

## **Impact of Economic Crisis and Way Forward for the Survival of SMEs: A Sri Lankan Perspective**

**G.T.W. Sriyani**

Department of Management and Entrepreneurship, Faculty of Management and  
Finance University of Ruhuna, Matara

SRI LANKA

gtwasanthas@badm.ruh.ac.lk

### **Abstract**

The small and medium scaled Enterprises (SME) sector in any country including Sri Lanka is considered a vital sector for a country's economic growth. However, past research evidenced that despite the large number of business establishments that occur every year in Sri Lanka, a high SME failure rate, a low growth rate, and survival rates were reported comparatively with other countries. The prevailing economic crisis in Sri Lanka further creates a vulnerable situation for the SME sector and it affects highly the growth and performance of most of the SMEs. This effect may continue for a long period and affects seriously hamper the country's economic growth further. Therefore, it requires identifying the impact of the prevailing economic crisis on SMEs in Sri Lanka and ways for ensuring the SMEs' survival. Hence, this research aims to reveal the key problems encountered by SMEs during this economic crisis and determine which factors affect the business survival even if the crisis brings many negative impacts. This study was based mainly on the positivism paradigm followed by the quantitative approach. The study sample included 172 manufacturing SMEs which were located in the Southern and Western Provinces of Sri Lanka. The Independent variable of this study was entrepreneur-specific factors and two sub-dimensions including dynamic capabilities and entrepreneurial orientation of the entrepreneur were used to measure the independent variable. The dependent variable was the business survival. As data analysis techniques, the factor ranking method was applied to identify the key problems faced by the SMEs due to the prevailing economic crisis, and multiple regression technique was applied to reveal the most persuasive determinants of SME survival during the economic crisis. Key problems faced by the SMEs included: high cost of production and demand decline due to inflation, shortage of required raw materials, continuous power cuts, working capital and liquidity problems, and breakdown of their supply chain due to fuel issues. All these key issues affect diminish the capacity utilization rate and lower the business performance of many SMEs. This research found that several SMEs were capable to protect as survivors even during the economic crisis period due to their dynamic capabilities and entrepreneurial orientation possessed with them. Among the two factors that were considered as owner-specific factors in this study, dynamic capabilities possessed by the owner-manager work as the most persuasive determinant of the business survival than the entrepreneurial orientation during the economic crisis.

**Keywords:** Business Survival, Dynamic Capabilities, Economic Crisis, Entrepreneurial Orientation, Small and Medium scaled Entrepreneurs

## 1. INTRODUCTION

An economic crisis creates a sudden downturn in a country's economy, its aggregate output, or gross domestic product (Tambunan, 2019). The past studies gave concerned mostly with the impact of the Asian financial crisis (1997–1998) and the global financial crisis (2008–2009). The ongoing island-wide economic crisis is considered as country's worst economic crisis in Sri Lanka since its independence in 1948. This was created by multiple compounding factors starting from the Easter Sunday attack in 2019, the COVID-19 pandemic in 2020, short-sighted policymaking, an overall lack of good governance, unplanned external borrowings, insufficient foreign reserves at the Central Bank of Sri Lanka, and loss of access to foreign debt for the first time in its history, etc. (Lakshila, 2022; Akmal, 2022). The Sri Lankan economy has been hammered by the COVID-19 pandemic and lucrative tourism revenues dropped from \$5.6 billion in 2019 to \$1.08 billion in 2020 (Akmal, 2022). Also, three key foreign exchange earning sources of the country including foreign remittance, tourism income, and apparel and tea exports collapsed drastically.

In general, many researchers (Bourletidis & Triantafyllopoulos, 2014; Robinson & Kengatharan, 2020; Akmal, 2022) affirm that micro, small, and medium scaled enterprises (MSMEs) are the most affected victims of such lengthy economic crisis. The COVID-19

pandemic has created a devastating impact on the SME sector in Sri Lanka from 2020 to 2021 (Akmal, 2022). Due to this tragedy, many SMEs had to face severe problems like shortage of inputs, import restrictions, imposed health guidelines, demand decline for products and services, cancellation of orders, delivery issues, labor utilization issues, difficulties in repaying loans and interest, awful cash deficit and lack of savings, etc. (Robinson & Kengatharan, 2020; Gunawardana, 2020). These problems create many permanent shutting down of businesses and reduce the level of operations with grave drops in production and sales volume and thousands of jobs (Gunawardana, 2020, Akmal, 2022). Nevertheless, of such graving issues, gradually several SMEs were capable to protect as survivors due to the talents and capabilities possessed with them, quick adaptations to the challenge by moving to e-business practices, new technologies, innovations, etc. as well as rapid changes in consumer buying habits and buying behaviour, and assistance received from the business development service (BDS) organizations created a blessing environment for the MSMEs. However, unfortunately, before the problems of COVID impact on MSMEs subsides and back to become normal, since the beginning of 2022, the prevailing economic crisis of the country creates multiple challenges and a massive drawback in the economic growth of the country as

well as a serious threat on the MSME sector in Sri Lanka (Lakshila, 2022; Akmal, 2022). This crisis can be considered a massive wave which affects swept out hundreds of MSMEs from their economic activities and the remaining businesses are extremely vulnerable and seeking ways to survive.

