Economic Crises and Pandemics: A Path to the Sustainability of Small and Medium-Sized Enterprises

By Sivaldo Donizetti Teodoro, Orandi Mina Falsarella, Duarcides Ferreira Mariosa, Diego de Melo Conti, Samuel Carvalho De Benedicto & Bruna Angela Branchi

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Keywords: pandemics, economic crises, sustainability, resilience.

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I. Introduction

The current Covid-19 pandemic brings fundamental reflections on the unsustainable way of life that humanity has been practicing for a long time. At the center of the pandemic crisis, there is another financial crisis, no less alarming, caused by measures such as social isolation and the closing of markets, which directly impact companies in general, especially those whose sectors have been heavily affected. At the heart of this devastating scenario are small and medium-sized companies, which, according to the Brazilian Micro and Small Business Support Service (SEBRAE, 2021b), account for 3 out of 4 jobs generated in Brazil. In addition, considering the panorama of small businesses, only in São Paulo state, Small and Medium-sized Enterprises (SMEs) represent 27% of the Gross Domestic Product (SEBRAE, 2018).

This scenario does not only occur in Brazil. According to Lovins and Cohen (2013), SMEs are the new economic engine of any country. In North America alone, more than half of non-farm GDP is generated by small businesses. In addition, they employ nearly sixty million people, generating between 60 and 80% of new jobs per year.

Therefore, the social role played by companies, especially small and medium-sized, is represented by their ability to generate jobs, mainly because they are becoming increasingly scarce in large companies and industries.

Social isolation contributed decisively to the economy, reducing its dynamics or even stopping it entirely in most segments, allowing them to open only the so-called essential services, such as supermarkets, gas stations, pharmacies, bakeries, and restaurants restricted to delivery services. To assess the effects of this scenario, SEBRAE (2020) surveyed entrepreneurs from all over Brazil and found that small businesses were heavily affected. In the period of data collection between April 3 and 7, 2020, respondents declared a drop in average weekly revenue of 69% concerning a week of regular operation.

Although the COVID-19 pandemic resulted in an ongoing economic and social crisis, it is not possible to fully assess the magnitude of all its impacts. Similar crises have already occurred throughout history. It is worth mentioning the 1918 Spanish flu pandemic, the Great Depression of 1929, and the 2008 crisis that devastated the United States of America worldwide.

According to Wisman (2014), financial crises have been endemic to capitalism since its early days. However, recovery usually takes place quickly. In addition to unemployment, the most significant
consequence was the destruction of wealth held by a small elite of the wealthy.

Given the historical and recurrent fact that pandemics and economic crises happen and will probably continue to happen, affecting the economy and the lives of thousands of people and companies, the biggest challenge, especially for Small and Medium-sized Enterprises (SMEs), is to face the effects of these events.

Adopting the concept of resilience in their strategies to survive economic crises or pandemics can help minimize the effects, which are often catastrophic, that threaten the survival of SMEs.

Resilience concerns the ability or possibility of individuals, groups, or systems to restore the original balance or previous status. For example, according to Babić, Babić et al. (2020), a person’s resilience in the medical field is the ability to adapt to changes and resist impacts and stressful situations after trauma, accident, tragedy, or illness, maintaining or restoring regular operation.

a) Objectives

This study questions whether, in economic, health, and pandemic crises that economically affect SMEs and cause serious social problems, the implementation of resilience strategies can mitigate the impacts of these crises on SMEs.

In this paper, we present a set of guidelines for implementing a Resilient Strategic Management (RST), which aims to consolidate alternatives for preparing or mitigating risks so that Small and Medium-sized Companies can be better prepared to face financial crisis or pandemics in the future.

b) Methodological approach

The methodological approach is characterized by its exploratory nature, which is based on documents, and follows a qualitative approach (Gil, 2002). This subject still needs to be explored since no references address the subject of resilience, sustainable development, economic and health crises, such as those resulting from the COVID-19 pandemic and similar ones.

According to Silveira and Córdova (2009), exploratory research also provides more familiarity with the theme and, thus, makes it better known, indicating paths for new analyses, studies, and observations. Meanwhile, qualitative research, according to Richardson (2017), is a method for exploring a social or human problem and understanding it through analytical categories.

The study focuses on Small and Medium-sized Enterprises (SMEs). Their representativeness, importance, and significance for modern society’s development is the main reason for this research. They contribute significantly to job creation and can be viewed as an economic driving force in many countries, accounting for a significant portion of the Gross Domestic Product (GDP) in both Brazil (SEBRAE, 2018) and North America (Lovins & Cohen, 2013).

The data in this paper was gathered through bibliographical and documentary research on the Portal de Periódicos [Periodicals Portal] of CAPES, Scielo, Web of Science, Google Scholar, and publications from SEBRAE and Instituto Ethos, two organizations that focus on SMEs.

The theoretical framework for elaborating the data collection protocol was based on the association of two main subjects: “economic crises and pandemics” and “resilience.”

The search for a theoretical framework for “Economic Crises and Pandemics” began with the ideas of crisis, listing crises with a global (1929 and 2008) and national (2014) impact to clarify their major consequences. Given their characteristics and parallels, the Spanish flu (1918) and COVID-19 (2020) records were chosen as the primary sources of information regarding pandemics. To better understand the concepts of resilience, vulnerability, and catastrophes for the final topic, scientific publications were published in respected academic journals. The studies tried to define these concepts’ features and provide ways to make SMEs more resilient.

The method applied to bring the results and achieve the objectives of this work consisted of associating the concepts found in the referenced bibliography with the impacts and vulnerabilities generated by the indicated economic and pandemic crises. Finally, we outline the strategic directives that can help SMEs cope with the effects and fallout from pandemics and economic crises.

