

# INITIAL EMPIRICAL EVIDENCE ON HOW JORDANIAN MANUFACTURING SMEs COPE WITH THE COVID-19 PANDEMIC

Khalil Al-Hyari, Al-Balqa Applied University

## ABSTRACT

*This research aims to investigate the influence of the COVID-19 (coronavirus disease 2019) pandemic on small and medium-sized enterprises (SMEs) in the Jordanian manufacturing sector. This study evaluates the state of various SMEs during the COVID 19 pandemic and improves insight as to what SMEs are experiencing and how they are managing to deal with it. Moreover, this research also includes data on firm size, layoffs, beliefs about the future business prospects, in addition to consciousness of current government relief programs. Exploratory qualitative research design based on 45 semi-structured interviews using a purposive sampling of managers, supervisors, and business owners of manufacturing SMEs in Jordan that are in different stages of the crisis.*

*The COVID-19 pandemic has had an economic impact on the community and particularly on SMEs in manufacturing sector. The results showed that Jordanian SMEs have already been severely impacted by COVID-19-related disruptions. In fact, 67% have reported a drop in sales because of either a drop in demand or problems with logistics and supply chains. 49% of the enterprises in the study stated that they have laid-off some of their workers because of lockdown, and 47% stated that they assume recovery to take more than nine months, putting Jordanian SMEs at great risk. To combat the economic repercussions of this pandemic, an urgent and decisive action is needed. Therefore, the results of this research might help to formulate strategic decisions that concentrate on SME recovery and regrowth once the pandemic has subsided.*

*Our results show how SMEs are fighting to survive in the era of this pandemic by adjusting their business models to changing environmental circumstances in a short period of time. Thus, SME's must initiate measures during the period of this pandemic by leading them to a tentative digitalization. Up to the author's knowledge, this is the first empirical study on how Jordanian Manufacturing SMEs cope with the COVID-19 pandemic. This research is expected to be a policy reference for governments, international organizations, and business organizations for dealing with the economic crisis caused by the COVID-19 pandemic to save SMEs. This research is focused on the manufacturing SMEs in Jordan during the COVID-19 pandemic outbreak with a policy of social distancing.*

**Keywords:** COVID-19, SMEs, Manufacturing Sector, Jordan.

## INTRODUCTION

The year 2020 has been unbelievably challenging for the global community (Kraus et al., 2020). The global pandemic of the 2019 coronavirus disease, more commonly known as COVID-19, is an unprecedented health and economic crisis seen as a life-threatening war on the world. It has affected the lives and livelihoods of both laborers, and the continued operations of

companies worldwide (ICC, 2020; Ejiogu et al., 2020). Indeed, the pattern of lifestyle defined by the pandemic has affected all aspects of the daily life of the world's population causing significant human suffering and life-threatening harm all around the world (Korankye, 2020; Prah & Sibiri, 2020).

The COVID-19 pandemic is an unforeseen global phenomenon with every country fighting with an invisible enemy (Pandey et al., 2020). As a result, the pandemic has thrown the economy into chaos and has effectively put life-sustaining commerce at a standstill (Korankye, 2020; Qamruzzaman, 2020). What is more, the effects this pandemic has on one country a threat to all countries, including Jordan.

The effect of COVID-19 on economies around the world has been exceptional (ANDE, 2020). Besides its effect on public health, the pandemic has caused a major economic shock around the globe (Juergensen et al., 2020; Korankye, 2020; Ejiogu et al., 2020). Undeniably, trade, investment, and employment have all been affected by this pandemic. Furthermore, every country, multinational, large, small and medium size enterprise - all businesses, in fact - is enduring the impact of this pandemic (Korankye, 2020). One can see the economic losses caused by COVID-19 between one-unit business and the other; however, on the losses depend on numerous issues comprising the type and the size of business (Milzam et al., 2020). The sectors most affected are tourism, trade, health, manufacturing, education, and transportation. It has affected not only livelihoods but also every economic activity, particularly SMEs, which are the most vulnerable sector since they do not have the resources to survive the pandemic (Fitriasari, 2020; Qamruzzaman, 2020). Because they are the most susceptible with the least amount of resilience, the effects of the pandemic on SMEs are especially severe (ECCP, 2020).

Studies conducted on the economic effects of previous pandemics show that many countries, businesses and enterprises have to endure economic hardships caused by a halt in production in affected countries and a collapse in consumption and confidence as a result of the pandemic (OECD, 2020; Kraus et al., 2020). This is due to a simultaneous demand and supply shock. In fact, many companies actually have to stop producing goods and offering their services because the pandemic has stopped the demand for them (Korankye, 2020). Subsequently, other companies find that they cannot get the supplies they need to continue production as a result of their suppliers stopping production (Korankye, 2020). There are many sectors that are most depressed and their demand has evaporated due to the COVID-19 pandemic such as household, SMEs, financial sector, restaurants, air transportation and tourism. On the other side, there are numerous forms of industries that have skyrocketed, like healthcare, medical tools, masks and personal protective equipment which are currently needed by the paramedics (Kraus et al., 2020; Milzam et al., 2020).

