CHARACTERISTICS OF FISHERY INDUSTRY MSMES IN TAKALAR REGENCY THAT ARE RESISTANT TO INTERFERENCES IN UNCERTAINTY ERA

Syamsari*1, M Syamsul Maarif1, Elisa Anggraeni2, Siti Amanah3
School of Business, IPB University, Bogor, Indonesia1
Department of Agricultural Industrial Technology, Faculty of Agricultural Technology, IPB University, Bogor, Indonesia2
Department of Communication Science and Community Development, Faculty of Human Ecology, IPB University, Bogor, Indonesia3
Email: syamsariitp@gmail.com*

ARTICLE INFO

ABSTRACT

Date received : June 25, 2022
Revision date : July 07, 2022
Date received : July 28, 2022

Research Business resilience in micro, small and medium enterprises (MSMEs) is limited in number, especially resilience in facing disturbances in an era of uncertainty. The need for research on business resilience is even higher for SMEs in the fisheries sector in developing countries. MSME business resilience needs to be maintained and improved to get sustainability so that it continues contributing to the economy.

The purpose of this study is to find the characteristics of the fisheries sector MSMEs in Takalar Regency which have high resilience to face disturbances in the era of uncertainty. The research location is in Takalar Regency, South Sulawesi, Indonesia, and carried out from August to October 2021. This study uses a descriptive analysis method supported by data from in-depth interviews and questionnaires filled out by 100 MSME entrepreneurs who have run fishing businesses for more than five years. The results of study show that high school graduates dominate the characteristics of MSMEs that have high resilience, the age of the business is more than five years, families dominate the MSME workforce, simple organizational structure, the sources of business capital are a diverse, productive response to disturbances dan have a good performance namely generating wealth that supports resilience and supports the sustainability of MSMEs.

Keywords:
Resilience; uncertainty; fisheries sustainability; MSMEs; Indonesia

INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs), especially the fisheries sector, have a significant contribution to the economy, especially to employment, poverty reduction, food sources, the formation of gross domestic product (GDP), exports, investment creation and sustainable economic growth (Fatoki, 2018; Namotemo, Kour, Dilly, Akerina, & Amahorseja, 2021; Nursini, 2020; Pornparnomchai & Rajchamaha, 2021; Wahyudi, Suroso, Arifin, Syarief, & Syarief, ...
This enterprises segment dominates the world economy, including Indonesia (Franco, Haase, & António, 2020; Utami & Nugroho, 2022). The existence of MSMEs for a long time was tested with various disturbances that emerged in the era of uncertainty (Azzaz, Matei Ghimbeu, Jellai, El-Bassi, & Jeguirim, 2022; Martin & Sunley, 2020). These disturbances are caused by turmoil that occurs in various sectors both at the local and global level such as economic, political, social and environmental crises, increasing over time (Pal, Torstensson, & Mattila, 2014; Suresh, Sanders, & Braunscheidel, 2020; Varona, 2017) including the latest incident that is Covid 19 pandemic restricted bussiness economy which has never been experienced before by (Czainska, Sus, & Thalassinos, 2021; Etemad, 2020; Lim, Morse, & Yu, 2020). This incident disrupted business stability and increased the risk to the sustainability of MSMEs (Duchek, 2018).

The significant contribution of MSMEs needs to be maintained by building and maintaining resilience (Abeysekara, Wang, & Kuruppuarachchi, 2019; Fatoki, 2018; Martin & Sunley, 2020; Suryaningtyas, Sudiro, Eka, & Dodi, 2019). Resilience is defined as the organization's ability to survive. face change and maintain its function (Karman, 2020). According to Pasman, Kottawar, and Jain (2020) resilience is the ability to recover business performance after experiencing a dangerous situation for the business due to unexpected disturbances. Resilience includes several abilities, namely the ability to withstand disturbances by adapting and innovating (Kantur & İşeri-Say, 2012; Quendler, 2017; Seville, 2018) the ability to anticipate and cope with disruptive events (Dahles & Susilowati, 2015; López-Castro & Solano-Charris, 2021) and the ability to bounce back after the organization fails to deal with disruption, resulting in organization that is stronger than ever, more ideas to deal with distractions and drive for future success (Duchek, 2018; Varona, 2017; Xiao & Cao, 2017).

