

## Impact of the Covid-19 Crisis: A Survey of Challenges and Respons in Chinese firms

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### **Abstract:**

COVID-19 pandemic has been spreading exponentially, Since March 2020. Infecting millions of people and halting economic activity around the globe. The pandemic has severely impacted small and medium businesses deteriorating their activities and making them financially vulnerable, struggling to survive. This paper is dedicated to the covid-19 crises and its impact in entrepreneurship particularly on firm's activities, we investigate the impact of the COVID-19 pandemic on SME's, and their response during the recent economic crisis initiated by this pandemic, and we took the Chinese firms as example. Our purpose is to present and discuss cases related to the issued above and make it beneficial to researchers and students as well. The case study concluded by proving that innovation strategy to crisis management was the solution for many firms across the world including the Chinese firms.

**Keywords:** small and medium-sized enterprises (SME's), COVID-19 crisis, crisis management, China firms

## **I- Introduction:**

Crisis originating externally can threaten firms' operations, performance and survival. Such crises can be considered black swan events when they occur with 'low probability [but have] high impact [and are] perceived by critical stakeholders to threaten the viability of the organization'. COVID-19 represents such a crisis (P.Puthusserry, 2022, p 603). Since March 2020, the COVID-19 pandemic has been spreading exponentially, infecting millions of people and halting economic activity around the globe (D.Miocevic, 2021, p1). Its development affected various sectors; the most affected ones are trade, tourism, transportation, education, and health. According to J.C.ALVES (2020, p2), the Covid-19 is more complex. Its complexity comes from the fact that it has had an impact that has been difficult to understand, it has been claimed that the situation has been more complicated to deal with than traditional crises. While many previous crisis occurred at a specific place and time (such as natural disasters) or had global effects that developed over a long period of time (such as financial crisis), the COVID 19 crisis combines a global spread with an unknown time frame and extent. No one knows when, and to what extent, activities can be resumed, which significantly complicates the work of dealing with the crisis (J.Fasth, 2021, p162).

Similarly to any other global issue, the pandemic has influenced the development of the global economy and threatened enterprises worldwide (M.Cepel, 2020, p249). On a wider scale, it created immense social and economic deteriorations at all levels, including social phobia, unemployment, supply chain disruption, stock market crashes, economic lockdown, and de-globalization (J.C ALVES, 2020, p2). To confront such negative impacts, governments have introduced many intervention measures and policies. Although these interventions are aimed at lessening the negative side effects of the crisis, the solutions to how to recover from the demand shock caused by the COVID-19 pandemic remains the sole responsibility of businesses (D.Miocevic, 2021, p1). Under these settings, The COVID-19 has been economically harsh and posed great challenges for the survival and development of firms. Most enterprises had difficulty to operate, especially the SMEs (small and medium-sized enterprises), SBs (small businesses) or SMBs (small and medium businesses) that have attributes that make them more vulnerable to the current pandemic crisis. Their scarcity of financial resources and gaps in specialized knowledge make it difficult for them to respond to the challenges posed by the COVID-19 crisis. Specific characteristics of SMEs in comparison with large firms certainly make difficult SMEs' responses to this crisis: lack of human resources, limited managerial capacity (procedures, techniques and tools), limited capital resources and no knowledge management (only tacit knowledge, nothing is formalized). Furthermore, SMEs face a liability of smallness, which simply means that the smaller the firm, the more vulnerable it is to internal and external events. Some also face a liability of newness, meaning that the youngest companies tend to be more vulnerable than older ones (V.B Klein, 2021, p117).

Nonetheless, there are also arguments that SMEs may be more resilient and better equipped to manage the situation than their larger counterparts (J.Fasth, 2021, p162). In this regard, some studies report that small entrepreneurial firms are not directly impacted by the negative effects of an economic crisis, which can be attributed to the strong opportunity recognition

capacity that these firms nurture. It is argued that SMEs can navigate through the stormy landscape of the COVID-19 crisis by engaging in organization-wide innovation. Consequently, such insights lead to the conclusion that the literature on the impact of economic crisis on SME business activity is ambivalent—evidently for some SMEs such crisis can represent a window of opportunity and for some a threat (D.Miocevic, 2021, p2).

Considering this context, we raised this research question:

### **How did the COVID-19 pandemic impact the firm's activities in China?**

To answer this question, we put the following **hypothesis**:

- The covid-19 pandemic had a negative impact on the SMEs operations and financial performance.
- The covid-19 pandemic had a possitif impact on the Chinese SMEs performance.

In order to answer this question, our paper will aim to: first, give a brief literature review on the changes and consequences of this pandemic in the business and management of SMEs; then, we discuss the respons of the SME's to the crisis and we take exemple of the Chinese firms.