Even though assistance was received from the government and policy decisions to uplift the SME victims of COVID-19 impact, such a helping hand and sustainable mechanism cannot be seen still for assisting the MSMEs who are particularly vulnerable to economic downturns to ride through this crisis (Lakshila, 2022). Akmal (2022) stated that until an adequate macroeconomic policy framework is in place, the business environment in the country may not be apparent as good for the business community and the general public. However, by utilizing their talents and capabilities as well as the experience that most of the SMEs gained through the COVID-19 pandemic challenge, they try to combat the challenges created by the prevailing economic crisis for ensuring business survival. Bourletidis & Triantafyllopoulos, (2014) show that even though several sectors are there which affected a lot, meanwhile several SMEs show a remarkable yield by getting benefits from the crisis. Kottika, et al., (2020) explained a similar experience during the Greek economic crisis about creating SMEs learning opportunities and exceptional business lessons to move the business to success. Even though many of the past studies emphasized the factors behind a

country's economic crisis and its impact on the SME sector, so far, research evidence on exploring the factors that determine the SMEs' survival during the crisis or/and post-crisis context is still vague (Karadag, 2016; OECD, 2021; Kose et al., 2020; Steinerowska-Streb et al., 2022).

Therefore, by considering the existing research gap, this study aims to reveal the key problems encountered by SMEs in times of prevailing economic crisis, as well as to reveal the most persuasive determinants of SME survival during the economic crisis. Revealing the key problems created for the SMEs due to the economic crisis and the uncertainty associated with the crisis will assist in developing platforms and dialogues to discuss the key issues and the root causes as well as developing a mechanism to ensure the survival of the MSME sector. Further, having an understanding of the factors which affect protection as survivors even during the economic crisis period might be useful for the MSMEs to face successfully such massive challenges and ensure business success.

## **2. LITERATURE REVIEW**

### **2.1 Status of SMEs in the Economic Structure in Sri Lanka**

The definitions for SMEs are varied from country to country based on the criteria used such as the number of employees, turnover, investment, etc. SMEs in most countries are defined as organizations with less than 250 employees (OECD, 2005). In Sri Lanka, National Policy Framework for Small and Medium Enterprise

(SME) Development (2016) defined “small-scale enterprises as entities of employees between 11-50 and annual turnover between 16mn-250mn, and entities of employees between 51-300 and annual turnover between 251mn-750mn as medium scale enterprises”. The development of the SME sector is vital for the economic development of any country because it contributes to employment generation, growth of Gross Domestic Production (GDP), contributing on innovations and value additions, and stimulating other economic activities (Sriyani, 2020). In Sri Lanka, the SME sector accounts for more than 75% of the total number of enterprises, 45% of employment, and 52% of the GDP contribution (National Policy Framework for SME Development, 2016). Also, SMEs' provide an extensive role in expanding local development in terms of eradicating poverty, inequality, and unemployment in rural sectors (Gamage, et al., 2020; Kumara, et al., 2020). This massive role is very significant in Sri Lanka because the highest percentage of MSME establishments were reported in the rural sector. About 75% of MSMEs are located in the rural sector (Gunawardana, 2020). Gamage, et al., (2020) mentioned that SMEs provide an immense role in the utilization of local resources such as the local raw materials, disadvantaged poor people, uneducated youth, etc. and this role is appreciable in local economic development in rural areas where exist inequity in resource sharing.

## **2.2 Problems encountered by SMEs in times of on-going economic crisis**

In general, SMEs are the most vulnerable group in a prolonged economic crisis and suffer excessively because of their limited potential for downsizing, business diversification, poor financial structure, limited market, and technology access, and being heavily dependent on external financing (Karadag, 2016). The literature is available relating to the impact of the Asian financial crisis in 1997–1998 and the global financial crisis in 2008–2009 on MSMEs. However, limited literature is available on the impact of the prevailing economic crisis in Sri Lanka and it added a new experience because it is a result of multiple effects including the Easter Sunday attack, the Covid-19 pandemic situation, mismanagement and poor decision-making by the government, decline in foreign reserves by 70%, depreciation sharply the Sri Lankan currency, etc. All these create either direct or indirect impacts on the SMEs' continuation of business activities.