The resilience of SMEs in the face of disruption in era of uncertainty needs to be investigated because it is specific (Sullivan-Taylor & Branicki, 2011). This opinion is reinforced by Audretsch and Belitski (2021) who recommend researching the resilience of MSMEs because they can survive in a turbulent environment despite lack of resources, skills and time, but in the same time continuing to innovate, offer new knowledge and create new jobs. In general, research on entrepreneurial resilience is still in its early stages. It is still largely unclear what entrepreneurial resilience really is, what elements are involved, and how it can be improved (Duchek, 2018; Saad, Hagelaar, van der Velde, & Omta, 2021). Research space is also open to research MSMEs in developing countries because the number is still small (Saad et al., 2021).

Research opportunities are also very open to examine the resilience of MSME sectors including the fisheries sector in the era of uncertainty which is the object of this research (Octasylva, Yuliati, Hartoyo, & Soehadi, 2022; Rochman, Indratno, & Agustria, 2021). Previous research has recommended examining the resilience of MSMEs from the context, business scale, location where they operate, type of business and environment (Spivey, 2016; Wishart, 2018). MSMEs in the fisheries sector have experienced many disruptions, but in fact they are still able to survive and contribute to household welfare in rural areas (Hikmah & Nasution, 2018; Nurhayati et al., 2020; Rochman et al., 2021). Fishery sector SMEs that have survived for 5 years show that these SMEs have strategies to deal with various disturbances (Giardino, 2016). Therefore, it is necessary to examine the factors that cause these SMEs to survive (Eschker, Gold, & Lane, 2017).

Takalar Regency was chosen as the location of the research because of large potential area of fishery resources (Irfan, Malan, Muchdar, & Abdullah, 2020). The agro sector such as fisheries, agriculture, forestry are the main contributor to 51.23 percent in GRDP of Takalar Regency in 2021 (BPS, 2022). Fisheries business in Takalar Regency has the potential to be disturbed, especially by external and internal factors. The external factors including environmental...
pollution (Rahatiningtyas, 2019), weather factors that cause catches to fluctuate (Firdaus & Witomo, 2014) and overfishing water conditions (Sumbodo, Anggraeni, & Ika, 2021). Internal factors that cause MSMEs in the fisheries sector to be vulnerable to disruption include the limited ability of producers because fishermen involved in fishing are generally small fishermen and their management is still traditional (Kusdiantoro, Fahrudin, Wisudo, & Juanda, 2019; Nababan, Christian, Afandy, & Damar, 2020) and various internal weaknesses in MSMEs in the fisheries sector, such as the low quality of human resources and limitations in the financial aspect (Namotomo et al., 2021).