Many service and manufacturing sectors have consequently had to shut down their operations (Kraus et al., 2020). The economic consequences of the pandemic quickly became obvious, and battling on the front lines of the pandemic are SMEs. As a result, with most of the labor force and their customers quarantining themselves indoors, the need for non-essential goods and services is reduced. Add to that the fact that both lockdowns and shutdowns severely test supply chains, and it becomes clear that, with SME's making up 70% of the workforce in most countries around the world, all of this puts SMEs under a lot of duress (Kraus et al., 2020; ITC, 2020). As a result, many SMEs have struggled, and in some extreme situations even closed (Korankye, 2020), and many SMEs are projected to go out of business during and after the COVID-19 pandemic (Syriopoulos, 2020).

The significance of SMEs and its influence to economy is well reported in the literature review (Syriopoulos, 2020; Razumovskaia et al., 2020). As in most nations around the world, SMEs in Jordan are the engines that drive the economy. That is, SMEs are the backbone of the Jordanian economy, constituting 98% of Jordan's enterprises and 40% of national employment. Nonetheless, the focus of all of this research will be on the manufacturing sector, 60% of which is employed by SMEs (Al-Hyari, 2020; Al-Hazaimah et al., 2011). It is their innovative ability which makes Jordanian manufacturing SMEs capable of being continually competitive. However, due to their smaller size and their restricted resources (financial, human and technical) compared to large enterprise, they usually becoming mostly vulnerable to external blows, such as the COVID-19 epidemic (Juergensen et al., 2020).

Though proof of the negative impacts caused by the pandemic are just now beginning to rear their ugly heads, there is no doubt that the biggest recipient of these economic impacts are SMEs in emerging markets and indeed, they are projected to suffer the most as a result of COVID-19 (Bouey, 2020). As a result of their importance to economic growth and the creation of jobs, a critical part of the global economic recovery will be the support of SMEs both during and after the pandemic (ANDE, 2020). During this challenging period, it is essential to preserve jobs, to keep businesses sustainable (Korankye, 2020). This condition calls for academic study providing businesses with effective plans on how to manage with the challenges of the COVID-19 pandemic.

Because of the severe drop in both supply and demand supply primarily affected SMEs at the manufacturing sector, it is, therefore, critically significant to study the role of Jordanian manufacturing SMEs will play in recovering from the economic crisis caused by the COVID-19 pandemic. This research explores the effects of COVID-19 on manufacturing SMEs in Jordan, focusing on how these enterprises handle a lockdown situation, and contributes to innovative and digitalized literature by providing insights into how external shocks may activate the innovation and digitalization developments of businesses. To the best of the author's knowledge, it is the first empirical research that addresses the consequences and surviving mechanisms of Jordanian SMEs at manufacturing sector in the COVID-19 pandemic.

## LITERATURE REVIEW

### Impact of Covid-19 on SMEs and other Businesses

SMEs form the backbone of the global economy, and their workers, who account for around of 80% of employment in various countries, have been among the hardest hit by the economic influences of the COVID-19 crisis. Crucial motivation is a must and protective measures are needed to help SMEs preserve their stability and alleviate the negative influences of COVID-19 pandemic has had on their livelihoods and the economy in general (ICC, 2020)

The size of enterprises significantly affects the financial health of the business unit according to their capital, assets. For large enterprises, the influence of COVID-19 pandemic can be handled with emergency funds while they wait for a return to the normal life. Consequently, the size of the funds should be measured by the total assets which aid the enterprises in preserving their business in times of crisis (Milzam et al., 2020). Both larger and smaller firms are the ones to more than likely feel the effects of the economic consequences, but none more than SMEs which, because of their size, tend to be more susceptible and less resilient than their counterparts (OECD, 2020). Plus, the longer it takes for SMEs to get back to work, the less

confident investors and consumers will feel about them. This, in turn, could lead to massive SME closures (Bouey, 2020).

