry, 16% in services, and 10% in agriculture and livestock.

Regarding the size of these SMEs, 30% had fewer than 10 employees, 52% employed between 10 and 50 individuals, 10% had 51 to 100 employees, and the remaining 8% had over 100 employees.

The age distribution of the surveyed SMEs showed that 44% had been in operation for 2 to 5 years, 26% for 5 to 10 years, 12% for more than 10 years, and 18% for only 2 years.

### **Correlation Analysis**

The correlation analysis conducted on the collected data highlights a significant relationship between the independent variable, such as the sales process, mode of delivery, and mode of payment, and the dependent variable, which is the financial performance of SMEs in Lebanon. For each of these variables, a positive correlation is observed:

- The relationship between the sales process and financial performance is positively significant ( $r = 0.158$ ,  $p < 0.05$ ). Therefore, we accept H1 and reject H0.
- Similarly, the mode of delivery exhibits a positive and significant relationship with financial performance ( $r = 0.294$ ,  $p < 0.05$ ), leading to the acceptance of H1 and rejection of H0.
- In contrast, the mode of payment shows a positive but non-significant relationship with financial performance ( $r = 0.295$ ,  $p > 0.05$ ), indicating that we reject the alternative hypothesis H1 and accept H0 for this variable.

### **Multiple Regression Analysis**

Multiple regression analysis revealed an overall positive correlation ( $R = 0.356$ ) among the three independent variables and the dependent variable. The R-squared value ( $R^2 = 0.127$ ) indicates that 12.7% of the variation in the financial performance of SMEs in Lebanon can be explained by the current modes of payment, delivery, and sales processes. This signifies a good degree of regression.

Further analysis, using the Anova test, indicates the significance of the three independent variables (mode of payment, mode of delivery, and sales process) concerning the financial performance of SMEs in Lebanon (Sig. = 0.000,  $F = 11.883$ ,  $p < 0.05$ ).

The non-standard coefficients contribute to constructing the regression equation, which can be expressed as follows:

Financial Performance of Online SMEs = 0.193 x Mode of Payment + 0.193 x Mode of Delivery + 0.140 x Sales Process - 2.632

These results allow us to make several key observations regarding the impact of e-commerce on the financial performance of SMEs during the Lebanese financial crisis:

- The sales process exhibits a statistically significant positive impact on the financial performance of SMEs, indicating that a well-structured sales process can enhance financial outcomes.
- The mode of delivery also shows a statistically significant positive effect on the financial performance of SMEs, suggesting that effective delivery methods contribute to improved financial performance.
- On the other hand, the mode of payment does not demonstrate a significant impact on the financial performance of SMEs during the crisis.

These findings provide valuable insights for SMEs in Lebanon to make informed decisions about their e-commerce strategies and adapt to the evolving landscape of the financial crisis.

Our analysis reveals the profound impact of the Lebanese financial crisis on online sales, especially during the lockdown periods when physical stores were closed due to the COVID-19 pandemic. Many businesses had to shift their operations online to adapt to these challenging circumstances. Consequently, there was a surge

in online sales as consumers increasingly relied on e-commerce to meet their needs. This transition not only helped businesses increase their visibility in the market but also expand their customer base, ultimately strengthening their market presence. In light of these findings, we confirm the validity of the first hypothesis: there is a significant impact between the sales process and the financial performance of SMEs online during the financial crisis.

Furthermore, given the economic and financial turmoil in Lebanon, businesses had to explore alternative avenues to sustain themselves. Many SMEs turned to e-commerce as a viable solution amidst these multifaceted challenges. They leveraged social media platforms and established online stores, often collaborating with delivery companies. The couriers continued to operate during this challenging period, playing a pivotal role in maintaining the flow of goods. Their contribution transcended mere economic significance; it had considerable social and economic implications, far beyond the usual scope. As such, the second hypothesis is validated: there is a significant impact between the mode of delivery and the financial performance of SMEs online during the financial crisis in Lebanon.

Lastly, e-commerce was already on a growth trajectory before the onset of the COVID-19 pandemic. However, the pandemic acted as a catalyst, driving unprecedented growth and market penetration for online retail. This growth can potentially encourage businesses to consider converting their newly acquired tools and experiences into long-term assets, even after the pandemic subsides. Notably, this includes leveraging flexible payment methods. Unfortunately, the financial crisis in Lebanon has constrained payment options, with the government imposing banking restrictions and limitations on the use of credit cards for transactions. These factors have compelled customers to be more cautious in their online purchases and payment methods, particularly given the volatility of the U.S. dollar in the market. Consequently, the third hypothesis is not validated: there is no significant impact between the mode of payment and the financial performance of SMEs online during the financial crisis in Lebanon.

## **V. Conclusion**

The primary objective of this study was to unveil the impact of e-commerce on the financial performance of SMEs during the ongoing financial crisis in Lebanon. To achieve this goal, our literature review first laid the theoretical foundations related to financial performance, followed by discussions on small and medium-sized enterprises (SMEs), e-commerce, and the vital role of SMEs during times of crisis. Furthermore, we explored the intricate relationship between the financial performance of SMEs and e-commerce.

In parallel, we formulated three hypotheses to frame our research context:

- There is a significant impact between the sales process and the financial performance of online SMEs during the Lebanese financial crisis.
- There is a significant impact between the mode of delivery and the financial performance of online SMEs during the Lebanese financial crisis.
- There is a significant impact between the mode of payment and the financial performance of online SMEs during the Lebanese financial crisis.

These hypotheses collectively created the conceptual framework for assessing the impact of e-commerce on the financial performance of SMEs during the ongoing financial crisis in Lebanon.