II. Economic Crises and Pandemics

It is opportune to present a brief bibliographical review of the economic crisis concept, its origins, implications, and consequences of discussing more comprehensively the impacts of the financial crisis generated by the COVID-19 pandemic on small and medium-sized companies.

Kirman (2010) contends that there is no leading cause for a sudden change in the economic or social situation. There are no culprits to judge and no easy remedies to avoid similar occurrences in the future. The only thing that can disturb the economy’s evolution is an external shock from which the economy adjusts, by assumption, to a new equilibrium.

Employment is one of the financial crises’ most relevant and consequential social aspects. According to Gutiérrez-Barbarrusa (2016), the typical jobs in all developed economies are decreasing in favor of flexible employment. Due to the need to become more competitive in response to globalization and the financialization of the economy, the search for a mobile
and adaptable workforce has occurred in these countries since the 1970s and 1980s especially.

Among the adverse effects caused by economic crises, Vieira (2016) points out that the main factor generated by the worsening of social and health conditions during financial crises is the loss of employment and the increase in the unemployment rate. This fact impacts the population’s health status, especially concerning mental health, such as depression and anxiety, generating, in many cases, a considerable increase in the number of suicides.

The following will present economic crises that, historically, have proved to be relevant and significant for the capitalist system. Their impacts and similarities will be pointed out in terms of their causes and consequences, especially the crises of 1929, 2008, and 2014, and those arising from the pandemics of 1918 (Spanish flu) and 2020 (COVID-19).

a) Crash of 1929 – The Great Depression

Before the crisis broke out in 1929, there was wealth. According to Frieden (2008), economic growth in Europe, Asia, and Latin America was driven by North American capital and markets through banks and companies that injected money and technology and established thousands of branches worldwide. The world’s financial center, occupied by London before, now became Wall Street. This economic expansion spurred significant social changes during the 1920s, such as:

✓ The emergence of new consumer goods and mass production.
✓ In the political sphere, democratic countries began to allow women to vote.
✓ Increased influence of labor movements and socialist parties.
✓ On the cultural issue, modernism and surrealism appear, revolutionizing the arts, while jazz reigns supreme in the music scene.

Cano (2009) argues that, between 1921 and 1928, in addition to the American economy going through a boom, financial growth intensified, through credit expansion and low-interest rates, making the stock and real estate markets very attractive. However, according to Cano (2009), there were some signs manifested before the crash of 1929, such as:

✓ Deficient agricultural price levels, especially for commodities.
✓ The southern housing bubble bursts in 1925.
✓ From 1927-28 onwards, there was a retraction in demand for real estate and automobiles.

Bruner and Miller (2019) state that the boom of the 1920s coincided with the beginning of the second great industrial revolution, electrification, automobiles, and modern technologies.

Still, according to Bruner and Miller (2019), the Great Depression resulted from a succession of shocks in the economy of forces that feedback and reinforced each other in a debt-deflation cycle, triggering a wave of rejection, populism, isolationism, nativism, ethnocentrism, and progressivism.

For Mazzucchelli (2008), the initial reactions to the 1929 crisis were insufficient and disastrous, as they failed to prevent the bankruptcy of 11,000 banks victimized by three waves of bank liquidation, the contraction of production (American GDP fell by 50% between 1929 and 1932) and the explosion of unemployment.

While the world was in a frantic post-World War I economic recovery, driven by the second industrial revolution, the economic growth boom and unbridled prosperity were not enough to prevent the 1929 crisis from erupting. The so-called “Great Depression” lasted for more than ten years, with devastating consequences, especially regarding social aspects, such as poverty, unemployment, and the bankruptcy of many companies.

2008 Financial crisis

In the global context, according to Stiglitz (2009), the 2008 financial crisis began in the United States, spread across Europe, and quickly became international. Even in emerging and less developed markets, countries that managed their economies correctly resisted the bad-credit practices. Although they maintained high levels of foreign exchange reserves, reduced the purchase of toxic mortgages, and did not allow their banks to take excessive risks in the derivatives market, they were nevertheless involved. They did not escape the consequences of the global crisis.

According to Guttmann (2008), finance-dominated capitalism has always been susceptible to crises. Mainly when state-managed economies migrated to the field of regulation from the market, such as, for example, the external debt crisis in underdeveloped countries in the 1980s, the Mexican peso crisis (1994-1995), or the turmoil that hit emerging markets in the late 1990s. Guttmann (2008) argues that those crises were temporary situations where rebalancing mechanisms enabled the integration of these countries back into the world economy. Still, the 2008 crisis proved to be different in several aspects:

✓ It did not emerge from some point on the periphery but emanated from the center (USA).
✓ It showed deep flaws in the institutional structure of contracts, funds, and markets that formed the new and deregulated world financial system.
✓ Because it was a systemic crisis, it turned into an event of splendid proportions and prolonged effects.
For Lovins and Cohen (2013), the economic collapse of 2008 originated from unsustainability, not only in the global financial system but also in the way business was conducted worldwide. Suggesting that to overcome the financial crisis, avoid collapses and create a society where everyone can prosper, we must rethink how we do business. Governments and companies must assume a protagonist role in this change.

b) Financial crisis of 2014 in Brazil

Cervo and Lessa (2014) state that after Brazil was considered an emerging power, the country's position on the international scene was from 2011 to 2014. The causes that originated the change, indicating the new downward trend, are located, among others:

- The weakening of the dialogue between the State and dynamic segments of society.
- The breach of confidence in the government by national and foreign investors and business people.
- The weakening of strategies and the need for new ideas to motivate external agents.
- The binding of public management with loss of the State's inducing capacity.
- The protagonism of Russia and China in the center of BRICS (Summit of developing countries formed by Brazil, Russia, India, China, and South Africa).