Moreover, COVID-19 affects the economy, and especially SMEs, in a variety of different ways on both sides of supply and demand. On the side regarding supply, logistical problems may arise including those like the disruption of transportation and a shortage in the number of laborers available. Added to those is the fact that some workers may become ill with COVID-19 or may not be able to even come to work due to the governmental restriction of their movement (OECD, 2020; SMEDA, 2020). SMEs may experience supply chain alterations because of irregular supply of raw materials, revenue loss and lack of liquidity to keep business operations (SMEDA, 2020). Moreover, supply chains may be interrupted leading to lacks of parts and intermediary goods (OECD, 2020). On the demand side, however, SMEs have realized that their demands decline considerably because of lockdown measures (Juergensen et al., 2020). Shortage of materials, the reduction in both global and local demand for their products and services, problems in paying loans and interest, deletion of orders, and a terrible cash deficit are the cause of intense economic suffering for SMEs everywhere in the world (Qamruzzaman, 2020). With no demand for their products or services, there is no revenue for SMEs; therefore, opening their business only means there will be no money coming in to pay their rent, their employees, and additional overhead (Bouey, 2020).

In the study (Syriopoulos, 2020) disclosed that SMEs were experiencing trouble due to interest payment, stagnant inventory, workers' wages, lack of funds, liquidity, technology and rental costs during this pandemic. From other side, some features of SMEs can be beneficial for them compare with large enterprise since SMEs are privately owned with flat hierarchical structures, it would be of great interest for entrepreneurs, SMEs owners/managers, to identify and commercialize new market trends particularly, in turbulent times such as COVID-19 pandemic (Syriopoulos, 2020). According to (SMEDA, 2020), the economy will observe inactive growing in manufacturing, services and agriculture sectors, which will lead to rise in unemployment, reduction in government revenue, decrease in exports and an interruption in supply chains. While it is rather difficult to predict what the size and impact of the COVID-19 pandemic, one thing that is certain is the unique potential for a global recession to occur. These annotations should give the researchers an awareness of the influence of the pandemic on SMEs sector globally (Korankye, 2020).

In the study of (ECCP, 2020), they revealed that 85% of SMEs in the Netherlands are in financial trouble due to the COVID-19 pandemic. In Belgium, 40% of businesses reported a drop in revenue of 75%, and in Portugal, 37% reported a drop in production by more than half. In another study initiated by (Qamruzzaman, 2020) for evaluating COVID-19's impact on SMEs in Bangladesh, the researchers noticed that SMEs in Bangladesh have to spend their days full of restrictions including a liquidity crisis, nearly zero market demand, and financial limitations. The study suggested that government relief and the best policies and guidelines to help this sector are important for sailing through the COVID-19 pandemic.

SMEs have recognized areas of public sector support to preserve their businesses and alleviate the impact of COVID-19, and these include *“financial packages, tax relief, lessening in payments of utility bills, support in paying salaries and facilitation conditions for loan repayments”* (SMEDA, 2020). Commercial banks in different countries are offering credit and easing situations for loan repayment (OECD, 2020). According to Bouey (2020), the state council encouraged banks to increase lending to small businesses by at least 30% in the first half of 2020.

Further evidence, found in the study of (Humphries et al., 2020), brings to light the fact that micro, small and medium enterprises are likely to be ruthlessly affected by the COVID-19 pandemic, since they are usually more credit constrained than larger enterprises. Furthermore, (ITC, 2020) found that around 40% of large business say that they were affected by the pandemic, while nearly 66% of micro and small firms reported the same; however, in developed countries, small business received more aid from government programs to help overcome both the health and economic consequences caused by the pandemic than their counterparts in developing countries received.

The potential effect of COVID-19 on the economy is a widely discussed subject lately in literature review and Jordan is not an exception in this regard. The development of SMEs in Jordan showed a fairly good pattern before the COVID-19 outbreak. SMEs play major roles in the Jordanian economy as they drive growth, provide employment, and open new markets, contribute to the gross domestic product, develop industrial production and contribute considerably to exporting. In 2019, SMEs in Jordan constituted about 98% of the manufacturing sector within the Jordanian context, and about 60% of current employees working in SMEs sector, as well as it is estimated that SMEs contribute 50% to the GDP, and 65% of the export-oriented product come from SME sector of Jordan, and they represent the engine of solving the unemployment problem (Al-Hyari, 2020). Therefore, this research plans to fill in the gap in literature by looking at the potential effect of COVID-19 on the developing economy and particularly on SMEs in the manufacturing sector.

Never mind the fact that SME's are some of the most vital contributors to the economic growth of most nations, the fact is that, during major public crises, they still remain vulnerable (Qamruzzaman, 2020). Therefore, to survive in the new global marketplace, SMEs in the manufacturing sector of Jordan will have to adopt new work processes, speed up digitalization and find new markets as a potential strategy for tackling this crisis. Yet the move towards digitalization should be complemented by technical support, skill building and infrastructure assistance to guarantee that it is inclusionary and equitable (Humphries et al., 2020).