To validate these hypotheses, we meticulously followed a well-structured methodology. Adopting a deductive approach, we employed a quantitative research method to collect and analyze numerical data through a questionnaire. Each variable was assessed using a Likert scale with five critical points. The questionnaire was administered online via Google Forms, and the data was meticulously interpreted using the statistical software SPSS.

Moreover, our research findings unveiled that, beyond supporting our hypotheses by demonstrating the positive role of e-commerce during the COVID-19 pandemic, SMEs leveraged the opportunities presented. They expanded their online presence through website development, social media engagement, and collaboration with professional delivery companies, thereby facilitating payment methods for consumers amid the ongoing banking crisis.

As a result, our questionnaire revealed that e-commerce significantly impacts SMEs during the financial crisis. The inherent values and characteristics of online sales undoubtedly contribute to the financial performance of SMEs. Furthermore, the role of innovation in enhancing the online experience cannot be understated. Whether it's a user-friendly mobile interface or a secure online payment mechanism, these technological advancements enhance the shopping experience, making it more enjoyable and transparent.



While this research has provided valuable insights into the relationship between e-commerce adoption and financial performance among SMEs in Lebanon during a financial crisis, there are certain limitations that should be acknowledged:

- **Sample Size:** The survey conducted in this study included responses from 250 SMEs. While this sample size is representative, it may not encompass the full diversity of SMEs operating in Lebanon. A larger sample could provide a more comprehensive understanding of the impact of e-commerce during the crisis.
- **Data Collection:** Due to the constraints posed by the economic crisis and the COVID-19 pandemic, data collection was conducted primarily through online surveys and secondary data sources. This approach might have introduced bias, and the lack of in-person interviews or site visits may have limited the depth of data collected.
- **Context-Specific:** The findings and conclusions of this research are primarily context-specific to the Lebanese financial crisis. While they may offer insights for similar contexts, generalizing these findings to other countries or different types of financial crises should be done cautiously.
- **Time Sensitivity:** The economic crisis in Lebanon is an ongoing and evolving issue. As such, the findings of this research may be time-sensitive and subject to change as the crisis develops further.
- **Qualitative Data Depth:** The qualitative data collected in this study, while informative, may not provide an exhaustive exploration of the complexities of e-commerce adoption during a financial crisis. Future research could benefit from more in-depth qualitative investigations.

#### Research Perspectives

Our research has shed light on various theoretical and practical aspects, but it also presents several shortcomings that pave the way for future research perspectives. This study serves as a starting point for more in-depth inquiries. A broader, nationwide investigation into the impact of e-commerce on the financial performance of SMEs during the financial crisis in Lebanon would be particularly valuable. We aim to determine whether our research question and results are consistent in different contexts, enabling generalizations.

As research progresses in the future, there should be a diversified range of options to improve the reliability of studies and validate results and conclusions. The study was conducted among 250 owners and managers, representing a small sample relative to the total number of online SMEs. It would be beneficial to extend research beyond a single region, examining the repercussions of e-commerce on the financial performance of SMEs during the ongoing financial crisis throughout Lebanon.

Based on the findings of this research, several recommendations can be made to assist SMEs in Lebanon and similar economies in harnessing the potential of e-commerce during financial crises:

- **Invest in E-commerce Infrastructure:** SMEs should invest in robust e-commerce platforms, user-friendly websites, and mobile applications. Ensuring a seamless online shopping experience can attract and retain customers, especially during crises.
- **Diversify Payment Options:** Given the financial constraints imposed by the Lebanese crisis, SMEs should explore and offer a variety of payment methods. This flexibility can attract more customers who might have limited access to traditional banking services.
- **Strengthen Social Media Presence:** Utilize social media as a powerful marketing and communication tool. Engaging with customers, running targeted advertising campaigns, and posting valuable content can increase brand visibility and loyalty.
- **Collaborate with Delivery Services:** Partner with reliable delivery companies to ensure timely and efficient order fulfillment. A strong delivery network can mitigate disruptions in the supply chain and enhance customer satisfaction.
- **Emphasize Trust and Transparency:** Given the challenges and uncertainties during financial crises, SMEs should prioritize trust and transparency. Building trust with customers and offering clear return policies can increase credibility.
- **Foster Innovation:** Continuously innovate to improve the online shopping experience. Incorporate the latest technology, such as secure payment gateways, chatbots for customer support, and personalized recommendations.
- **Regular Data Analysis:** Consistently analyze e-commerce data to identify trends and customer preferences. Data-driven decisions can lead to more effective marketing and product offerings.
- **Government and Financial Support:** Advocate for government support in terms of regulatory frameworks, financial relief, and access to foreign exchange to facilitate e-commerce operations.
- **Customer Feedback:** Actively seek and act on customer feedback to improve products, services, and the overall online shopping experience.

- Risk Management: Develop a comprehensive risk management strategy to address potential challenges specific to operating in a crisis environment, such as fluctuations in currency value.

By implementing these recommendations, SMEs can navigate the challenging landscape of financial crises while leveraging e-commerce as a tool for resilience, growth, and long-term sustainability. Our findings have not only validated the formulated hypotheses but have also underlined the resilience and adaptability of SMEs in the face of economic adversity. The recommendations outlined serve as practical guidelines for SMEs to thrive in the evolving landscape of e-commerce. As the world continues to grapple with economic uncertainties, this study paves the way for further exploration and expansion of knowledge, contributing to the broader understanding of how e-commerce can be a pivotal force in sustaining SMEs during financial crises.