For Oreiro (2017), the decline of the Brazilian economy is the result of the intensive reduction of investments and the retraction of profit margins of industries caused by the increase in wages above productivity growth. With the rise of the exchange rate, these factors made it impossible for costs to be incorporated into product prices not further worsen competitiveness with imported products.

Barbosa Filho (2017) corroborates this argument, stating that the 2014 crisis resulted from a series of supply and demand shocks, which began in 2011 and 2012 through a set of policies adopted called the New Economic Matrix (NME in Portuguese), which reduced the productivity of the Brazilian economy. For a better understanding, these demand shocks include the exhaustion of the NME from the end of 2014; the 2015 domestic public debt sustainability crisis; and the correction of tariff populism, demanding a contractionary monetary policy to control inflation after the Central Bank's loss of credibility.

It is worth noting that the causes of economic crises can often be specific, affecting only a few sectors or even a single niche market, such as banking. However, in the case of pandemic outbreaks, like the one that occurred in 1918 (Spanish flu) and the one in 2020 (COVID-19), a century later, they covered all countries and decimated millions of people in all parts of the world, followed by the collapse of health systems and social isolation, because there was no other solution. As a result, closing markets has become the primary option for almost all governments to contain the spread of the pandemic. These crises, therefore, go far beyond the economic dimension, reaching the whole society, that is, becoming systemic crises.

To understand the impacts and the similarity between economic and pandemic crises, the 1918 (Spanish Flu) and 2020 (COVID-19) pandemics will be addressed in the next section, presenting the main characteristics and impacts caused in the economic context and Social.

c) Spanish Flu Pandemic – 1918

According to Silva and Angerami (2008), a basic explanation for the emergence of viral diseases lies in the intervention of human societies in nature. Ecological disturbances, even those that occurred millennia ago, almost always result from processes that have their origin in viral diseases arising from the domestication of animals to the deforestation of forests, which, reducing their natural habitat, forces them to live close to humans.

Osterholm (2005) adds that the flu pandemic has always been a global threat and that in the last three hundred years, ten pandemics were influenza A, with the 1918/1919 pandemic decimating between 50 and 100 million people worldwide.

Asquith (2020) argues that conventional wisdom coalesced around three lessons from the 1918 experience:

- Pandemics cause a solid economic contraction, followed by a strong recovery.
- Non-pharmaceutical interventions (NPIs) such as lockdowns and social distancing are economically beneficial.
- NPIs ensure that normalcy can be quickly restored, even in a globalized world.

Geloso and Pavlik (2020) state that the 1918 pandemic caused a severe depression in economic activity, aggravating the adverse effects of the First World War (1914-1918). However, the countries with the highest levels of financial freedom were also the ones that best succeeded in mitigating the damage caused by the influenza pandemic. On the contrary, the scenario is bleak when the pandemic hits the least favored, as in India in 1918-1919. According to Mills (1986), the consequences were devastating:

- The rivers were clogged with corpses because the available firewood was insufficient for the cremation of Hindus.
- The disease was marked by the usual high rate of flu infection and unprecedented second-wave virulence, decimating an estimated 17 to 18 million people in 2 to 3 months.
- People from 20 to 40 years were hardest hit, with women suffering disproportionately more than men.
The subsequent effect was on the fertility rate, with a reduction in births in 1919 of about 30 percent.

The highest concentration of mortality was experienced by those classes with increased rates of poverty, malnutrition, and hunger, which explains India’s position as the country with the most increased mortality recorded in the pandemic.

In Brazil, as stated by Bertucci (2009), in 1918, from north to south of the country, Brazilians had their daily lives changed by the interruption of family activities, isolation of the sick, imposition of silence on the city, in addition to other actions to contain the Spanish flu, such as:

- Closure of public places such as schools, parks, theaters, and cinemas.
- Prohibition of night gatherings, including religious ones.
- Visits had to be rejected, and kisses and hugs were contraindicated. Burials with follow-up on foot were forbidden.

**d) COVID-19 Pandemic – 2020**

In December 2019, in China, a new virus was announced, it was initially called the New Coronavirus, and later it was named COVID-19.

Leal Filho et al. (2020) note that international travel enabled the rapid spread of the epidemic, highlighting the interconnection of economies. Travel restrictions have increased significantly, with countries imposing full or partial closures of their borders, causing airlines to cancel flights and further reducing international trade and tourism.

Beach, Clay, and Saavedra (2020) compare the COVID-19 pandemic with the 1918 Spanish flu. They noted that both are respiratory illnesses caused by a virus, which can be spread through casual close contact, and they have reached many parts of the globe in a few months with high mortality rates.

Specifically, COVID-19, Gregurec, Furjan, and Tomićić-Pupek (2021) state that the global health crisis, which began in 2020, affected the activities of companies of all sizes and in all sectors of the economy. Although some of these sectors showed a certain level of resilience or even found a new operational or business niche, the negative impacts of the pandemic were reported in all spheres of life and had economic, political, social, and psychological consequences. However, the most decisive effect was on human health and the perception of it. Several countries have suspended commercial activities and adopted social distancing to reduce human-to-human transmission of COVID-19, leading to lockdowns, reductions in consumption, community closures, and business failures.

Another exciting fact refers, according to Asquith (2020), to the effects of the current pandemic on the labor and asset markets. They are expected to be distinct, given the more interconnected nature of the global economy, critical medical and public health advances, and more sophisticated economic policy tools.