Jordan is experiencing geometrical growth in discovering the infected population since the 2019-coronavirus disease was first detected. According to official information from the Jordanian government, Jordan has recorded 211,000 confirmed cases with 143,721 recoveries and 2626 deaths as of 28 November 2020. Jordan is facing the brunt of the coronavirus epidemic with the country in a state of partial lock down. This has had a negative influence on businesses. The Jordanian manufacturing SMEs has scaled down production, reduced operations to minimal levels and started lessening working hours as of the mid-April 2020. The business's supply chain has suffered an enormous interruption because of the irregular supply of raw materials where businesses can neither obtain parts nor sell their output since retail outlets are closed (Kraus et al., 2020).

The Jordanian economy records the contribution of SME in facing various crises at previous history. As during the financial crisis in 2008, SME remained strong supporting the national economy. However, during this COVID-19 pandemic, SMEs will be the most vulnerable sector of the economic crisis. How deep and long this crisis lasts will be determined by the success of the steps taken to stop the spread of COVID-19. According to Fitriasari (2020), the effects of government policies to overcome liquidity problems in SMEs, implementing financial first-aid and stimulus packages for businesses, and policies to secure employment, and supply chains are also important consideration. Nurunnabi (2020) believes that enterprises need to control and evaluate all the progresses linked with the spread of the emerging corona-crisis

and to improve and implement contingency strategies to control any undesirable situations rising from (corona-virus) epidemic. For that reason, one could say the pandemic has paralyzed SMEs in the manufacturing sector of Jordan. The motivation of this research to find out the current state of manufacturing SMEs in Jordan, along with the potential challenges, might be hindering them to revive their operations.

## METHODOLOGY

This research is seeking to shed more light on the influence of the COVID-19 pandemic on the current conditions of their SME's. Therefore, the research is based on the exploratory qualitative research approach based essentially on semi-structured interviews, particularly designed to capture SMEs owners' and managers' subjective experiences throughout the pandemic.

The exploratory qualitative approach is used when there is an observable fact which little is known about, yet is still considered to be suitable for researchers to study, and often including atypical areas of study which the researcher can improve upon by sorting out a multifaceted set of elements and relations, no matter how many or few they be (Yin, 2018; Sekaran & Bougie, 2016). The trends being searched are vague, and their scope and logic are uncertain. Thus, the purpose of this research is to better understand the problems SMEs in the manufacturing sector of Jordan face throughout the COVID-19 pandemic and how they responded, or plan to respond, to growing economic uncertainties. According to (Kraus et al., 2020), qualitative research designs are generally appropriate for investigating these types of organizational processes. According to Prah & Sibiri (2020) qualitative methodology is ideal for the researchers since it helps better understand and offer an in-depth explanation of the subject matter. Comprising multiple cases permitted for a robust research approach with more general findings.

In the present situation of the COVID-19 epidemic, it is completely difficult to have a large number of samples for gathering their replies (Qamruzzaman, 2020). With our best possible efforts in the process of data collection, this research was able to have a sample of 45 SMEs with semi-structured interviews, representing SMEs in the manufacturing sector of Jordan. Because of the social distancing actions and quarantine, the interviews were conducted by telephone and advance technology communication tools such as Skype, Microsoft Team, and Zoom. The interviews were recorded with the respondents' consent, lasting around 30 minutes. As a result of confidential methodical rule, titles of the respondents could not be declared. The interviews lasted from 20 to 30 minutes.

This research employed a purposive sampling method, interviewing key informants for instance, managers, supervisors, and business owners of various SMES at manufacturing sector in Jordan between August and November, 2020, over the current peak of the COVID-19 pandemic in Jordan. The researcher used a primary analysis to highlight specific questions regarding what the respondents believe will happen in the future based on future predictions. In addition, the researcher also asked questions regard the respondents' awareness of available government relief programs that could help their businesses deal with the COVID-19 pandemic through questions such as how many staff members they predict they will dismiss within the next three months, how optimistic they are that their businesses will get better, and how long do they expect their company to last before they have to close their businesses. Finally, the recordings were transformed into written manuscripts which the researcher review and then categorized regarding certain common themes and general differences.

## DATA ANALYSIS

Table 1 provides an overview of the respondents' and their firms' characteristics. All of the respondents were upper management. This result resembles with the characteristics of an SME where the owner typically is the manager. Moreover, all of the respondents had at least a Bachelor's degree. Regarding gender, 77.8% of the respondents were males, while 22.2% were females. Concerning the firms' size, 66.7% of enterprises have up to 49 employees. 33.3% of enterprises have 50 to 249 employees. This proves that 100% of the respondents are categorized as SMEs according to the Jordanian Ministry of Trade and Industry's definition. 66.6% of respondents were between 18 and 45 years of age. As shown in Table 1, interviews were conducted with various firms from different sectors. 17.8% came from clothing and textiles industry, 15.6% were chosen from health and personal care industry, chemicals, plastic and detergent industry made up 35.6% and finally, the pharmaceutical industry equaled 11%.