The major industries such as tourism, textile, food processing, etc. have been badly affected as a result of this worst economic crisis that the country has ever faced (Akmal, 2022; United Nations, 2022, Lakshila, 2022; Hovan George, et al., 2022). The countries which reported many tourist arrivals to Sri Lanka like the United Kingdom, Canada, and India issued travel warnings and advised their citizens to consider the ongoing economic uncertainty in Sri Lanka. Hovan George, et al., (2022) mentioned that due to the current economic situation in Sri Lanka, leading textile companies, including

Zara, Mango, and H&M, have shifted their attention from Lanka to Asian countries. Furthermore, the SMEs that link with the value chain of such industries were severely affected due to the loss of input supplies, sub-contracts, complementary services, etc.

Robinson and Kengatharan (2020) emphasized that the COVID-19 pandemic gravely damaged the SMEs in Sri Lanka. SMEs face the same set of problems due to the unending economic crisis (Lakshila, 2022). Akturk (2014) identified the impact of the Global Financial Crisis in 2008 on SMEs in two ways: impact on the functions of production, marketing, finance, and administration of the business of SMEs by putting them under pressure; and under various indicators such as financial difficulties and working capital problems, reduce the capacity utilization rate, increase in production costs, and laying off employees. These problems in the global, as well as Sri Lankan context, can be incorporated as three key challenges that the SMEs have experienced with economic crises such as high inflation affected by the decline in the demand for the products and services; low utilization rate of production capacity; and financial difficulties, working capital and liquidity problems.

*High inflation affected to decline in the demand for products and services:* Declining the disposable income of the people due to high inflation affected seriously to demand decline for the products and services of SMEs (Akturk, 2014). For the first time in its history, Sri Lanka became

the third highest overall rate of inflation in the world (CBSL, 2022-August) by reporting an increase in Colombo Consumer Price Index from 60.8% in July 2022 to 64.3% in August 2022 while increasing the the the food inflation to 81%. All these causes to resulting basic goods to be more expensive and many low-income Sri Lankans have become unable to afford adequate food because of skyrocketing prices during the year 2022. Also, the reduction of operating hours, increase in input prices, shortage of inputs, etc. affect to rise of the cost of production and thereby increase the price of final products (Akmal, 2022). All these work as a vicious cycle that generates massive threats and challenges to SMEs. Moreover, the rapid depreciation of the Sri Lankan Rupee, inflation has gone up at an unbearable level with no increase in wages drastically affecting to decrease the purchasing power and standard of living of the people. Price hike-ups, shortages in cooking gas and kerosene oil, lengthy power cuts, and shortages in the supply of many products create changes in people's consumption patterns and force many families to reduce their consumption and non-consumption expenditure (Lakshila, 2022).

*The low utilization rate of production capacity:* Akturk (2014) found that, in Turkey, during the crisis, a drastic decline in the utilization rate of production capacity happened because of a lack of raw materials, financial difficulties of the SMEs as well as lack of demand. It caused the removal of employees to face the reduction of capacity utilization rate.

Akmal (2022) mentioned that the fall of foreign currency reserves in Sri Lanka by 75% in 2022 created difficulties in importing fuel and other essential commodities. Then, shortage of fuel, cooking gas, imported raw materials, lengthy queues in fuel stations, lengthy daily power cuts, etc. affect the SMEs to reduce the utilization rate of production capacity. George, et al., (2022) found that nearly 1000 bakeries were closed due to a shortage of cooking gas. Daily power cuts to conserve energy, shortage, and increase in the price of fuel cause to limit the factory and workplace operating hours (Lakshila, 2022; ACAPS, 2022).

*Financial difficulties, working capital, and liquidity problems:* SMEs face hardships mostly in the financial area in a crisis due to an increase in interest rates, a decrease in re-borrowing facilities, difficulties in collecting their receivables and paying their debts, and a worsening of credit conditions (Akturk, 2014); Karadag, 2016). Piette & Zachary (2015) show that SMEs face higher risk and tighter credit conditions during the crisis. OECD (2009) stated that declining sales cause delays in the payments on receivables, and this leads to SMEs' working capital and liquidity problems as well as the increase in reported defaults, insolvencies, and bankruptcies. The working capital problem also causes to collapse of the short-term creditworthiness of SMEs (Akturk, 2014; Lakshila, 2022).

### **2.3 Factors affecting SME survival during or post-economic crises**

As discussed above, though many negative impacts or threats created by economic crises on the performance of SMEs, some experiences were reported in the research literature about the SMEs converted challenges into opportunities with the right decisions and by applying amazing survival strategies (Kottika et al., 2020; Lim et al., 2020; Akturk, 2014). They focused on the questions of why and how, as well as looked at the process of how some SMEs can sustain and even accelerate growth through an economic crisis. With such positive perspectives, and rather negative, several researchers focused their research studies to reveal the factors that determine survival and back to normal. These factors include the Nature of the business; Adaptation of new technology and e-commerce for the business operations; Abilities and skills of the Entrepreneur; Dynamic capabilities of the entrepreneur; and Entrepreneurial Orientation (EO) and Market Orientation (MO).