### **1. Coronavirus and its impact: A theoretical framework**

The Severe Acute Respiratory Syndrome Corona-virus 2 (SARS-CoV-2) caused the corona-virus disease 2019 (COVID-19) with the first symptoms officially reported in December 2019 and the subsequent outbreak in 2020. On March 11, 2020, the World Health Organization declared COVID-19 a pandemic. On March 27, 2020, the international monetary fund (IMF) stated that “the world is now in recession” and that the “length and depth of this recession depend on two things containing the virus, and having an effective, coordinated response to the crisis”. It has caused significant behavioral changes in the way individuals interact and behave in society as the virus is inflicting rising human costs worldwide. In the absence of a cure, social distancing, self-isolation became the norm or the “new normal”, to curtail the spread of the virus and reduce its impact. The pandemic has disrupted many businesses around the world due to complete or partial lockdown and social distancing measures, which are essential measures to curtail the spread of the virus. Due to these measures, specific sectors/businesses that rely on social interaction like the sports industry, travel, tourism, hospitality, and manufacturing industries have experienced profound effects. Workplace closures affected the supply chain and led to reduced production. Income decline, layoffs, fear of contagion are some of the reasons which have led to reduced customer spending, which is further causing job losses and business closures (E.Thukral, 2021, p 154).

COVID-19 has created a crisis due to its complex negative impacts. The crisis is not only strengthened by its impact on the health of residents, but its influence is global (geographical) and complex (economic and social). Especially in the economic sphere, COVID-19 has shown how vulnerable both companies and entire societies are through global supply chains (J.Klucka, 2021, p 10). As example, P.Zou (2020, p2) affirmed that the impact of the epidemic on China's economy is significant. According to them, in the first two months of 2020, China's added value in terms of size, investment, and consumption fell by 13.5, 24.5, and 20.5% year-on-year, and the unemployment rate reached 6.2%, for the first quarter of 2020, China's GDP growth rate fell by 6.8%.

As explained by the authors A.Islam and I.Jerin (2021, pp 38-39), the idea of crisis in business refers to an unexpected situation that generates obstacles in an organization's regular

operational activities and involves both fiscal and reputation-related risks. Here, crisis management can be illustrated as a process by which a business organization adjusts various strategies to confront a hazardous scenario that threatens to damage the stakeholder's interests of the organization. Three dimensions are common in most of the explanations of crisis: (1) a hazard to the business; (2) the factor of surprise; and (3) the requirement of quick decision making. The suitable strategic mechanism is linked with the future mid-term objective of the organization. It helps to increase its accomplishments by dealing with weaknesses, threats, strengths, and opportunities. SMEs are may be more sensitive to crisis-related events due to resource constraint issues, unstable position within the market, and other elements. Nevertheless, SMEs still hold a few advantages related to adjustability, learning ability, innovation initiatives, and customer relations.

Before discussing the impact of the covid-19 pandemic on Small and medium-sized enterprises activities, we first need to define this concept. Each country has its own definition of what constitutes a SME; the traits include annual sales, number of employees, the number of assets owned by the company, market capitalization, or any combination of these features.

According to the OECD (2005), Small and medium-sized enterprises (SMEs) are “non-subsidiary, independent firms which employ less than a given number of employees, this number varies across countries. The most frequent upper limit designating an SME is 250 employees, as in the European Union. However, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees”.

The United States defines SMEs differently from one industry to another. For example; in manufacturing, an SME is a firm with 500 or fewer employees; in contrast, businesses that mine copper ore and nickel ore can have up to 1,500 employees and still be identified as an SME (D.Liberto, 2022).

In Europe, The main factors determining whether an enterprise is an SME are the turnover of medium-sized enterprises (50-249 employees) should not exceed 50 million EUR; that of small enterprises has between (10-49 employees) and should not exceed 10 million EUR while the micro firms have (less than 10 employees) should not exceed 2 million EUR (The European Commission, 2003).

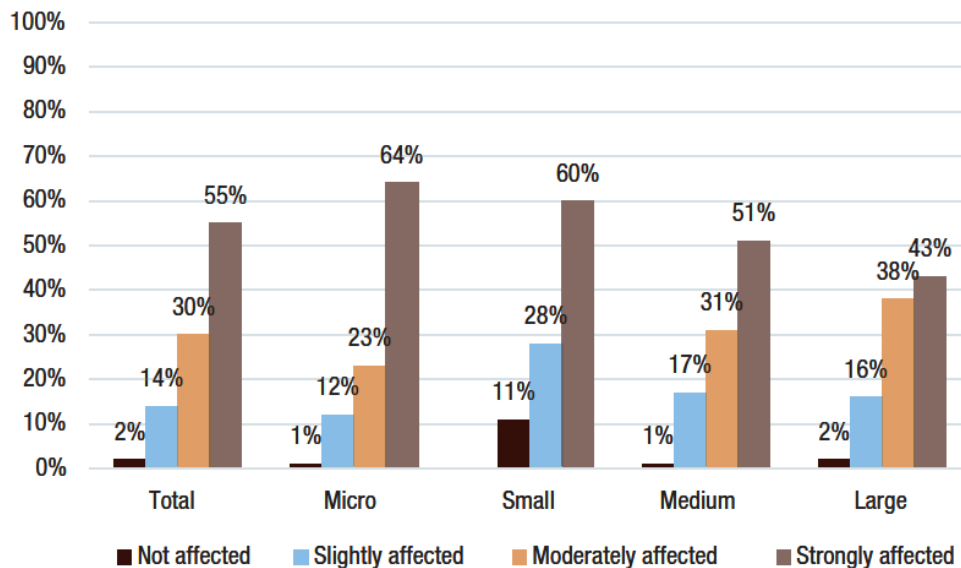
In China, the definition of an SME is complex, which depends on the industry category and based on the number of employees, annual revenue, and total assets (John Dudovskiy, 2012). For example, Chinese retail companies are small if they employ between 10 and 49 employees and have annual operating revenue of at least 1\$ million (D.Liberto, 2022).