For Demenech, Dumith, Vieira, and Neiva-Silva (2020), the implementation of mitigating measures, such as, for instance, emergency financial aid for people in a more vulnerable situation, proved to be a positive short-term measure. However, they note that there is an urgent need to seek the development of intersectoral policies aimed at reducing economic inequality, such as implementing long-term structural measures to face this and future health crises that may still occur.

For Blundell, Dias, Joyce, and Xu (2020), in the United Kingdom, the decade immediately before the onset of COVID-19 was marked by a relatively slow economic recovery after the Great Recession of 2008, characterized by stagnant actual earnings, significant cuts in the welfare system and an increase in self-employed “individual” work. Unlike many other European countries, the U.K. welfare system was already struggling to replace the incomes of people who lost their jobs. Furthermore, the cuts further weakened the extent to which the State could help people fulfill their commitments and spending in the event of an unexpected income shock. The relative focus of the system has shifted significantly towards income support for those who work but earn low wages.

Asquith (2020) states that the COVID-19 pandemic marks a global health and financial crisis that threatens the lives and livelihoods of hundreds of millions of people. Economists and policymakers have little prior experience to serve as the basis for making decisions other than the example of the Spanish flu pandemic in 1918.

**e) Economic crises and pandemics and their impacts on SMEs**

Regardless of the causes that permeate economic crises, whether arising from conflicts between peoples, nations, internal or external, or even originating from social issues of global scope, the immediate and, in many cases, irreversible effects that fall upon SMEs point to the need for a more forceful and planned approach, in the context of fundamental principles of sustainable development, to avoid unprecedented escalating consequences in the social and economic scope.

For Kossyva et al. (2015), the challenging and constantly changing global business environment requires companies to be proactive, flexible, and open to new opportunities if they want to succeed because, given the fragile economic conditions, companies are challenged to deal with difficult external circumstances, and therefore, they need to find new ways to conduct their business.
In times of recession and economic stagnation, according to Roldão, Monte-Mor, and Tardin (2018), entrepreneurial activity intensifies, which means that individuals seek business opportunities in the financial crisis whose motivation is related to entrepreneurship out of necessity.

Eggers (2020) advocates that the smaller company, the fewer resources it typically handles, which makes it more vulnerable to internal and external events. Such as a critical employee leaving his job, a decline in financing options, a reduction in demand due to the entry of a competitor into the market, or, in the case of financing options, a reduction in demand due to the current COVID-19 pandemic, a crisis that hits the global economy.

Leal Filho et al. (2020) state that initial concerns about the impact of COVID-19 are associated with economic growth. The reports highlight that the social and economic effects of COVID-19 are unprecedented and continue to unfold. The expected global recession is estimated to be worse than the 2007–2009 financial crisis. The United Nations Conference on Trade and Development (UNCTAD) estimates that the cost to the global economy in 2020 will be around US$1 trillion. The authors further add that in the first quarter of 2020, global financial markets collapsed due to – or accelerated by – global economic stagnation, fear, and uncertainty about the future. As the virus spreads across the world, the disruption to economic activity intensifies, with impacts on international supply chains and reduced trade due to business closures and workforce withdrawal (infection, mortality, social distancing, lockdown) aimed at stopping transmission of the virus.

Alves, Lok, Luo, and Hao (2020) state that small companies become more vulnerable to crises as they are exposed to low levels of preparation, resource constraints, relatively weak market positions, and greater dependence on the government and local agencies. In addition, crises can be highly damaging to a business as they erode reliability, destroy company value, threaten business objectives, put pressure on management, provide limited time for management to respond, and risk being taken to business failure. SMEs often suffer from financial losses, reduced sales volume, inability to fulfill the terms of the contracts they entered, troubles with cash flow, reduction in the number of employees, and even the closing of businesses during or after crisis events.

The economic shock associated with COVID-19, which resulted in the lockdown and a severe reduction in economic activity in many sectors of the economy, does not and will not affect everyone in the same way. Addressing the debate over economic impacts, Blundell et al. (2020) state that in addition to the response and the long-term legacy that will be left, it has become necessary to look at the core of the most emerging social issue: inequalities. Many of the pre-existing inequalities in the scope of gender, ethnicity, age, and geography will have to be treated. In addition, this pandemic encompasses effects on several other aspects related to life, such as health and jobs, which, at first view, are not interrelated with each other.

According to Gregurec et al. (2021), technology professionals refer to the COVID-19 pandemic as a global disruptive event, which can be seen as an opportunity or a challenge to transform business models or implement new support technologies for business processes.

Unprecedented levels of unemployment have risen, and the need for government support forces them to take on uncomfortably high levels of debt as many sectors of the economy need help. A pandemic causes considerable uncertainty and makes visible the vulnerabilities and weaknesses of the current economic system (Leal Filho et al., 2020).

According to the Instituto Ethos (2020), in a survey carried out with entrepreneurs from small and medium-sized companies, they observed that the main challenges of the COVID-19 pandemic are, in descending order, economic uncertainty, for 81% of them; sudden changes in the business environment, for 67%; consumption reduction or change in consumer behavior, to 40%; and problems to accessing financing, for 33%.

Robinson et al. (2020) state that digital and social inequalities more significantly affect specific subgroups, especially those most vulnerable to COVID-19 exposure. Furthermore, digitally disadvantaged individuals are deprived of opportunities to minimize their risk of exposure to COVID-19. In general, they are less likely to have the economic means to use digital services in the consumer domain and more likely to engage in face-to-face interaction to meet the needs of their families and communities.