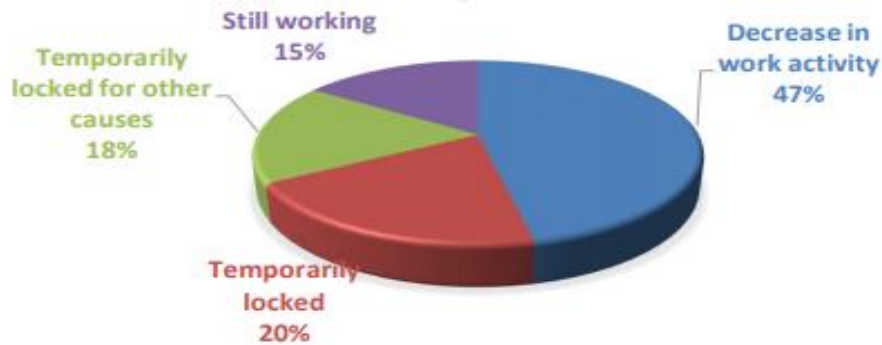
Measure	Value	Frequency	Percentage
Gender	Male	35	77.8
	Female	10	22.2
Age	18 less than 25	5	11
	25 less than 45	25	55.6
	45 less than 60	7	15.6
	More than 60 years	8	17.8
Academic Qualification	High School or less	-	-
	Bachelor	30	66.7
	Master	10	22.2
	PhD	5	11.1
Management level	General manger	38	84.5
	Quality manager	2	4.4
	Administration manager	3	6.7
	Marketing manager	1	2.2
	Others	1	2.2
Size of the Company	1-9 Employees	5	11.1
	10-49 Employees	25	55.6
	50-249 Employees	15	33.3
	250 and above	-	-
Firm Sector	Pharmaceutical	5	11
	Food	8	17.8
	Health and Personal Care	7	15.6
	Chemicals and Detergent	12	26.7
	Textile and Clothing	8	17.8
	Plastic	4	8.9
	Others	1	2.2

## FINDINGS AND DISCUSSION OF RESULTS

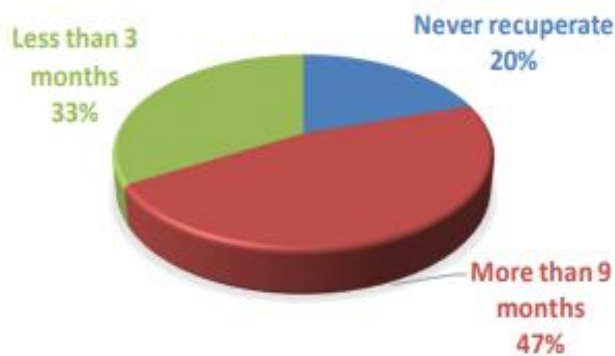
This research seeks to investigate the influence of the COVID-19 pandemic on the status of SMEs of the manufacturing sector in Jordan. The finding of the research shows that COVID-

19 pandemic has influenced the operations and the statuses of SMEs at manufacturing sector in Jordan. Wages of employees have been reduced and employees have been laid-off according to the research findings. Also, the results revealed that there is severe reduction in public purchases and demand for manufacturing SMEs output. The results also showed that SMEs are diminishing the number of workers making up the labor force, and in some situations, laying-off workers and suffering a fall in their revenue.

This research allowed the respondents to report whether the enterprises was closed as a consequence of COVID-19 pandemic or another cause. Across the sample, 46.7% of them admit to have experienced a decrease in work activity caused by COVID-19 as stated in Figure 1. 20% of enterprises stated that they were temporarily locked due to pandemic. By contrast, just 18% stated that they were temporarily locked for other reasons; while 15% stated that they were still working. This result is consistent with the results identified by (Humphries et al., 2020) that businesses will permanently close or go bankrupt within the next six months.