### **1.1. Impact of COVID-19 on SMEs activities:**

Many SMEs fail in the short term due to already existing problems such as little or no investment in improvements and/or knowledge of the market, lack of formal planning and demand forecasting, lack of managerial and technical skills, and limited economical resources. These features make the SMEs more vulnerable to internal and external events such as: critical employee quitting his/her job, a decline of financing options, and reduction of demand due to a competitor entering the market (most of SMEs are within very competitive markets) (Santiago, 2021, p2). In this regard, there's no doubt that the COVID-19 pandemic has added to small business challenges around the world, regardless of size, location, or funding. According to Eggers (2020), most of the studies that focus on finance are concerned

with the consequences of the crisis on small firms, namely, the lack of funding and financing sources. A recent review of literature on crisis and small- and medium-enterprises (SMEs) finds that most of the publications focus on financial issues (51%), followed by strategy (41%), and institutional environment (8%) (A.E. Engidaw, 2022, p3). As mentioned in the literature review, distinctly in the work of V.B Klein (2021, p117), SMEs faced a liability of smallness, which simply means the smaller the firm, the more vulnerable it is to covid-19 events, see the next figure.

**Figure (1): impact of covid-19 on Small and large companies**



source : United Nations, “THE COVID-19 PANDEMIC IMPACT ON MICRO, SMALL AND MEDIUM SIZED ENTERPRISES - MARKET ACCESS CHALLENGES AND COMPETITION POLICY-”, UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT, 2022, p16.

In accordance with this statement, G.Vidal (2020, p2), stated that SMEs have borne the worst economic brunt of COVID-19; they were under an existential crisis and heavy distress trying to understand the impact of the COVID-19 crisis, not knowing what the future holds and what to do to face it. The devastating effects this outbreak is having on SMEs can already be seen, many of them were even on the verge of collapsing, others were struggling to survive navigating as best they can (a) some were temporarily closing hoping to get to the other side of this in one piece and (b) some were changing and investing to best deal with the rapidly changing environment. SMEs have very low cash buffers. Even if they are prepared, if suddenly they have to shut doors and their revenue stream goes to zero, or just to a fraction of what it used to be, they will run out of money in no time. And run out of cash means that SMEs is dead. Corroborating this argument, M.Rodrigues (2021, p4) cited M.Cowling (2020) who pointed out that only 39% of the businesses were bolstering their cash balances leading up to Covid-19 which suggests that 61% of businesses are at risk of running out of cash, including 8.6% that had no retained earnings at all”. According to these authors, the sudden exogenous shock environment has exhausted firms’ financial resources, leading to more insolvency, less liquidity, and a growing recourse to government support. Other disadvantages that SMEs face are not related to internal factors, but to external factors that will prevent them from developing their production and/or service provision processes (G.Vidal, 2020, p2).

Moreover, Europeans SMEs of all types have experienced immediate effects of the lockdowns on their upstream and downstream activities. Specifically, on the supply side,

stand-alone SMEs have faced considerable logistical issues. However, while reduced capacity utilization represents one key challenge, demand-side effects pose a more severe threat. Indeed, most consumer-focused, stand-alone SMEs operate in industries characterized by an elastic demand. With consumers facing employment uncertainties and financial constraints, many of these SMEs have experienced a sudden decline in demand. In contrast, many stand-alone SMEs serving the industrial market may benefit from their niche position, as they face few substitutes and, therefore, customers may be reliant on them. However, with production lines being halted across Europe during the lockdowns, and GVCs (Global value chains) disrupted, many of these firms are also likely to face reduced demand or an incapacity to produce. Specialist-supplier SMEs were also severely hit both on their demand-side and their supply-side. With many being engaged in exclusive agreements, orders from key customers which themselves stopped production were likely to be halted. Such effects have occurred in the automotive sector, for example. However, given their specialized focus, these SMEs supply vital components to their customers and, hence, once restrictions are lifted and production restarts, demand is likely to recover. Notably, some SMEs serving the industrial markets, including stand-alone and specialist-supplier SMEs, may have temporarily repurposed their operations towards goods needed during the pandemic, such as face masks and medical equipment; at least making up for some of their lost demand. Moreover, the authors added that there are economic implications associated with the COVID-19 pandemic that go beyond the lockdowns. There are short-term effects which apply to all types of SMEs and there are medium- and long-term implications which differ across these firms (J.Juergensen, 2020, pp 502-503), as shown in the following table.