Gregurec et al. (2021) advocate the need for new strategic approaches so that small and medium-sized enterprises (SMEs) can increase the likelihood of overcoming the impacts of the pandemic. Given that they have been severely hit financially because of their limited resources and experience. Gregurec et al. (2021) add that every crisis, regardless of its origin, has immediate effects on financial markets. Consequently, one of the biggest problems SMEs face occurs when they need to transform their current business model, which often means seeking access to external capital. This situation is further aggravated by the lack of physical and tangible assets that could be used as collateral for loans, third-party investments, and financing.

The implications and consequences that weigh on people and businesses in times of economic disturbances caused by crises or pandemics can rather be to a lesser or greater degree, depending on their intensity and the actions of governments and institutions in response to these disturbances.
f) Resilience and SMEs

Due to the consequences that SMEs face in the different scenarios that arise in the troubled business environment in times of crisis, it is opportune to bring contributions from authors about the concept of resilience. To understand how this concept can be applied in the adverse daily life full of challenges and uncertainties for small and medium-sized companies.

According to Manyena (2006), the word resilience is derived from the Latin “resilio,” which means “to leap back.” For the author, the concept of resilience helps to understand the relationship between risk and vulnerability. It fills a void by addressing the “soft perspective” of vulnerability and allows rethinking the overall equation of “risk = danger x vulnerability.”

Folke (2006) recalls that the perspective of resilience emerged from ecology in the late 1960s and early 1970s through studies of populations interacting as predators and prey and their functional responses concerning the theory of ecological stability. For Folke (2006), the resilience approach emphasizes the non-linear dynamics of thresholds, uncertainties, and surprises: how periods of gradual change interact with periods of rapid change and how these dynamics interact on temporal and spatial scales.

Holling (1973) proposes that the behavior of ecological systems can be defined by two distinct properties: resilience and stability. Resilience determines the persistence of relationships within a system, and it is a measure of the ability of these systems to absorb changes in state variables, driving variables, and parameters that persist. In this author’s definition, resilience is a system property, and the persistence or probability of extinction is the result. Stability, on the other hand, is the ability of a system to return to an equilibrium state after a temporary disturbance.

Iborra, Safón, and Dolz (2020) state that the concept of resilience in psychology relates to individuals or groups’ ability to recover from adversity or trauma. In the organizational environment, faced with the threats of external events, such as global economic crises, it is about the ability to recover from possible impacts.

Gunderson (2000) asserts that the loss of resilience is usually accompanied by a change in the system’s State, signaled as a resource crisis when a system changes to a situation of undesirable stability, management alternatives direct actions towards restoring the system to a desirable domain that allows it to return to an acceptable state by itself or then, to adapt to the changed system when changes are irreversible.

According to Gunderson (2000), no mechanism can guarantee the maintenance of resilience. Strategies that address the range of requirements and focus on renewal contribute to resilience, but they require institutions to focus on learning and understanding critical interactions across scales. Learning, trust, and engagement are critical components of social resilience. Social learning is facilitated by recognizing uncertainties, monitoring, and assessing stakeholders.

For Herbane (2018), resilience is an adaptive process and the ability of an organization to face the main challenges through its ability to respond and reinvent itself to achieve organizational renewal. This way, resilience is crucial for an organization’s strategic agility and business continuity. Herbane (2018) adds that socioecological interpretations of resilience go beyond recovery and constancy to incorporate dynamic learning, adaptation, and transformation.

Gunasekaran, Rai, and Griffin (2011) state that most SMEs face common problems and challenges in the global market and operations. Resilience can be seen as adaptability, responsiveness, sustainability, and competitiveness in evolving markets.

For Gunasekaran et al. (2011), SME resilience requires knowledge retention through a flexible workforce, strategic management thinking, top management support, and technology. SMEs need to be proactive in knowledge-sharing arrangements to recognize that knowledge has value and that added value is derived from exchanging knowledge. In addition, personal relationships have traditionally been a critical success factor; using these existing ties, along with a clear understanding of what the company strategically wants to accomplish, can become a sustainable competitive advantage and lead to growth and increased profitability.

Sanchis, Canetta, and Poler (2020) argue that business resilience is a crucial capability of companies to ensure long-term continuity. To this end, the structure of SMEs should include constituent capacities of business resilience concerning preparation and recovery. In addition, they propose elements that support the transition from the current situation through preventive actions (preparedness capacity) and knowledge record actions (recovery capacity).

According to Sanchis et al. (2020), each preventive action is specific to each disturbing event. However, they point out that preventative action can also be applied to disruptive events. From the recovery point of view, they indicate that the knowledge record must be related to disruptive events and the recovery actions conducted to restore the company’s usual level of operation.

For Alves et al. (2020), SMEs can have advantages in terms of flexibility, learning capacity, innovation, and customer relationship due to their small size and low level of bureaucracy. Despite their inherent limitations, SMEs have resilient responsiveness to the market. SMEs must adopt resilience strategies, which require a leadership mindset; adopting multiple crisis management practices; maintaining a good relationship.
and a robust network; identifying threats and opportunities, and acting promptly and flexibly.

Sullivan-Taylor and Branicki (2011) state that SMEs do not have the technical resources and systems, often equated with resilience capabilities and, despite the agility and flexibility displayed by some SMEs, it may be necessary to become more strategic and proactive in your approach to manage the threat and reality of extreme or critical events. Because they have limited resources, in most cases, SMEs need tailored guidance and assistance for planning and responding to extreme events.

Sullivan-Taylor and Branicki (2011) also add that the need to frame organizational resilience around the main strengths and capabilities already possessed by SMEs is indisputable. Identified with the attributes of speed and agility, it will help them deal with uncertainties, risks, and threats appropriately to their organizational context and operational constraints.