This research on the resilience of the fisheries sector in Takalar Regency was conducted to find the characteristics of MSMEs that show their resilience to face various disturbances in an era of uncertainty. This research is in accordance with the recommendations of Kantabutra and Ketprapakorn (2021) to find the dynamic characteristics of MSMEs that are shown every day. According to Hinton and Hamilton (2013) the characteristics that need to be explored are the characteristics of the founders; opportunity orientation; exploitation of opportunities; and growth management. Zaridis and Mousiolis (2014) recommends an analysis on the characteristics of entrepreneurs, companies, management strategies and the influence of the external environment. Research on the character of entrepreneurs and SMEs shows resilience that comes from preparedness in dealing with disasters (Korber & McNaughton, 2018). Strengths Internal factors such as managerial characteristics and organizational behavior contribute significantly to the resilience and competitiveness of SMEs. Resilience that sources from within MSMEs must be known so that the internal strengths of MSMEs can be maintained and enhanced (Garcia, ten Caten, de Campos, Callegaro, & de Jesus Pacheco, 2022; Hirsch, 2021). This analysis is not only used to build MSME resilience. However, it can be used to prepare MSMEs to develop on a large scale (Ropega, 2011). Therefore this study will also describe the performance of MSMEs. Good performance will ensure business development and sustainability (Fatoki, 2018). Business sustainability is an indicator of organizational resilience (Ortiz-de-Mandojana & Bansal, 2016). This performance indicator follows (Eijdenberg, 2016), who recommends that business performance in informal enterprises is measured by personal wealth measures such as the ability to send children to school or obtain health care, the ability to meet food needs, and the ability to build a house. These performance indicators are considered more accurate for measuring MSME business performance in developing countries than the well-known business performance measures such as sales and number of employees. The non-financial performance measures were also proposed by several researchers, such as (Reijonen & Komppula, 2007) and (Balugani, Butturi, Chevers, Parker, & Rimini, 2020), which state that the use of non-financial aspects in measuring the business performance of MSMEs in developing countries is due to a large number of MSMEs that have not practiced good management in the business units they run.

**METHOD**

The method used in this research is the descriptive analysis method, which analyzes the characteristics and business performance and shows that MSMEs in the Takalar fishery sector have high resilience to face disturbances in an era of uncertainty. This analysis is supported by data from respondents totaling 100 MSME entrepreneurs who do business in fishery commodities, including seaweed, shrimp, milkfish, and capture fisheries (sea products) located in Takalar Regency, South Sulawesi Province, Indonesia. Each respondent filled out a questionnaire and participated in in-depth interviews regarding data on the level of entrepreneur education, age of MSMEs, workforce, MSME organizational structure, sources of capital, response to disturbances in the era of uncertainty, and MSME business performance. The selected respondents are entrepreneurs who have been in business for at least five years. Following the advice of
(Chandler, 2012), the critical age of a business is 3.5 to 5 years and is corroborated by the findings of (Giardino, 2016), who states that MSMEs those who are 5 years old and over already have a survival strategy.

RESULTS AND DISCUSSION

A. The education level of MSME entrepreneurs is dominated by high school education

Respondents have various levels of recent education, namely elementary, junior high, high school, and undergraduate. The distribution of the education level of MSME entrepreneurs in the fisheries sector in Takalar Regency can be seen in Figure 1. The number of MSME entrepreneurs in the fisheries sector in Takalar Regency are entrepreneurs with elementary 31 percent, junior high school education 22 percent, 43 percent high school graduates and 4 percent with a bachelor's degree.

![Figure 1. Characteristics of fisheries entrepreneurs based on education level in Takalar Regency](image)

The distribution of entrepreneur education levels based on micro, small and medium-scale businesses is shown in Figure 2. Respondents with S1 education were found on the small (12%) and micro (1%) scale but not on the medium scale. Entrepreneurs with high school graduates dominate the scale business (80%) and dominate the small-scale business (48%) and 39% on the micro-scale. Entrepreneurs with a secondary school education level are evenly distributed across all business scales, namely at the medium scale business by 20%, at the small business scale by 28%, and on the micro-business scale by 20%. Entrepreneurs with an elementary education level have the most significant percentage on the micro-scale (40%) and 12% on the small-scale business.

![Figure 2. Distribution of respondents of MSME entrepreneurs in Takalar Regency based on final education level.](image)
Characteristics of Fishery Industry MSMEs in Takalar Regency that are Resistant to Interferences in Uncertainty Era

The level of education is related to the cognitive abilities of entrepreneurs, which is one of the factors that support business resilience. According to the findings of Linnenluecke and Griffiths (2010), cognitive abilities, behavior, and contextual factors shape the ability of entrepreneurs to identify threats, develop anticipatory plans and mobilize resources to deal with distractions. Gunasekaran, Rai, and Griffin (2011) stated that entrepreneur education is related to awareness of the importance of using technology, especially in marketing and awareness of the business environment.