*Nature of the business:* By taking into account the prevailing literature on the post-economic crisis, Steinerowska-Streb et al., (2022) studied after the post-economic crisis whether the size of the firm, types of business activity and market range (internationalization) create differences in the probability of SMEs' survival. The results evidenced that firm size and business type were not good predictors for business survival and internationalized firms were capable to achieve a high level of survival compared with the firms which operate in the domestic market and

SMEs could reduce their risks of failure by expanding into foreign markets. It further emphasized that larger companies may struggle with some diseconomies of scale due to scale inefficiencies while smaller firms are facing the obstacle of resource scarcity at the local level. KEPE (2015) presented a similar view of medium-scale firms affected seriously that the small scale firms because of high operation costs and less flexibility (cited by Kottika et al., 2020). Steinerowska-Streb et al., (2022) found that SMEs' survival does not vary with the business type as manufacturing, service, trade, etc., and all firms, regardless of the type of business, have to with the challenge of changes in demand and supply. On the other hand, Steinerowska-Streb et al., (2022) highlighted that, indeed, many emerging economies reached back to their pre-crisis position faster than developed countries due to influencing a wide range of institutional differences, fiscal and monetary policies, level of private investment, diverse technology levels and infrastructure, domestic and external demand, availability of raw materials and labour force, etc. which determine the country's economic growth potential. However, such a conducive business environment cannot be seen in many developing countries, especially in Sri Lanka.

*Adaptation of new technology and e-commerce for business operations:* Also, much evidence was reported from several countries including Sri Lanka relating to the adaptation of new technology and e-commerce for business operations as survival

strategies for the problems created by the economic crisis resulting due to Covid-19 pandemic (DAI Final Report, 2022; IFC Report, 2020). The findings of the DAI Report (2022) show that digital tools like social media played a big role in the promotion and selling of goods and services during the pandemic when in-person transactions fell sharply and the same is applied by the SMEs as a solution in the economic crisis for the delivery difficulties due to hiking the price and shortages of fuel. Gregory et al. (2002) say that during the Asian economic crisis of 1997, Korean SMEs could be strengthening themselves through marketing activities and technological innovation. This adaptation helped SMEs to connect with the big ties (cited by Bourletidis and Triantafyllopoulos, 2014).

*Abilities and skills of the Entrepreneur:* Good decision-making skills of the entrepreneur in such crises have been argued as a strong defense to win the challenges. Bourletidis and Triantafyllopoulos (2014) argued that SME owners have to face the challenge of managing the trade-off between the benefits and costs when choosing the measures to cope with the crisis. Also, Auzzir et al., (2018) pointed out that an entrepreneur's expertise in crisis management helps in navigating challenging times. Remarkably, several researchers (Simon-Moya et al., 2016; Cowling et al., 2018) found that young firms have a greater likelihood of surviving during crisis periods.

*Dynamic capabilities of the entrepreneur:* Dynamic capabilities

(DCs) have been identified as crucial for entrepreneurs to face strategic challenges in the turbulent business environment (Samsudin and Ismail, 2019; Collis and Anand, 2018; Carayannis and Stewart, 2013). DCs are considered "higher-level competencies that determine the firm's ability to integrate, build, and reconfigure internal and external resources and competencies to address, and possibly shape rapidly changing business environments" (Teece, 2007, P.1319). The DC theory suggested that rather than following the prior market position and just doing the same thing in better ways, a firm instead identifies and exploits a new source of competitive advantage by acquiring or building a new combination of resources by doing the right thing. This is the Schumpeterian view on the ability to recombine, reconfigure and create new assets to realize an entrepreneurial opportunity even in stormy situations. Acikdilli et al., (2013) pointed out that in unstable situations, DCs may reconfigure the firm's idle resources or recombine them in novel ways like developing new products or introducing new uses for existing products, etc. Also, Samsudin & Ismail (2019) pointed out that innovation plays a dominant role, especially in crises. It was emphasized that in exploiting opportunities that arise within the turbulent business environment, an entrepreneur needs to use their DCs in an innovative-oriented manner to achieve success. A proper understanding of such capabilities is provided safeguards for SMEs to secure their competitive positioning, particularly during a period of market

shocks that requires strategic change (Borch and Madsen, 2007). Gunawardena (2020) pointed out that the COVID-19 pandemic situation created a ground for SMEs to convert even threats into opportunities by properly utilizing the DCs and innovative orientation possessed by them.