Iborra et al. (2020) assert that for SMEs to achieve resilience, they need to respond efficiently to constantly changing environments through ambidexterity and strategic consistency. Ambidexterity, for the authors, is a dynamic capacity that influences the resilience of SMEs, whose essence lies in improving efficiency without the risk of losing the ability to develop new ideas, products, and processes. In addition, it also means that they can become more adept at making quick decisions, using their assets differently, and identifying opportunities for recovery in the face of crises. Strategic consistency, in turn, refers to developing a sense of continuity during adversity. The consistent allocation of resources by SMEs facilitates a sense of direction and stability.

For Papadopoulos, Baltas, and Baita (2020), organizations face several challenges and uncertainties due to the implications and consequences of COVID-19. Thus, organizational actors must develop various scenarios for future strategic actions. The creation of scenarios allows managers to be aware of their different strategic choices according to their respective capabilities and mission objectives. Scenarios are considered tools to trigger and accelerate the administrative learning process. The authors suggest that SMEs adopt a proactive and integrated approach that improves the daily lives of local, national, and global communities since leaders are asked to make complex decisions in the era of pandemic crises.

### III. The Impacts of Economic Crises and Pandemics and Resilience in SMEs

The results of the literature review are summarized in Table 1. In this, the main impacts and vulnerabilities caused by economic crises and pandemics are pointed out by the authors studied and described based on the concepts and analytical categories adopted. As noted, the impacts and vulnerabilities were categorized into 04 types or situations of vulnerability: Fragile economic conditions, Global economic stagnation, Employment level, and Decreased demand.

<table>
<thead>
<tr>
<th>Vulnerabilities</th>
<th>Impacts and Consequences</th>
<th>Authors</th>
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</thead>
<tbody>
<tr>
<td><strong>Fragile Economic Conditions:</strong></td>
<td>· Cash flow difficulties</td>
<td>Kossyva, et al. (2015)</td>
</tr>
<tr>
<td></td>
<td>· Decline of financing options</td>
<td>Alves, et al. (2020)</td>
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<td></td>
<td>· Resource Constraints</td>
<td>Geloso and Pavlik (2020)</td>
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<td></td>
<td>· Inability to honor contracts</td>
<td>Oreiro (2017)</td>
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<td></td>
<td>· Acceleration of inflation</td>
<td>Eggers (2020)</td>
</tr>
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<td></td>
<td>· Business bankruptcy</td>
<td>Mazzucchelli (2008)</td>
</tr>
<tr>
<td></td>
<td>· Greater reliance on local government/agencies</td>
<td>Gregurec, et al. (2021)</td>
</tr>
<tr>
<td><strong>Global Economic Stagnation:</strong></td>
<td>· Vulnerable to external and internal circumstances</td>
<td>Eggers (2020)</td>
</tr>
<tr>
<td></td>
<td>· International supply chains</td>
<td>Alves, et al. (2020)</td>
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<td></td>
<td>· Fear and uncertainty about the future</td>
<td>Leal Filho, et al. (2020)</td>
</tr>
<tr>
<td></td>
<td>· Sudden change in the business environment</td>
<td>Blundell, et al. (2020)</td>
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<td>· Digital vulnerability</td>
<td>Ethos (2020)</td>
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<td>Robinson, et al. (2020)</td>
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</tbody>
</table>
Economic Crises and Pandemics: A Path to the Sustainability of Small and Medium-Sized Enterprises

Employment Level:

- Loss and reduction of employees: Eggers (2020)
- Rising unemployment: Vieira (2016)
- Withdrawal from the workforce: Alves et al. (2020)
- Worsening of social and health conditions: Leal Filho, et al. (2020)

Demand Reduction:

- Reduction in household consumption: Eggers (2020)
- Decrease in revenue: Oreiro (2017)
- Decreased trade due to business closures: Gregurec, et al. (2021)
- Low level of preparation and liability: Sebrae (2020)

\[ \text{Source: Prepared by the authors, 2023} \]

Considering the main characteristics presented regarding the concept of resilience, it was tried to consolidate its main characteristics in Table 2, associating them with the actions that contribute to increasing it, and small and medium-sized companies can adopt that in the elaboration of strategies to face times of economic crises and pandemics.

Table 2: Characteristics of resilience that SMEs can apply.

<table>
<thead>
<tr>
<th>Resilience characteristics</th>
<th>Actions to increase resilience</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>Define strategies that meet the requirements needed and that focus on renewal.</td>
<td>Gunderson (2000)</td>
</tr>
<tr>
<td>Regeneration</td>
<td></td>
<td></td>
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<tr>
<td>Renovation</td>
<td></td>
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<tr>
<td>Adaptive process;</td>
<td>Develop the ability to face the main challenges through the ability to respond and reinvent to achieve organizational renewal;</td>
<td>Herbane (2018)</td>
</tr>
<tr>
<td>Strategic agility</td>
<td></td>
<td></td>
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<tr>
<td>Business continuity of organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure long-term continuity. Ability to prepare and recover.</td>
<td>Adopt elements that support the transition from the current situation through preventive actions and knowledge-recording actions.</td>
<td>Sanchis, et al. (2020)</td>
</tr>
<tr>
<td>Resilient market responsiveness</td>
<td>Possess a leadership mindset; adopt multiple crisis management practices; identify threats and opportunities; act promptly and flexibly. Focus on how to increase demand.</td>
<td>Alves et al. (2020)</td>
</tr>
<tr>
<td>Dealing with uncertainty to suit the organizational context and operational constraints</td>
<td>Approach managing the threat and reality of extreme events more strategically and proactive.</td>
<td>Sullivan-Taylor and Branicki (2011)</td>
</tr>
<tr>
<td>Revitalize strategies through crisis scenarios and business continuity plans.</td>
<td>Develop scenarios and tools to accelerate the organizational learning process. Seek to increase revenues using alternative or additional sales channels.</td>
<td>Papadopoulos, et al. (2020)</td>
</tr>
<tr>
<td>Recovery capacity</td>
<td>Improve efficiency. Make quick decisions, use the proper resources differently, and identify recovery opportunities. Develop a sense of continuity during adversity.</td>
<td>Iborra, et al. (2020)</td>
</tr>
</tbody>
</table>
Having analyzed the characteristics of resilience that SMEs can apply guidelines are suggested below to develop a Resilient Strategic Management (RST). In this way, for each of the impacts and vulnerabilities generated by financial crises and pandemics, categorized into Fragile economic conditions, Global economic stagnation, level of employment, and demand reduction, strategic guidelines arise from the concepts of resilience (characteristics and actions) that can minimize them.