**Table (1): Short-term and longer term effects of the COVID-19 crisis on manufacturing SMEs**

	Stand-alone SMEs (consumer and industrial)	Specialist-supplier SMEs	Knowledge-based SMEs
Short-term	<p>Most SMEs face liquidity issues and tightened financial constraints, following the disrupted operations during the lockdowns</p> <p>There is an increased reliance on governmental subsidies and many SMEs apply for their local, governmental support schemes; depending on eligibility</p> <p>The main focus is on addressing immediate operational issues, 'fixing' particular disruptions on the demand and the supply side</p> <p>New concepts and changes are put in place to ensure further governmental restrictions are being followed; for example, ensuring social distancing measures</p>		
Medium-/ Long-term	<p>Many of these SMEs will have to upgrade their digital infrastructure, enabling online sale channels, teleworking etc</p> <p>Employees will have to be re-trained accordingly</p> <p>Long-term investments will be required to upgrade production processes to cut costs and increase productivity</p> <p>New opportunities will arise for industrial SMEs to enter new supply chains or deepen their involvement in existing ones; some may also re-organize their own supply chains</p>	<p>GVCs (<i>global value chains</i>) will be reorganized; growing trends towards multiple sourcing, stock management; reshoring, embracing geographical proximity</p> <p>Supplier SMEs will see changes on both sides: They will re-organize their own supply chains and will see their key customers reorganize</p> <p>Staying in existing agreements and entering new ones will depend on their ability to keep costs low and match prices; without compromising quality</p> <p>Long-term and increased investments in digital technologies will be required to enable automation</p>	<p>New applications of their technologies can arise in a post-COVID-19 world; for example, in areas such as medical research and equipment</p> <p>Some may adapt their nascent technologies towards finding solutions for and tackling the issues having arisen during and through the pandemic</p> <p>Successful SMEs can benefit from further governmental research grants</p> <p>New start-ups may emerge to capture areas of growth through 'creative destruction'</p>

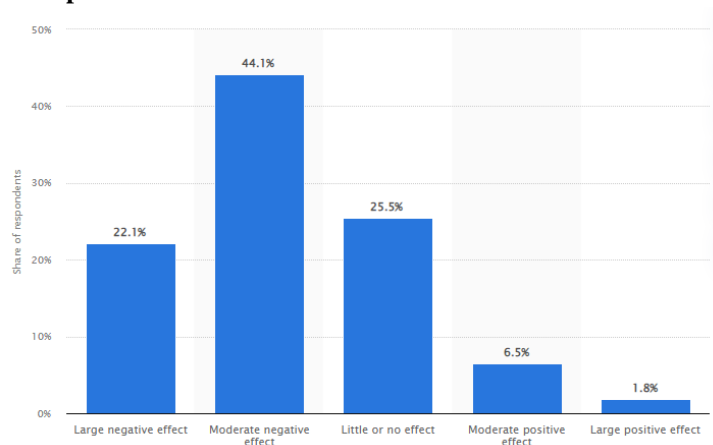
source : Jil Juergensen, José Guimón, 2020, p503.

In this research, J.Juergensen (2020) suggested that in the short-term, SMEs of all types will encounter financial concerns and liquidity issues, as noted previously in this review. Specifically, stand-alone SMEs have experienced a rapid decline in demand as well as some supply chain challenges, making them particularly reliant on external financial support. Even

before the crisis, many of them were operating under tight budgets and financial constraints. These have worsened as a result of the crisis, making their demise more likely. Knowledge-based SMEs and specialist-suppliers have also experienced some interruptions, making many of them vulnerable to financial issues as well. However, the authors suggested that in the longer term, other challenges (and opportunities) will arise that differ across types of manufacturing SMEs. In particular, the crisis has pointed stand-alone SMEs to the importance of investing in digital technologies. These became essential for SMEs, not only to support crucial downstream activities such as sales and marketing, but also to increase their internal efficiency and productivity. From a managerial perspective, digitization provides new opportunities for firms and the crisis associated with the COVID-19 pandemic will accelerate the responsiveness of SMEs to harness them. However, they stated that some SMEs may struggle to implement digital initiatives due to prevailing financial concerns following the crisis, and the need to re-train staff accordingly. Nevertheless, besides digitalization, the aftermath of the COVID-19 pandemic might also give a new impulse to other ongoing trends affecting manufacturing SMEs, such as the transition towards environmental sustainability (J.Juergensen, 2020, p504).

Based on an online survey conducted by the group Statista Research Department during January 2022 that aimed 885,000 businesses in the United States (Statista, Jan 19, 2022), 22.1 percent of surveyed small businesses in the United States claimed that the COVID-19 pandemic had a large negative effect on business. In comparison, only 1.8 percent of respondents said that the pandemic had a large positive effect on their business as presented in the next figure.