*Entrepreneurial Orientation (EO) and Market Orientation (MO):* EO generally refers to a firm's propensity to be innovative, to be proactive, and take risks (Soininen, et al., 2013). Simon-Moya et al., (2016) found that ventures which started based on market opportunity have better survival chances during times of crisis because these are associated with the concept of entrepreneurial orientation, with the dimensions of innovativeness, proactiveness, and willingness to take risks than those were started based on necessity motive. Sriyani et al., (2020) also argued that the EO plays a crucial role in directing the business toward success. Soininen et al., (2012) found that, during and after a crisis, SMEs with higher EO have better chances of survival. They further found that among the dimensions of EO, innovativeness, and proactiveness have a positive effect on performance while risk-taking has a negative effect. Eggers (2020) also argued that a time of crisis can create market opportunities by utilizing properly the innovative and proactive postures. Petzold et al., (2019) also highlighted the important roles of MO and EO and their positive effects on firm performance even during periods of a financial crisis. They explained that during economic downturns due to



the SMEs' MO and EO, they are capable of catering to a customer's immediate needs and proactive approaches that go beyond these needs. Regarding the *ways* of survival, Kottika et al., (2020) highlighted the importance of EO and MO specifically for pricing and downsizing decisions, building new market and input linkages, and offering new products to the market and these are identified as essential decisions in a crisis.

### 3. METHODS

This study focused on understanding the social setting by recognizing the individual constituents of a phenomenon of business survival during the economic crisis and hence a large sample of SMEs has to be selected. Therefore, the positivism paradigm followed by the quantitative approach was applied in this study. Whenever necessary, qualitative views were also used. The target population is SMEs who are registered in at least one of the BDS organizations in Sri Lanka. The sample of 175 manufacturing SMEs was selected from Southern and Western Provinces by using the simple random sampling technique based on the membership lists from the district offices of the Small Enterprise Development Division, National Enterprise Development Authority, Industrial Development Board, and Vidatha. In selecting the sample, SMEs were defined based on the number of employees of the entity as 11 – 300 as per the definition presented by the National Policy Framework for SME Development (2016). Further, five present SMEs from each list who have at least 5

years of experience in their business were considered to select for the study sample. The hybrid method: a semi-structured questionnaire, as well as an interview method, was applied in collecting primary data. The first part of the questionnaire focused on the basic profile of the respondents and the business. The second part included the ranking question to identify the most critical problems faced during the crisis and five-point Likert-scale questions to reveal the most persuasive determinants for SME survival during the economic crisis. Among 175 SMEs, only 172 properly responded to the questionnaire, and the data analysis proceeded with these 172 SMEs.

Focusing on the first research objective, the researcher used the factor ranking method to identify the most affecting problems for their business operations due to the prevailing economic crisis in Sri Lanka. 12 number statements were produced in this regard as shown in Table 1. For this, respondents were asked to rank the problems listed in the given table as per the severity of affection for their business operations. The second research objective is to reveal the most persuasive determinants of SME survival during the economic crisis. Among the determinants of SME survival during the economic crisis that was discussed in the research literature, only the *entrepreneur-specific factors* were considered as the independent variable of this study and two sub-dimensions including i) dynamic capabilities of the entrepreneur (DCs); and ii) entrepreneurial orientation (EO) were

used to measure the independent variable and tested two hypotheses accordingly. In defining dynamic capability, the definition presented by Teece et al., (1997, P. 517) was used and it is defined as "the ability to integrate, build, and reconfigure internal and external competencies to address rapidly-changing environments". In measuring the dynamic capabilities, three dimensions such as sensing & seizing the environment (DC<sub>1</sub>), innovative capabilities (DC<sub>2</sub>), and learning capabilities (DC<sub>3</sub>) were used. Entrepreneurial orientation is defined as the strategic orientation of the business which demonstrates proactiveness(EO<sub>1</sub>), innovativeness (EO<sub>2</sub>), and risk-taking (EO<sub>3</sub>), by taking into account the definition presented by Covin and Slevin (1989) and Miller (1983). The dependent variable of this study is the business survival and it was defined as the successful continuation of the business with a satisfactory level of production (BS<sub>1</sub>) and sales (BS<sub>2</sub>) from the entrepreneur's perspective. Cronbach's alpha value was used to test the reliability of the data set and multiple regression analysis was applied to test the two research hypotheses as depicted below. Multiple regression analysis was applied to determine the most persuasive determinant of business survival that was considered in this study.

H<sub>1</sub>: Prudently use of dynamic capabilities of the entrepreneur during the economic crisis affects significantly the survival of the business.

H<sub>2</sub>: Entrepreneurial orientation (EO) affects significantly the survival of the business.

#### 4. RESULTS

The basic profile of the SMEs in the sample revealed that the majority (89%) was in the age group of year 30-50, 51 % was male and 49% was female, 81% was married, 63% has at least senior secondary level education and 24% has tertiary level education. As per findings, SMEs involved in the industrial sectors such as food processing, garment, shoe and leather products, batik and handloom are the highly affected sectors due to this economic crisis. The food processing industry was mainly affected due to transport issues. During the lockdown and curfew period due to Covid pandemic situation in the country, people were encouraged to do home gardening and cultivation. Even though this created new opportunities for agro-based value-addition processes, the fuel crisis of the country and continuous power cuts affected the production process and delivery of inputs and outputs. Due to the perishable nature of fruits and vegetables, severe post-harvest losses were there and hence the shortage of inputs occurred in the food processing industry. SMEs involved in garment, shoe and leather products, batik, and handloom manufacturing were affected mainly due to shortages in raw materials such as fabric yarn, fabric, dyes, machine parts, etc. with the import restriction decision of the government, shortfall of foreign reserve and devalue of the rupee.