**a) Strategic guidelines to mitigate situations of fragile economic conditions.**

One of the main threats small and medium-sized companies face in times of crisis is fragile economic conditions. According to research carried out by SEBRAE (2020), the financial position of SMEs before the economic meltdown due to social isolation and the market's closing was already wrong for 24.4% of entrepreneurs and reasonable for 49%. The situation has worsened even further with social isolation measures and market closing. Even in typical situations, the economic conditions of small and medium-sized companies could be better.

Among the strategies to mitigate this scenario of fragile economic conditions, some guidelines will be presented that can increase the resilience of SMEs and reduce situations of vulnerability and the impacts of weak economic conditions.

As Porter (1990) said, the long-term challenge for any company is associated with the perception of opportunities to expose itself to new markets and prepare for changes. As Lloret (2016) states, a competitive company must be attentive to developing sustainable value, as sustainability implies continuity. It is therefore recommended:

1) Approach to managing the threat and reality of extreme events more strategically and proactive.
2) Develop scenarios and tools to accelerate the organizational learning process.
3) Seek to increase revenues using alternative sales channels.

In times of crisis and even calm, due to the competitive environment that SMEs live in, the company is expected to be better prepared than the competition to face adverse situations.

By considering such guidelines in their strategic planning, SMEs will be able to become more solid over time, with a more stabilized image and a significant number of customers, allowing them to mitigate specific risks and cash flow troubles, inability to fulfill contracts, declining funding options, fear, and uncertainty about the future, as well as the sudden change in the business environment.

**b) Strategic guidelines for surviving in global economic stagnation scenarios.**

Even in "normal" periods, fragile economic conditions are already a nightmare for SMEs. The scenario worsened when extreme events, such as the global economic stagnation experienced in 2020 due to the COVID-19 pandemic. Extreme events or disasters, as stated by Bhamra, Dani, and Burnard (2011), configure a multifaceted concept composed of many different elements, which seem to defy any precise definition and, despite representing a potentially unpreventable and severe threat to an organization's operations continuity, they require strategies to face them.

For this reason, whatever the uncertainties or deviations that may negatively impact the activities of companies, it is essential that efforts be channeled toward seeking a greater level of preparation to become more resilient.

Another fundamental point refers to the investment in Information and Communication Technology (ICT) tools to achieve strategic and operational objectives. It was found that during the pandemic, this point was confirmed as a way out for the survival of SMEs. Many of them had to resort to this action to keep their operations running during the financial crisis generated by the COVID-19 pandemic, such as implementing online shopping and delivery.

Therefore, it is recommended to adopt the following measures as a guideline:

1) Define strategies that meet a variety of requirements and that focus on renewal.
2) Develop the ability to face the main challenges through the ability to respond and reinvent to achieve organizational renewal.
3) Investment in information technology tools to achieve strategic and operational objectives can mitigate the exposure of SMEs to competitiveness risks, mainly due to their digital vulnerability.

To increase the resilience of companies, according to Gunderson (2000), it is, therefore, necessary to establish strategies that meet a variety of requirements and focus on renewal and learning, as is the case of TIC, since learning new technologies is crucial to making a company resilient. It is an adaptive process that allows companies to face the main challenges through their ability to respond and reinvent themselves to achieve administrative renewal.

**c) Strategic guidelines to mitigate the reduction in the level of employment**

It is incontestable that the importance of small and medium-sized companies goes far beyond the economic dimension due to their contribution to the GDP of several countries in the world, including Brazil. In
social matters, as already described, SMEs represent most jobs generated (SEBRAE, 2018; LOVINS and COHEN, 2013), which reinforces their image as agents of social transformation.

Complementing the SME’s resilience potential in times of economic turmoil, it is recommended to consider the following strategic guidelines:

1. Retain knowledge through a flexible workforce, strategic management thinking, top management support, and technology.
2. Be proactive in knowledge-sharing arrangements.
3. Adopt elements that support the transition from the current situation through preventive actions and knowledge-recording actions.
4. Keep the history of previously occurred vulnerabilities and solutions for the main problems faced.

As a pillar of its resilient strategic management, these actions will undoubtedly mitigate impacts such as the loss of employees critical to its operations and the risk of compromising its business. It is worth noting that also included in its strategy the concern to having company activities that contemplate the solution of social problems; it will undoubtedly contribute to small and medium-sized companies mitigating the related impacts, not only in the decreasing of workforce operations but also fostering job generation in the communities where they operate.

**d) Strategic guidelines to face impacts due to reduced demand**

Economic crises provoke a series of changes in the business environment. One of the most harmful consequences for companies is a decrease in revenues due to the reduction of demand.