**Figure (2): Overall impact of COVID-19 on small businesses in the United States (January 2022)**

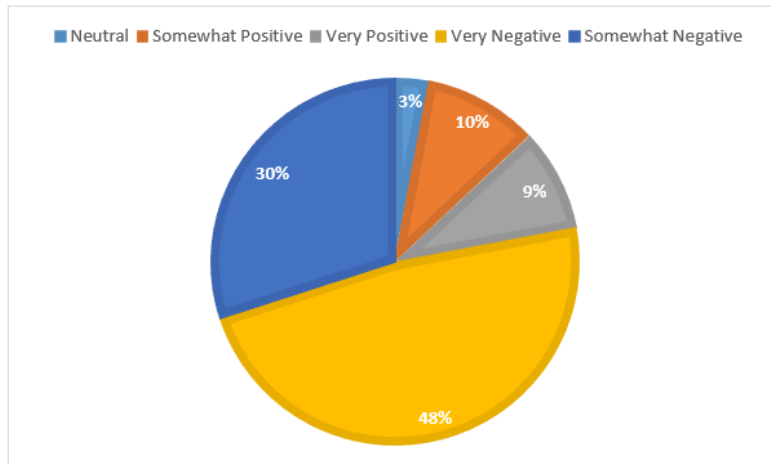


source : <https://www.statista.com/statistics/1220920/us-covid-19-impact-small-businesses/#statisticContainer>

Following this statements, S.Kamaldeep (2021, pp 5-6) studied and analyzed the degree of impact of the ongoing Covid-19 pandemic on SMEs globally based on data collected from the multi-sectoral surveys. The surveys were aimed at owners, managers and responsible for administration and accounting. The questionnaire for each operation was made available of a set of companies from the base of the SME Observatory Foundation stratified and representative of the universe of firms with up to 800 employed persons. 653 responses were obtained from these companies throughout the five surveys. The main topics surveyed refer to the impact on the activity of companies, the production and employment; business strategies;

occupational risk; the interventions implemented public and possible modifications of the forms of work. The results show that for 46% of SMEs in the retail trade sector were impacted by COVID-19 has been very negative, for 32% it has been something positive, for 10% it has been something positive, for 9% very positive and for 3% it is neutral. The results show that the situation of SMEs in the commerce sector during the contingency generated by COVID-19 has been affected, as showed bellow:

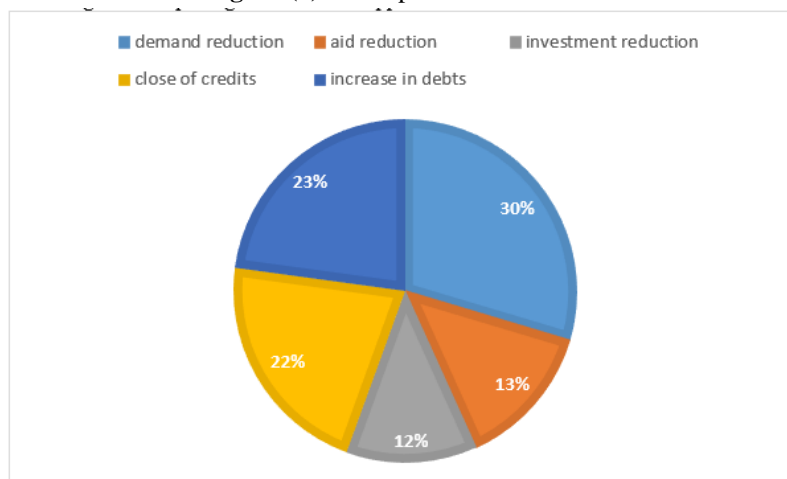
**Figure (3):** Impact of the health crisis caused by COVID-19 Globally.



source : Singh Kamaldeep, **Impact of Covid-19 on SMEs Globally**, 2021, p5.

Other results showed that for 48% of the SMEs in the commercial sector was impacted by COVID-19, its main problem generated was the reduction in demand, for 37% it has been the increase in their debts, for 35% it has been the closing of credits, for 22% the reduction of public aid and for 20% it is the reduction investment. The results show that the main problem for SMEs in the sector trade during the contingency generated by COVID-19 has been particularly affected due to the reduction in demand and the increases in its debts and the closings of the openings of financial support to be able to face them, as showed bellow:

**Figure (4):** Main problems for SMEs



source : Singh Kamaldeep, **Impact of Covid-19 on SMEs Globally**, 2021, p5.

To sum up, SMEs has suffered drastic and exponential economic consequences due to this exogenous shock: operation disruption, reduced sales volume, cash flow problem, reduction in staff number and salary, and even Risk of bankruptcy during or after crises events.