**FIGURE 1**  
**MOST SMES EXPERIENCED SOME OR A MAJOR INFLUENCE OF (COVID-19) PANDEMIC**



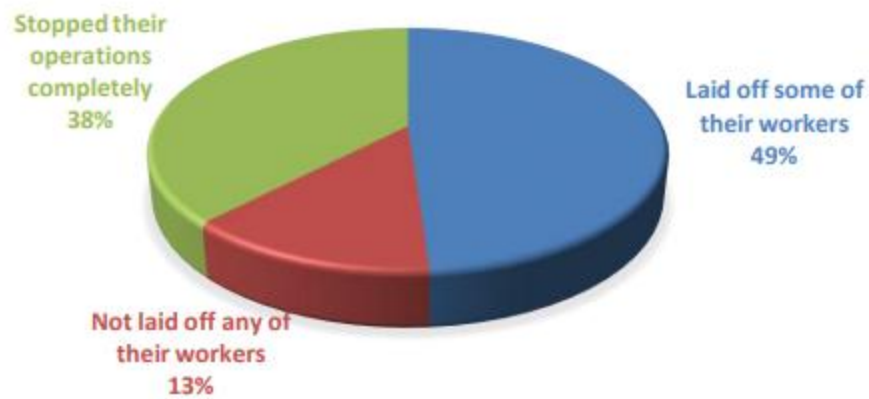
**FIGURE 2**  
**EXPECTATION CONCERNING SMES RECUPERATE**

Figure 2 shows how long respondents think it will take for their business to recuperate. 20% of enterprises assumed they will never recuperate, 47% stated that they assume recovery to take more than nine months, and less than 33% of enterprises assumed it would take less than

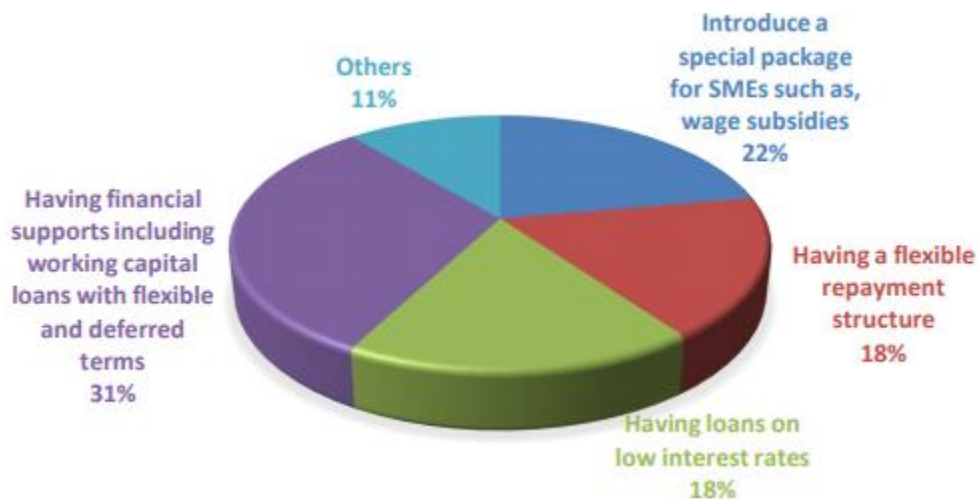


three months to recuperate. The results are in agreement with the literature reporting that SMEs are doubtful about the predictions for a quick recovery, and that the majority of them think their enterprises will still be impacted in one year (Humphries et al., 2020).

According to Figure 3, 49% of enterprises have laid-off some of their workers because of lockdown, whereas 13% admit that they have not laid off any of their workers. Moreover, about 38% of enterprises which classified as SMEs stated that they have stopped their operations completely comparing with large enterprises, which indications the vulnerability of SMEs at manufacturing sector in Jordan throughout lock down. This engenders concern as SMEs are one of the major employers in Jordanian economy, the going down this path could finish up with thousands of workers becoming unemployed in a few months later. These results are the same as the findings of (ITC, 2020; SMEDA, 2020).



**FIGURE 3**  
**% OF ENTERPRISES WHO HAVE LAID OFF EMPLOYEES**



**FIGURE 4**  
**IMPORTANCE SUPPORT OFFERED BY PUBLIC INSTITUTIONS AND GOVERNMENT TOWARD SMES**

The results of this research afford significant and appropriate suggestions for SMEs owners /managers. To tackle the existing difficulties and to help SMEs avoid bankruptcy, 89% of enterprises ask for financial support comprised of working capital loans with flexible and deferred terms, trade finance, loans on low interest rates, and wage subsidies for SMEs to meet operational expenses and to help them to keep their workforce on their payrolls as shown in Figure 4. This result is consistent with the results identified by Kraus et al. (2020) and Razumovskaia et al. (2020) that businesses must guarantee liquidity, decreasing their costs by using less working hours or finding government help for leveling the negative impact of the COVID-19 pandemic. In addition, the results show how SMEs are struggling to persist in the era of this pandemic by modifying their business models by leading them to digitalization by adapting their work to a changing landscape of working “remotely, through recognizing and developing innovative venture opportunities based on the extraordinary combination of digital and physical resources and building comparative advantages. These results are the same as the findings of (Fitriasari, 2020).