B. Minimum age of MSMEs is five years.

The distribution of MSMEs by age is shown in Figure 3. MSMEs reached a business age of 5-9 years is 31%. MSMEs aged 10-14 years are 23%, 15-19 years are 14%, and those older than 20 years are 32%. The age of the MSME respondents found in this study deserves to be referred to as MSMEs that can survive. The longer the age of the business, the more survival experience MSMEs have practiced. The capacity for resilience develops over time with increasing experience in facing various difficulties (Cocchiara, 2007). These experiences have shaped behavioral patterns that support resilience, including flexibility, motivation, persistence, optimism (De Vries & Shields, 2006), and anticipatory thinking (Doern, 2016). This finding is also reinforced by (Giardino, 2016), who states that MSMEs who are 5 years old and over already have a survival strategy.

![Figure 3. Business Age of Fisheries SMEs in Takalar district](image)

According to Bosma, Stam, and Schutjens (2011), the critical age of a business is 3.5 to 5 years. The entrepreneur's ability to pass this critical age shows he has the resilience to face disturbances through the learning process to hone his competence as an entrepreneur. Several previous researchers have also proven that entrepreneurs who have entrepreneurial behavior can withstand various disturbances in an era of uncertainty, even in conditions of limited resources (Branicki, Sullivan-Taylor, & Livschitz, 2017; Indarto & Santoso, 2020; Zaridis & Mousioli, 2014). According to Utami and Nugroho (2022) the experience of the owner plays an important role in maintaining the sustainability of MSME's business.

C. Families dominate MSME

MSME workers in the fisheries sector in Takalar are family and community members who live around the business location. These workers are recruited without going through the selection process. The use of internal labor from the entrepreneur's family is a characteristic of a family business that relies on family resources. This business continues to operate despite the crisis because the entrepreneur and the family are always united in running a business that is the foundation of their family's life. All resources owned by the family are also used to ensure business continuity. This family's internal workforce is ready not to receive
compensation according to the UMP standard but to adjust it to business conditions. In times of crisis or disruption that threatens the sustainability of the MSMEs, all family members who work for MSMEs only expect rewards that can meet basic needs. The attitude of the workers of this family member will remove most of the company’s financial burden. The family's strong commitment to survive in the face of disruption and maintain the sustainability of MSMEs follows the findings of Bauweraerts and Colot (2013) and Zapkau, Schwens, and Kabst (2017). According Amann and Jaussaud (2012), family businesses have stronger resilience during and after the economic crisis than non-family businesses because they can withstand business downturns better, recover more quickly, and demonstrate higher performance and a more stable financial structure more substantial over time.

D. Simple Organizational Structure

Fisheries MSMEs in Takalar Regency’s organizational structure is simple. The entrepreneurs who have established the MSME are located as leaders and at the same time as workers and are assisted by one or several workers. The simple organizational structure of MSMEs is in with the findings of (Branicki et al., 2017). structure simple organizational markets, managing finances, and facilities. The ability of the MSME structure to manage this business is because it can move the system. According to Lim et al. (2020), MSMEs must be viewed as a system capable of managing various components of resources, namely strategic, physical, financial, human, and organizational resources.

Takalar fisheries MSMEs with a simple structure have a quick response to overcome their weaknesses, survive in the face of disturbances and maintain their sustainability. This opinion is in accordance with Utami and Nugroho (2022) who state that the advantage of a simple MSME organizational structure is that MSME owners carry out more effective supervision and control and have a fast response to situations. This study also found the advantage of a simple structure is that MSMEs are faster and easier to build cooperation with fellow MSMEs engaged in the fisheries sector from producers to marketing so that a number of MSMEs can become one link in the fisheries sector institutional chain. According to Wiyono (2016) the progress of the fisheries sector is largely determined by its institutions.