#### **4.1 Key problems faced by the SMEs in Sri Lanka during the Economic crisis period:**

In identifying the key problems faced by SMEs due to the prevailing economic crisis, the factor ranking method was used. The 12 most critical factors were presented as per the knowledge gathered through the research literature and the personal experience of the researcher. In Table 1 (under the Annexes), the problems are presented from the highest to the least ranks as per the respondents' replies on each problem. Accordingly, the six most critical problems faced by SMEs include an increase in the cost of production due to high inflation; diminish production runs due to continuous power cuts and fuel issues; shortage of required raw materials; decline the consumer demand due to inflation of the country; working capital and liquidity problems; and breakdown of their supply chain due to fuel issue. Because of the prevailing economic crisis, the majority of the SMEs in the study sample have to face difficulties in receiving the required raw materials for their production processes. This implies that all the most critical factors revealed through this study directly affect to diminish the production volume of SMEs.

The general opinion revealed through the interview with the selected 10 SMEs was that shortage of local and imported raw materials, fuel, cooking gas, lengthy queues in fuel stations and daily power cuts affect to reduce the utilization rate of production capacity and this created multiple effects for them including stop the operations for many hours of the day,

losing the economies of scale benefits, cancellation of orders, cut down employments, rise-up the cost of production and price increases for final products. They further said that these happen as a cyclical process. Several of them mentioned that the fuel issue causes the breakdown of their supply chain even. Because all imports, exports, storage, and the entire logistic operations are centered on and around Colombo, fuel issues created delivery issues for the SMEs located far away from Colombo peripheral area. One of the respondents detailed what he felt due to this crisis "*The rise in transport costs and overcrowded public transport has left workers struggling to travel to work and hence increases labour absenteeism, poor labour productivity, etc. Due to high living costs and insecurity of employment, as well as the government's encouragement, most of the skilled youth employees migrate for foreign jobs. Then, lack of skilled labour, shortage of raw materials, regular long hours power cuts, fuel shortages, etc. cause to worsen the capacity utilization problem further for them. So, due to under capacity in operational activities, the cost of production has further gone up*".

Very high inflation in the country without any salary increases for the general public causes a serious decline in the disposable income of the people and hence a decline in the demand for the products and services of SMEs. People looked at the high inflation rate and price hike-ups as a double-edged sword that the people have to face concurrently.

In the interview, most of the SMEs explain why they said the lack of working capital was one of the critical issues. As they explained, serious price fluctuations and high prices of raw materials; demand declines; government decisions on stopping to provide lending facilities for SMEs; delays in account receivables, and decline of other income sources affect to weaken the working capital position of the SMEs. Likewise, the working capital problem cause to collapse of the short-term creditworthiness of most of them as well as unable to purchase the required amount of raw materials and which leads to reduce the production volume further.

#### **4.2 Determinants of SME survival during the economic crisis**

The second research objective of this study is to reveal the most persuasive determinants of SME survival during the economic crisis. For this purpose, the two hypotheses were developed to test the impact of the two dimensions of the independent variable of “entrepreneur-specific factors” on business survival. The reliability test results relating to the independent and dependent variables are depicted in Table 2. Accordingly, all constructs reported a value of greater than 0.6 and this fulfills the rule of thumb of internal consistency described by Zikmund (2013) and the scales deemed reliable for further analyses. Table 3 shows the group statistics of business survival. The mean values relating to DC and EO were reported as greater than 3.0 and this indicates that the SMEs in the sample agreed upon the 2 dimensions leading to the business survival during the crisis

period. Multiple regression analysis was applied to test the two hypotheses of this study and the model summary of the impact of owner-specific factors on business survival during the economic crisis is depicted in Table 4. Accordingly, it was reported a high positive correlation (0.693) between the owner-specific factors and the business survival. Also, the  $R^2$  value of the model is 0.480 and it says that the overall model explains a 48% variation in business survival. Then, findings imply that owner-specific factors considered in this study have a strong power to determine the business survival during the economic crisis period. The ANOVA results depicted in Table 5 show the overall model fit by reporting the F value of 13.916 with a *p-value* of less than 0.05.

Table 6 depicted the coefficient values of the predictors (DC and EO) that were used to test the two hypotheses of this study. The two hypotheses of this study were respectively: “H<sub>1</sub>: Prudently use of dynamic capabilities of the entrepreneur during the crisis affects significantly for the survival of the business” and “H<sub>2</sub>: Entrepreneurial orientation (EO) affects significantly for the survival of the business”. The beta value relating to Dynamic capabilities is 0.420 and the *p-value* is 0.016. It was reported the beta value for Entrepreneurial Orientation was 0.336 and the *p-value* is 0.007. As per Table 6, both *p-values* are significant at the 0.01 significance level and *t-values* are also greater than 2 indicating that both hypotheses of the study can be accepted. Out of

the two predictors, dynamic capabilities affect highly on determining business survival during the economic crisis among SMEs more than the entrepreneurial orientation because DC reports a comparatively high beta value.