## RECOMMENDATIONS

In order to successfully address the business advisory needs of the SMEs in the manufacturing sector throughout the COVID-19 pandemic, this research explores areas of opportunities where SMEs needed support to get the desired result and thus become more resilient. This research recommends the following based on the results:

- Adapt modes of operation that allow SMEs to reduce their costs when doing business and stockholding by meeting the changing needs of their customers, through providing soft loans to logistics sector so that improve investment in warehousing, IT, and transport sector.
- Use digital platforms to improve the effectiveness and competitiveness of SMEs in reaching customers at their homes particularly by using online marketing.
- SMEs must avoid from doing risky businesses in this risky time by reorient activities and resources to confirm business stability throughout the lockdown.
- Government should support SMEs in finding new business opportunities and establishing new contacts.
- Exceptional allowances, Grants, working capital loans with flexible and deferred terms, and loans with free or low interest may be introduced to SMEs.
- Lessen interest payments or easier lending policies for running SMEs’ businesses for few months might be introduced during the period when market demand is down and SME’s are frail because of little to no revenue, thus allowing them to stay afloat during those worrisome times.
- Emergency funding programs that target SMEs may be introduced to online or digital sales and services.
- Decision maker may offer extraordinary motivations to SMEs sector to keep their workers by enhancing handicraft products.
- Special funding from the government for unemployment insurance payments and wage subsidies to aid retain their employees on the payroll, also tax imposed on workers’ salaries may be simplified in the situation that SMEs at manufacturing sector affected by the COVID-19 are forced to dismiss workers.
- SMEs need technical help and guidance to help them restructure their business operations to build resiliency for a range of COVID-19-related challenges.
- Increase and simplify access to finance for SMEs, along with those run by women or young entrepreneurs.
- Consider further emergency funding that would aid SMEs in avoiding insolvency or aid creditors who have SMEs that have gone insolvent.
- Help in digitalization by accelerate the effort towards the digitalization of trade documents and procedures, in cooperation with the private sector.

- Shift effort on the way to improve online environment and providing services and products online.
- Technical and financial advisory support in strengthening current business operations

## Limitations

Research results are founded on a small sample size. Thus, the results cannot be generalized for all the SMEs operating in Jordan or other similar developing countries, because expanding the sample population to include other SMEs in other sectors such as the service sector might change the results achieved from this research.

Furthermore, this research was carried out during the pandemic and for that reason, the consequences and the level of damage might differ in the near future. Forthcoming research should emphasis on the government role to enhance creative strategies for promoting economic development in Jordan.

The special condition and the period of time in which this research was carried leaves open a relative valuation of the practicality of these mechanisms. As a result of the estimated massive long-term influence of the COVID-19 pandemic, along with the data being gathered at a very specific time period, the researcher recommends further longitudinal studies be carried out on the long-term strategic responses of SMEs regarding the COVID-19 pandemic. This research encourages other researchers to do further researches in other countries as well to attain a global picture of the outcomes. Replication studies conducted in other cross-cultural settings would be useful

## REFERENCES

- Al-Hazaimeh, A., Al-Hyari, K., & Al-Nsour, M. (2011). Determinants of aggregate import in Jordan: Empirical evidence (1976-2008). *Journal of Economic Development, Management, IT, Finance and Marketing*, 3(1), 18-38.
- Al-Hyari, K. (2020). Lean bundles within Jordanian manufacturing smes and their effect on business performance. *Problems and Perspectives in Management*, 18(2), 302-315.
- ANDE. (2020). *The small and growing business sector and the covid-19 crisis: Emerging evidence on key risks and needs*, ANDE-The Aspen Network of Development Entrepreneurs. Retrieved November 5, 2020, from [https://cdn.ymaws.com/ande.site-ym.com/resource/resmgr/publications/covid\\_and\\_sgbs\\_issues\\_brief-.pdf](https://cdn.ymaws.com/ande.site-ym.com/resource/resmgr/publications/covid_and_sgbs_issues_brief-.pdf)
- Bouey, J. (2020). Assessment of covid-19's impact on small and medium-sized enterprises: implications from china: testimony of Jennifer bogey, before the US house committee on small business, March 10, 2020. In *RAND Corporation*. Rand Corporation.
- ECCP. (2020). *European smes and the impact of covid-19*, ECCP, The European Cluster Collaboration Plat form, Retrieved October 10, 2020, from [https://www.clustercollaboration.eu/sites/default/files/european\\_smes\\_and\\_the\\_impact\\_of\\_covid.pdf](https://www.clustercollaboration.eu/sites/default/files/european_smes_and_the_impact_of_covid.pdf)
- Ejiogu, A., Okechukwu, O., & Ejiogu, C. (2020). Nigerian budgetary response to the COVID-19 pandemic and its shrinking fiscal space: financial sustainability, employment, social inequality and business implications, *Journal of Public Budgeting, Accounting & Financial Management*, 32(5), 919-928.
- Fitriasari, F. (2020). How do small and medium enterprise (SME) survive the COVID-19 outbreak? *Jurnal Inovasi Ekonomi*, 5(2), 53-62.
- Humphries, J.E., Neilson, C., & Ulyseas, G. (2020). *The evolving impacts of COVID-19 on small businesses since the CARES Act*.
- ICC. (2020). *A Call to action to save our smes*, icc at the world business organisation, International Chamber of Commerce, Retrieved October 8, 2020, from <https://iccwbo.org/content/uploads/sites/3/2020/03/2020-sos-call-to-action-web.pdf>
- ITC. (2020). *SME competitiveness outlook 2020: COVID-19: The Great Lockdown and its Impact on Small Business*. ITC, International Trade Centre, Geneva. Retrieved 1 November, 2020, from <https://www.intracen.org/publication/smeco2020/>