E. Various sources

Sources of capital are challenging to obtain to get up after experiencing business losses. Initial capital used when starting a business for the first time comes from personal entrepreneurs, family circles such as parents, in-laws, siblings, and bank and non-bank financial institutions. MSME’s initial capital comes from entrepreneur (37%), family circle (26%) and capital from bank/non-bank financial institutions (37%). The proportion of each capital is shown in Figure 9. The capital sourced from the entrepreneur’s personal and family circle is remarkable because MSMEs can use these two sources of capital to rise from business setbacks or temporarily close due to losses.

When the business is running, MSMEs have the opportunity to get additional capital support from partners. MSMEs of medium and small-scale businesses that have developed in addition to cooperating and receiving capital support from partners also receive capital support from banks continuously. Meanwhile, micro-enterprises still rely on capital sources from entrepreneurs or families and micro-credit from banks. However, they get more capital from non-bank financial institutions and informal financial services. These four sources of capital cause MSMEs to develop.
The ability of MSMEs, especially micro-scale businesses, to survive amidst limited capital shows the general ability of business groups in rural areas to utilize the surrounding resources to maintain the sustainability of their business (Siemens, 2010).

![Figure 4. Capital Sources of MSMEs Fishery District Sector, Takalar](image)

Limited capital causes MSMEs to take the lowest risk to survive. This is under the findings of (Naldi, Nordqvist, Sjöberg, & Wiklund, 2007), which state that MSME-scale family companies' characteristics include taking risks at a lower level than non-family companies. Tsuruta (2020) argues that many micro and small businesses have sprung up and can survive but cannot develop into medium and large because increasing the scale of MSMEs requires additional capital investment.

**F. Have a productive response to disturbances**

Disruptions experienced by fishery sector entrepreneurs in Takalar district can cause losses and sometimes close temporarily. However, they can get up and continue their business. This ability to rise is a manifestation of his resilience. This finding is under the opinion of (Corner, Singh, & Pavlovich, 2017), which state that one form of resilience is that entrepreneurs remain stable to get up and operate even though they have experienced business failures. Several previous researchers stated that if the MSME entrepreneur failed in business, then the entrepreneurial behavior and remaining resources were used to bounce back even though the condition was more substantial than before, having more ideas or alternatives to continue being sustainable (Albasrawi, Jarus, Joshi, & Sarvestani, 2014; Corner et al., 2017; Dahles & Susilowati, 2015; Duchek, 2018; Kantur & İşeri-Say, 2012; Linnenluecke & Griffiths, 2010; Vogus & Sutcliffe, 2007; Xiao & Cao, 2017). According to Witmer and Mellinger (2016), the resilience of MSME entrepreneurs in facing these various disturbances shows a productive response to disturbances, namely, turning these disturbances and challenges into opportunities.

**G. MSME Business Performance**

Indicators of MSME business performance in the fisheries sector in Takalar Regency are measured using personal wealth. This performance indicator follows (Eijdenberg, 2016), who recommends that business performance in informal enterprises is measured by personal wealth measures such as the ability to send children to school or obtain health care, the ability to meet food needs, and the ability to build a house. These performance indicators are considered more accurate for measuring MSME business performance in developing countries than the well-known business performance measures such as sales and number of employees.
The business activities of MSMEs in the Takalar fishery sector have brought wealth to their entrepreneurs. Thus, these MSME entrepreneurs can meet their food and drink needs throughout the year, send their children to university level, build houses, and buy vehicles. This finding shows that all the SMEs in the fisheries sector in Takalar Regency have good performance, which supports SMEs' sustainability. Sustainability shows these SMEs' organizational resilience (Ortiz-de-Mandojana & Bansal, 2016).