The discussion with the SMEs in the study sample helped to reveal how the selected SMEs use dynamic capabilities and entrepreneurial orientation characteristics for surviving during this economic crisis. Several SME owners revealed that continuous sensing of environmental happenings and seizing the opportunities created, specifically focusing on new product developments and modifying the products to offer affordable prices to the customers and match with their income, the technology improvements, more focus on the export market, consider customer demand changes and new requirements, competitors' reactions, and government policy decisions gain benefits for their survival. Also, two women entrepreneurs who are in the Western Province mentioned that “designing new packages and testing new materials such as eco-friendly packaging is used as solutions for the restrictions of importing several inputs”. Moreover, the Learning capabilities of several SME owners about what to combat during the Covid pandemic period and how to survive are used as good lessons for the impacts due to crisis. Also, sharing their knowledge with the employees and together creating new and low-cost products as well as input creating process assist them to utilize

the employees properly for surviving from this struggle.

More evidence was revealed through the interviews regarding together with the capability of environmental sensing and seizing, they used the proactiveness behaviour also. For example, it was revealed that SMEs work hard and do research and development to find the necessary inputs on their own and seek substitutes. As practiced during the Covid pandemic situation, several SMEs in the study sample have utilized the idle time of their employees for growing the necessary inputs on their own without laying off the employees as done by many SMEs. This can be identified as a very sustainable solution for the shortage and high price of raw materials. Moreover, together with the assistance of research and development institutions like VIDATHA and University research teams, several SMEs find substitute inputs for the imported ones and high-priced ones. Accordingly, they are capable to retain their customers while attracting competitors' customers and fulfilling the customer demand until uplifting the living condition of the people. Also, they practice *Product Reengineering* at their level and this was a good example to show their innovativeness. As the crisis lowered the level of people's real income, rather than depending on luxuries and new goods further, most of the SMEs in the study sample produce low-cost products by using alternative inputs at affordable prices. Regarding the EOs of SMEs, evidence is available relating to their proactiveness and

risk-taking behaviour. Interviews with SMEs revealed that rather than long-term investments, they wisely select the short-term investments which require for catering to the customer demand changes during this crisis including product testing, product and package modifications, market re-positioning, etc.

One of the most popular adaptations to environmental sensing is "*use social media and e-business platforms for marketing*". Facebook apps and Instagram are the most frequently used digital tools by the majority of SMEs in the study sample. This strategy is most beneficial for the entrepreneur as well as the customer due to many reasons including the ability to avoid the intermediary and the final price to the customer becomes comparatively low, able to provide customized orders, and thereby create good relationships and trust with customers, create loyal customer groups, cash on delivery and digital payment tools help them to solve the long delays in accounts receivables and hence solve the working capital problem to some extent. However, as revealed in this study, during Covid Pandemic period, through many SMEs adopted e-business practices and use e-business platforms like online marketing, participate in online training and knowledge sharing programs, webinars, etc., it is difficult to continuation for the high transportation cost and fuel issue. It deprives the use of such e-business practices due to the continuous power cuts, rise of the telecommunication charges, and high prices and unavailability of device.

## 5. DISCUSSION

As revealed in this study, similar findings were reported by several researchers relating to the most affecting problems for SMEs due to economic crises in the global context as well as in the Sri Lankan context. The present study found that high inflation due to the prevailing economic crisis created a multiplier effect on SMEs' performance. It affected increasing the cost of production, declining consumer demand, and operating under capacity by the SMEs. Shortage of required raw materials, continuous power cuts, and fuel issue affect to diminish the capacity utilization rate; working capital, and liquidity problems; and fuel issue causes the breakdown of their supply chain. Akturk (2014), Akturk (2014), Lakshila (2022), and Akmal (2022) presented a similar set of problems like decreases in capacity utilization rates, increases in costs and shortage of raw material, working capital in times of crisis faced by the SMEs in global level as well as in Sri Lankan context.

As pointed out by several past studies (for example, Kottika et al., Lim et al., 2020; Akturk, 2014), this study also argued that turbulent times like economic crises generate learning opportunities and provide rare business lessons for SMEs and thereby they can use their unique characteristics, skills, traits, and capabilities to protect as survivors during the crisis period. As found in this study, Kottika et al., (2020) explained that due to the innovativeness and proactiveness of the SMEs, they are capable to introduce new products with better

quality as well as with new initiatives and this ability help SMEs to survive in the financial crisis. Even though positive opinions were found in past literature (for example, Kottika et al., 2020; Simon-Moya et al., 2016; Soininen et al., 2012; Petzold et al., 2019; Acikdilli et al., 2013; Gunawardana, 2020; Samsudin and Ismail, 2019; Collis and Anand, 2018; Carayannis and Stewart, 2013) relating to the support of DCs and EOs of the SMEs for the business survival during the economic crisis and turbulent times, it is rare the studies that focused on the comparison of which one either DCs or EO of the entrepreneur affect highly on their business survival. However, this study focused on this research gap and revealed though both DCs and EOs significantly affect the SMEs' business survival, dynamic capabilities affect more highly than entrepreneurial orientation.