In the COVID-19 pandemic, the impacts of reduced demand were felt more strongly in some segments than others. A survey carried out by SEBRAE (2021) shows that the tourism, creative economy, gym, and personal care segments were the most affected during the crisis.

To face the problems caused by demand reduction and withstand changes in their business environment, one of the fundamental aspects of building a resilient process is leadership issues. In this regard, it is suggested to include the following strategic guideline:

1) Possess a leadership mindset.
2) Adopt multiple crisis management practices.
3) Identify threats and opportunities.
4) Act promptly and flexibly.

Focusing on how increasing demand can help SMEs navigate crises and increase their resilience. Considering that SMEs suffer more from demand constraints, such as loss of customers or market share during crises, Alves et al. (2020) state that SMEs should focus on increasing demand using networking platforms to explore new business opportunities after crisis events. Because they have dynamic and innovative capabilities and are willing to learn from crisis events, SMEs can bounce back quickly.

Another critical attribute to be considered to increase resilience regarding demand reduction issues is associated with the following guidelines:

1) Improve efficiency: Make quick decisions, use the proper resources differently, and identify recovery opportunities.
2) Develop a sense of continuity during adversity: that resorting to the characteristics of ambidexterity, according to Iborra et al. (2020), translates into the ability to improve efficiency without losing the ability to develop new ideas, products, and processes and in strategic consistency – a sense of continuity during adversity and the consistent allocation of resources to facilitate a sense of direction and stability.

In this way, it is possible to acquire the ability to perceive and respond to new demands by improving innovation, adapting its offer to face new markets, and reinventing how it provides its service. That can help SMEs to increase their competitiveness concerning their competitors by offering innovative products and services.

In addition, it allows them to adopt highly flexible processes, make decisions quickly and develop the ability to provide immediate responses. It can be a strategic differential, allowing small and medium-sized companies to be better prepared in the search for alternatives to survive the period of economic turbulence and adjust their operations to the new scenario of low demand.

**IV. Final Considerations**

This text proposes to reflect, discuss, and offer resilience guidelines to face the implications and consequences of the emergence of a pandemic during globalization and an increasingly complex world. The scenario is challenging. Due to the speed of propagation of COVID-19, the consequent actions of governments to minimize contagion, and the eagerness to avoid overloading health systems, this period has become, in the scope of business, devastating for companies small and medium-sized enterprises.

Many companies have seen their profits collapse and their businesses stop because of social isolation and the market’s closing, limiting themselves only to the economy’s essential sectors. Other companies had to review their business model and sought alternatives, such as delivery and online sales, to guarantee their customers’ maintenance and billing conditions.

The impacts, however, went far beyond the economic dimension, comprehensively affecting the
social extent. Due to the demand reduction and the restrictions imposed on various economic sectors, many companies were forced to reduce their staff, increasing unemployment.

It was first said that even though the COVID-19 pandemic resulted in an economic and social crisis, the dimensions cannot yet be fully assessed. Similar crises have already occurred, such as the Spanish flu pandemic in 1918, the Great Depression in 1929, and the 2008 crisis that devastated the United States of America worldwide.

In turn, it is worth noting that if financial crises have historically been endemic to capitalism, the recovery took place in a relatively short time, and the impacts did not seem so severe, in general, locally affecting a small fraction of the population, the wealthier. The news is that the current economic and pandemic crisis is affecting the economy and the lives of millions of people, businesses, and companies, tiny and medium-sized ones.

Based on what a brief but significant bibliographical review proposes, it is suggested that to resist situations caused by current and future economic crises or pandemics, the adoption of strategies and action guidelines based on the concept of resilience is possible to minimize the harmful effects that threaten the survival of SMEs.

In this sense, to guide the way of building a set of guidelines for resilient strategic management, we sought to identify in the concepts of resilience, brought by the consulted bibliography, its characteristics and mitigating attributes to impacts and vulnerabilities, which became more evident to small and medium-sized enterprises in times of crisis. So that by adopting such principles and guidelines in their strategic processes, they serve as encouragement and direction to become more robust, that is, more prepared for the economic crises and pandemics that may arise in the future.

Establishing strategies previously aimed at the sustainability of small and medium-sized companies during economic turbulence or pandemics, reconciling with the requirements of resilience can make them more prepared to survive the adversities caused by the consequent effects and vulnerabilities permeating the business environment of the SMEs. Thus, it is expected that SMEs can use this work as a reference for planning their activities, aiming to keep them sustainable, competitive, and resilient to the possible future crisis.

Concerning the statements made here, the limits of scope and the generalization difficulties are worth noting, highlighting its punctual and exploratory character. However, the elements developed here are considered relevant and suggestive of delving deeper into survival strategies and seeking mechanisms to soften the impacts of financial crises and pandemics for small and medium-sized companies.

What can be recommended as additional studies, such as those that can be identified if, during the COVID-19 pandemic, some of the strategic guidelines proposed in this work were adopted by some SMEs and, thus, confirm in practice if some of the impacts caused by the financial crisis have been mitigated; or that allow assessing the applicability of the proposed strategic guidelines, as a way to becoming a resilient base for the survival of SMEs during the crises that arise in the future.

The set of guidelines for Resilient Strategic Management (RST) proposed in this study is not self-limited, nor is it presented as the definitive solution for SMEs to succeed in developing their business models. Still, it certainly contributes to searching for the best way to respond to the effects and vulnerabilities that affect them and thus become more resilient, regardless of any crises that arise.

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36. Orelho, J. L. (2017). A grande recessão brasileira: diagnóstico e uma agenda de política...
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