### 1.2. Firms' response to the Covid-19 crisis:



The crisis is an unexpected event, and the key is to act quickly to implement responses. Firms or businesses diverged in their responses, while some opted for a retreat strategy like a distress sale of assets, taking new debts, laying off employees, which in the long run can undermine the competitiveness of the company. Others acted in a more resilient manner, which includes taking into account the new needs of the customers, moving to online channels for sales, in case of supply chain disruption, sourcing from new suppliers. Resilient and agile approaches are pro-competitive approaches and ensure that a business can weather the storm in as good shape as before or even stronger. Thus, the capability to respond to change depends on the entrepreneur's resilience and government health economic policy response measures. (E.Thukral, 2021, pp 154-155). In conclusion, careful crisis management is fundamental to minimize the effects of crises on organizations. Employed successfully, it can facilitate the quick restoration of disrupted or weakened systems and be a source of competitive advantage for those able to respond quickly to exploit new emerging opportunities. And to develop an effective crisis response strategy to a crisis such as COVID-19, organizations must possess not only the necessary capabilities needed to rapidly reconfigure and leverage resources to adapt to sudden changes in the environment, but also the flexibility to readjust basic assumptions, behaviours, routines and processes and ensure emotional regulation (P. Puthusserry, 2022, pp 3-4). Within this framework, four strategic responses to a crisis were proposed by Wenzel (2020): retrenchment, persevering, innovating, and exit. These strategies were shown as effectively capturing the early responses of family firms to the Covid-19 pandemic. Retrenchment involves cost-cutting measures that may reduce the scope of a firm's business activities. This strategy appears to support firms in surviving a crisis in the short run. Persevering is about preserving the status quo of a firm's business activities. This may be achieved through debt financing, and seems suitable in response to a crisis in the medium run, even though it may threaten the long-term survival of the firm. Exit means the discontinuation of a firm's business activities; it is a strategy which is not limited to a crisis, and can be selected at any time. Finally, innovating means that the firm engages in strategic renewal in response to a crisis (T.Clauss, 2021, p296).

Another range of solutions have been suggested for SMEs during the COVID-19 crisis according to K.Klyver (2021, p2), that include business model adaption, innovation, and pivoting, (coping) strategies, learning, and technology solutions. The strategies are complementary, and each has different advantages and disadvantages and can be followed narrowly or broadly<sup>1</sup>. While crises can have devastating impacts on economies and societies, they also open up an opportunity space for strategic renewal. In this sense, we refer to innovating as the realization of strategic renewal in response to crisis (M.Wenzel, 2020, p11). Innovation is viewed as a driver of competitiveness, economic growth, and progress. To overcome the crisis and sustain the business in the long run, businesses need to innovate (E.Thukral, 2021, p155). Several studies indicate that SMEs with dynamic and innovative capabilities and are willing to learn from crises and contain a tendency to recover quickly (Ariful Islam, 2021, p40).

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<sup>1</sup> The narrow approach is limited to a few focused measures; the broad approach broadens the scope of applied measures.

In contrast to the other mechanisms, an innovation strategy to crisis management is the most future-oriented because it may provide solutions on how to use opportunities that emerge from a crisis. It has been shown that firms pursuing more explorative strategies toward new product and market developments are those that cope better with crises. In line with this, studies have shown that SMEs' innovative stances and entrepreneurial orientations are helpful for surviving a crisis. Considering how the Covid-19 crisis created a situation in which the existing Business Models of many firms were suddenly placed on hold, managers should assess the impact of the crisis on their firms' Business Model and may potentially seek out BMI (Business Model Innovation) as an effective opportunity (T.Clauss, 2021, p296). An innovative response strategy was followed by mature-growth case firms. This is reflected in their innovative approach of developing new products/solutions to mitigate their own challenges (product development) as well as assisting other stakeholders (diversification) in navigating the evolving COVID-19 pandemic successfully Diversity in TMT human and social capital and having formal and decentralized organizational designs, such as task structure, formal role specification, decision process and information channel, were essential in facilitating a product development strategy (P.Puthusserry, 2022, p 619).

As part of innovating, Digitalization has appeared as a dynamic capabilities perspective as mentioned in the work of Hai Guo (2020). Digitalization, which refers 'to the process of organizational transformation through the adoption of digital technologies, mainly manifested in organizations as digital artifacts, digital platforms, digital infrastructures, as well as digital business and management models', can help firms gain and sustain competitive advantages by improving their organizational flexibility and resilience and by enhancing their dynamic capabilities. Moreover, digitalization is beneficial to firms' dynamic capabilities; first, it helps firms sense environmental changes. The great advantage of digital resources in volume, velocity, variety, and value makes it possible for firms to collect or retrieve information resources in the external environment at a low cost. In addition, the application of big data analysis systems and IoT technologies helps firms screen valuable information through high-speed computing so that they can sense and predict environmental changes to some extent. Second, firms can better seize opportunities in a crisis environment with the help of digital technologies. In the COVID-19 outbreak, digitalization has created plentiful new opportunities, and areas such as online education, online working, and unmanned delivery have shown great potential. Further, the decentralized nature of digital technologies breaks obstacles in time and space, and promotes interactions between focal firms and their value co-creators, thus increasing their opportunities in open networks. In addition, high-volume big data technology and high-speed cloud analysis technology have greatly improved the accuracy of business analysis, helping firms identify potential opportunities in complex environments. Furthermore, digital technology has changed the ways in which new opportunities are exploited, in ways that are more novel than predefined. Finally, digitalization enables firms to reconfigure their resources to respond to crises. Digitalization improves firms' available resources in scope, scale, and flexibility (Hai Guo, 2020, pp 4-5).