- Juergensen, J., Guimón, J., & Narula, R. (2020). European SMEs amidst the COVID19 crisis: assessing impact and policy responses. *Journal of Industrial and Business Economics*, 47(3), 499-510.
- Korankye, B. (2020). The Impact of Global Covid-19 Pandemic on Small and Medium Enterprises in Ghana. *International Journal of Management, Accounting and Economics*, 7(6), 255-276.
- Kraus, S., Clauss, T., Breier, M., Gast, J., Zardini, A. & Tiberius, V. (2020). The economics of COVID-19: initial empirical evidence on how family firms in five European countries cope with the corona crisis. *International Journal of Entrepreneurial Behavior & Research*, 26(5), 1067-1092.
- Milzam, M., Mahardika, A., & Amalia, R. (2020). Corona virus pandemic impact on sales revenue of micro small and medium enterprises (MSMEs) in Pekalongan City, Indonesia, *Journal of Vocational Studies on Applied Research*. 2(1), 7-10.
- Nurunnabi, M. (2020). Recovery planning and resilience of SMEs during the COVID-19: experience from Saudi Arabia. *Journal of Accounting & Organizational Change*.
- OECD. (2020). *Policy responses towards SMEs in the context of the COVID-19 virus outbreak*, Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), OECD. Retrieved November 5, 2020, from [https://www.lpk.lt/wp-content/uploads/2020/03/Policy\\_responses\\_towards\\_SMEs\\_in\\_the\\_context\\_of\\_the\\_COVID19\\_virus\\_outbreak-2.pdf](https://www.lpk.lt/wp-content/uploads/2020/03/Policy_responses_towards_SMEs_in_the_context_of_the_COVID19_virus_outbreak-2.pdf)
- Pandey, J., Chakraborty, S., Chakraborty, I., Ghosal, P., Singh, N., & Majumdar, S. (2020). Can developing countries handle the mental burden due to the lockdown situation?: Understanding the uncertainty and management of Covid-19 pandemic. *Asia Pacific Journal of Health Management*, 15(3), 72-79.
- Prah, D., & Sibiri, H. (2020). The resilience of African migrant entrepreneurs in China under COVID-19. *Journal of Entrepreneurship in Emerging Economies*.
- Qamruzzaman, M. (2020). COVID-19 Impact on SMEs in Bangladesh: An Investigation of What They Are Experiencing and How They Are Managing?. Available at SSRN 3654126.
- Razumovskaia, E., Yuzvovich, L., Kniazeva, E., Klimenko, M., & Shelyakin, V. (2020). The effectiveness of Russian government policy to support SMEs in the COVID-19 pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 160.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- SMEDA. (2020). *Survey report: Impact of COVID-19 on SMEs policy & planning division*, (SMEDA, Small and Medium Enterprises Development Authority), Retrieved October 12, 2020, from [https://smeda.org/phocadownload/Research\\_Publications/SMEDA%20Survey%20Report%20-%20COVID-19%20Impact%20on%20SMEs%20reduce.pdf](https://smeda.org/phocadownload/Research_Publications/SMEDA%20Survey%20Report%20-%20COVID-19%20Impact%20on%20SMEs%20reduce.pdf)
- Syriopoulos, K. (2020). The impact of COVID-19 on entrepreneurship and SMEs. *Journal of the International Academy for Case Studies*, 26(2), 1-2.
- Yin, R., & Campbell, D. (2018). *Case study research and applications: design and methods*. Thousand Oaks, California: SAGE Publications, Inc.