## **6. CONCLUSION**

This study focused on two main objectives. Revealing the key problems faced by SMEs in Sri Lanka due to the prevailing economic crisis was the first objective. Based on the findings, it can be concluded that high inflation in the country and price hikes in raw materials, fuel, and other supplies affect to limit the of production runs, increase the cost of production and thereby increase the final price of products to the customer. Inflation also affected to decrease the purchasing power of the customers and together with the price increases caused to decline in the demand for the products. This happens as a cyclical process and hampers the business activities of

SMEs. On the other hand, the working capital problem that was created as a result of the economic crisis directly affected the diminishing of the production volume of SMEs. So, decreasing the volume of operation of SMEs is a serious threat to the country's economic development because this reduces the ability to contribute to GDP, create employment, poverty reduction, etc. Therefore, the government and other responsible authorities require taking immediate action to ensure the production efficiency of the SMEs by assisting them to solve the above mentioned key problems Destination wise clustering the MSMEs, employing an effective supply chain management system, and developing a regional value chain might be good solutions for ensuring the the availability of raw materials and other inputs at low prices without affecting delivery issues due to high prices and shortage of fuel. This might be a good solution for the working capital issue and the capacity issue of SMEs.

The second objective of this study is to reveal the most persuasive determinants of business survival during an economic crisis. As per the findings, it can be concluded that the dynamic capabilities, as well as the entrepreneurial orientation, possessed the SMEs affected significantly to protect as survivors during the prevailing economic crisis period. Comparatively, with entrepreneurial orientation, dynamic capabilities assist SMEs in ensuring business survival, and hence, the SMEs, business development service providers, and the other stakeholder groups need to concern more on developing dynamic

capabilities such as sensing & seizing the environment, innovative capabilities, and learning capabilities of the entrepreneurs. Also, working cooperatively with their employees as an entrepreneurial family, and sharing the owner's learning capabilities to come up with innovative solutions

have shown remarkable solutions for such a crisis rather than laying-off employees to cope with limited demands. This can be considered a win-win-win approach for all three parties including the owner-manager, employees, and the national level policy planners

**APPENDIX**

**Table 1: Key problems faced by the SMEs during the economic crisis period**

	Key problems	Rank
1	High inflation affect to increase the cost of production	1
2	Continuous power cuts and fuel issue affect to diminish production runs	2
3	Shortage of required raw materials to continue business operations	3
4	Decline the consumer demand due to inflation in the country	4
5	Working capital and liquidity problems	5
6	Fuel issue causes the breakdown of their supply chain	6
7	The difficulty of paying the salaries of their employees	7
8	Difficulties in sourcing inputs from abroad due to dollar shortage	8
9	Difficult to obtain lending facilities from financial institutions	9
10	Loss of sub-contracts previously received from large-scale firms	10
11	Difficult to retain skilled people due to migration for foreign employment	11
12	Difficult to repay loan installments	12

Source: Author Survey-2022

**Table 2: Reliability Test Results**

Construct	Indicators	Cronbach's Alpha
Dynamic Capabilities	DC <sub>1</sub> , DC <sub>2</sub> , DC <sub>3</sub>	0.831
Entrepreneurial Orientation	EO <sub>1</sub> , EO <sub>2</sub> , EO <sub>3</sub>	0.762
Business Survival	BS <sub>1</sub> , BS <sub>2</sub>	0.815

Source: Author Survey-2022

**Table 3: Descriptive Statistics Results**

Dimension	N	Mean	Std. Deviation
Dynamic Capabilities	172	3.9067	.69217
Entrepreneurial Orientation	172	3.6933	.72361
Business Survival	172	3.3131	.49331

Source: Author Survey- 2022



**Table 4: Model summary of the impact of Owner-specific factors on Business Survival**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.693 <sup>a</sup>	.480	.432	.59071

a. Predictors: (Constant), DC, EO

**Table 5: ANOVA Results of the impact of Owner-specific factors on Business Survival**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.920	3	4.207	13.916	.000 <sup>b</sup>
	Residual	14.989	169	.326		
	Total	27.602	172			

a. Dependent Variable: BS  
b. Predictors: (Constant), DC, EO

**Table 6: Coefficients of the impact of Owner-specific factors on Business Survival**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.265	.729		7.087	.000
	DC	.436	.148	.420	2.498	.016
	EO	.365	.136	.336	2.139	.007

a. Dependent Variable: BS

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