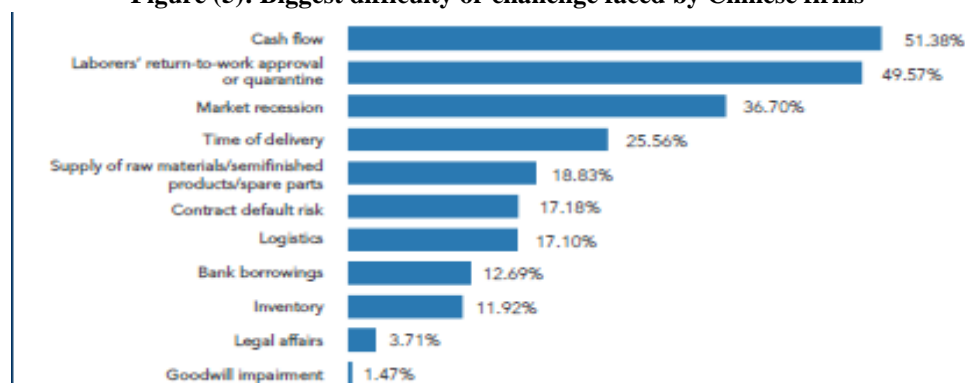
## **2. The impact of the pandemic on Chinese firms:**

COVID-19 has been a major test of China's general health framework and administration restriction, highlighting the critical importance of working on significant pandemic avoidance

and control frameworks alongside public general health framework crisis the board (D.Li, 2022, p3). China's strict virus containment measures coupled with the shutdown of economies in countries critical to China's economic recovery led to major limitations on their growth, in the first two months of 2020, China's added value in terms of size, investment, and consumption fell by 13.5, 24.5, and 20.5% year-on-year, and the unemployment rate reached 6.2%, for the first quarter of 2020, China's GDP growth rate fell by 6.8% P.Zou (2020, p2). The economic growth in China is projected to slow to 4.3 percent in 2022 before rebounding to 5.2 percent in 2023, largely reflecting the economic damage caused by the persistence of COVID-19 (The World Bank, 2022).

The role of SMEs is crucial in most economies because they stimulate economic growth, create jobs, and open new markets. Despite their importance SMEs are frequently the most affected by major public crises. As the small and medium enterprises (SMEs) in other countries, most Chinese SMEs operate in the same way and face the same obstacles (D.Xiao, 2022, p63345). The spread of COVID-19 has a great impact on China's economy and has brought severe challenges to the survival of domestic SMEs. According to the "Research Report on the Countermeasures and Suggestions on the Impact of COVID-19 Pandemic on SMEs" issued by the China Association of SMEs on February 15th, 2020, nearly 67.69% of SMEs have reduced their operating income; 21.61% of SMEs cannot timely repay debts with increasing pressure on operating funds; 86.22% of SMEs cannot survive with funds on the account for more than 3 months; 33.73% of SMEs do not have enough funds to survive for one month; only 9.89% of SMEs say that they can survive for more than half a year. The fragile financial situation of SMEs backed themselves in a corner, and their trouble directly affected China's economic growth. Therefore, the outbreak of the pandemic has continuous influence on Chinese SMEs and the negative impacts stand still. The downward pressure on the economy caused by COVID-19 will not disappear immediately as the pandemic goes to an end. The long-term recovery and the pressure of survival and development remain a task for SMEs (Z.Ma, 2021, p4). Thus, the survey conducted by the Shanghai National Accounting Institute (2020) found that the biggest difficulty or challenge faced by enterprises in China were cash flow (51.38%), labor (49.57%), and market recession (36.70%) as presented in the figure (5).

**Figure (5): Biggest difficulty or challenge faced by Chinese firms**



**source :** Institute of Management Accountants (IMA), Chinese Enterprises Facing the Impact of The Covid-19 Crisis: A Survey of Challenges and Respons, 2020, p13.

## 2.1. How firms responded to the epidemic

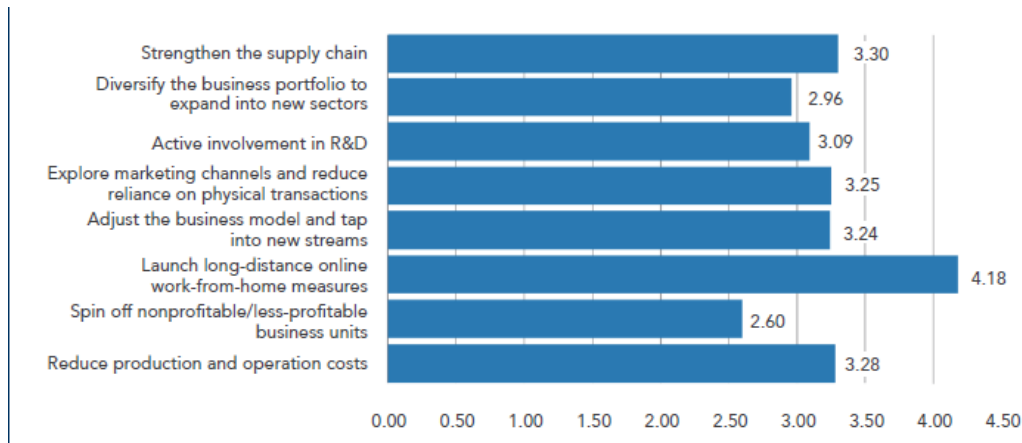
In China, some of the fastest-recovering companies proactively looked ahead and anticipated such shifts. For example, in the early stages of the outbreak, Master Kong, a leading instant noodle and beverage producer, reviewed dynamics on a daily basis and reprioritized efforts regularly. It anticipated hoarding and stock-outs, and it tilted its focus away from offline, large retail channels to online-to-offline (O2O), e-commerce, and smaller stores. By continuously tracking retail outlets' re-opening plans it was also able to adapt its supply chain in a highly flexible manner. As a result, its supply chain had recovered by more than 50% just a few weeks after the outbreak, and it was able to supply 60% of the stores that were reopened during this period (M.Reeves, 2020).

The combination of this pandemic and the impact of the Sino US trade dispute prompted some firms to recognize the problems and to devote more efforts to R & D and innovation. This pandemic has promoted the establishment of remote offices, remote recruitment, and remote business negotiation models, and the informatization and digitalization of firms have improved their ability to respond to major crises. During the crisis, some firms transferred employees from offline stores to online sales teams. They successfully completed this channel transformation and survived the crisis by using live-streaming and social media platforms (P.Zou, 2020, p 6). For example, cosmetics company Lin Qingxuan was forced to close 40% of its stores during the crisis, including all of its locations in Wuhan. However, the company redeployed its 100+ beauty advisors from those stores to become online influencers who leveraged digital tools, such as WeChat, to engage customers virtually and drive online sales. As a result, its sales in Wuhan achieved 200% growth compared to the prior year's sales (M.Reeves, 2020).

In hard-hit businesses, such as restaurants, employees were unable to carry on their regular activities. Rather than furloughs or layoffs, some creative Chinese enterprises actively reallocated employees to new and valuable activities, like recovery planning, or even loaned them to other companies (M.Reeves, 2020).

In conclusion, to cope with the epidemic situation, most of the Chinese firms have taken initiatives like: long-distance online work-from-home measures, strengthening the supply chain, adjusting the business model and tapping into new streams, exploring marketing channels and reducing reliance on physical transactions, active involvement in R&D, and diversifying the business portfolio to expand into new sectors. Meanwhile, other nonlisted companies opted to reduce production and operation costs (the Institute of Management Accountants, 2020, p4), as showed in the figure (6).

**Figure (6): initiatives that have been taken by enterprises to recover production**



source : Institute of Management Accountants (IMA), Chinese Enterprises Facing The Impact of The Covid-19 Crisis: A Survey of Challenges and Respons, 2020, p4.

## Conclusion

Covid-19 pandemic has created both terror and confusion worldwide. From a public health pandemic to an economic crisis, it has put a strain on many entrepreneurs and has caused many harmful problems that have destabilized businesses and governments. This pandemic created immediate and significant changes to how firms do business, making them more vulnerable to the great upheaval brought about by this crisis. Small businesses have borne the worst economic brunt around the world, making them the prey of changes in the consumer behavior, demand, and product distribution. In many countries, lockdowns and other health restrictions have prevented the personnel and staff from working and even conducted them to Job losses which resulted in a drastic fall in demand elsewhere in the economy sphere. Sales have declined and firms were on the verge of collapsing, many businesses in supply chains have ceased operating others were struggling to survive navigating as best they can. Uncertainty, led many individuals and businesses to spend more cautiously and searching for ways to survive this crises. The impact of covid-19 was being felt all around the world, even if the crisis ended, the economy cannot be expected to quickly return to its normal state, consumer behaviors, manufacturing methods, ways of traveling or working have changed.

Beside the major threats, this unexpected crisis also offers a nexus of significant opportunities to rethink entrepreneurship's. As we seen in this review, in order to survive Startups and small businesses acted in a more resilient manner, which includes taking into account the new needs of the customers, moving to online channels for sales, in case of supply chain disruption, sourcing from new suppliers, thus choosing approaches to ensure that the business can weather the storm in good shape as before or even stronger. Therefore innovation strategy to crisis management has appeared to be the key to provide the solutions needed for the firms on how to use these opportunities that emerged and using them in their favor to survive the crises.

## Hypothesis testing

### - For the 1<sup>st</sup> Hypothesis:

The results show that the Covid-19 pandemic affected drastically SMEs worldwide both in the demand and the supply sides due to the lockdowns and other health restrictions, thus making them more vulnerable. In the supply side, the firms were facing logistical issues, and a shortage of workers. And on the demand side, people were facing employment uncertainties

and financial constraints which led to a decline in Sales affecting the firms' revenues therefore resulting in an increase of their debts and forcing these firms to find solutions to just survive.

**For the 2<sup>nd</sup> Hypothesis:**

The COVID-19 has had a substantial impact on Chinese SMEs' performance and operational standards. The results show that the COVID-19 pandemic pushed SMEs toward innovative operating processes and digitalization and being actively involved in R&D. Therefore, ensuring that the Chinese SMEs can weather the storm in good shape as before or even stronger.

This study contributes to the literature review, it presents and discusses cases related to the COVID-19 crises and the impact that these crises have generated worldwide and especially in China, in order to make it beneficial to researchers and students as well.

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