This measure of the performance of the fisheries sector MSMEs in Takalar Regency, which is based on non-financial measures, was also put forward by several researchers, namely (Balugani et al., 2020; Reijonen & Komppula, 2007) who state that the use of non-financial aspects in measuring the business performance of MSMEs in developing countries is due to a large number of MSMEs that have not practiced good managerial work in the business units they run. Tambunan (2008) also express the same view that MSMEs practice traditional organizational management.

CONCLUSION

Micro, small and medium enterprises in the fisheries sector in Takalar Regency show high resilience in facing disturbances in an era of uncertainty. This high resilience is shown by the characteristics and performance of the MSME business for more than five years of operation. The characteristics that show the resilience of MSMEs are that high school graduates dominate the education level of entrepreneurs, and the minimum age of business is five years. Families dominate the MSME workforce, and the organizational structure is simple. The sources of business capital are diverse and have a productive response to disturbances. MSMEs in the Takalar fishery sector has good business performance and support the sustainability of MSMEs, which is shown by the ability of MSMEs to generate wealth for entrepreneurs so that entrepreneurs can meet their family's food and drinking needs for a year, can send their children to university level, build houses and buy vehicles.

REFERENCES

Abeysekara, N., Wang, H., & Kuruppuarachchi, D. (2019). Effect of supply-chain resilience on firm performance and competitive advantage: A study of the Sri Lankan apparel industry. *Business Process Management Journal*. Google Scholar

Albasrawi, M. N., Jarus, N., Joshi, K. A., & Sarvestani, S. S. (2014). Analysis of reliability and resilience for smart grids. *2014 IEEE 38th Annual Computer Software and Applications Conference*, 529–534. IEEE. Google Scholar

Amann, B., & Jaussaud, J. (2012). Family and non-family business resilience in an economic downturn. *Asia Pacific Business Review, 18*(2), 203–223. Google Scholar

Audretsch, D. B., & Belitski, M. (2021). Knowledge complexity and firm performance: evidence from the European SMEs. *Journal of Knowledge Management*. Google Scholar

Azzaz, A. A., Matei Ghimbeu, C., Jellai, S., El-Bassi, L., & Jeguirim, M. (2022). Olive Mill by-Products Thermochemical Conversion via Hydrothermal Carbonization and Slow Pyrolysis: Detailed Comparison between the Generated Hydrochars and Biochars Characteristics. *Processes, 10*(2), 231. Google Scholar

Balugani, E., Butturi, M. A., Chevers, D., Parker, D., & Rimini, B. (2020). Empirical evaluation of
the impact of resilience and sustainability on firms’ performance. *Sustainability, 12*(5), 1742. [Google Scholar]

Bauweraerts, J., & Colot, O. (2013). How do family firms deal with the crisis? *International Advances in Economic Research, 19*(3), 313–314. [Google Scholar]

Bosma, N., Stam, E., & Schutjens, V. (2011). Creative destruction and regional productivity growth: evidence from the Dutch manufacturing and services industries. *Small Business Economics, 36*(4), 401–418. [Google Scholar]

BPS. (2022). *Takalar Regency in 2021 GRDP Report.*

Branicki, L. J., Sullivan-Taylor, B., & Livschitz, S. R. (2017). How entrepreneurial resilience generates resilient SMEs. *International Journal of Entrepreneurial Behavior & Research.* [Google Scholar]

Chandler, V. (2012). The economic impact of the Canada small business financing program. *Small Business Economics, 39*(1), 253–264. [Google Scholar]

Cocchiara, R. (2007). Beyond disaster recovery: becoming a resilient business. *IBM Whitepaper.* [Google Scholar]

Corner, P. D., Singh, S., & Pavlovich, K. (2017). Entrepreneurial resilience and venture failure. *International Small Business Journal, 35*(6), 687–708. [Google Scholar]

Czainska, K., Sus, A., & Thalassinos, E. I. (2021). Sustainable Survival: Resource Management Strategy in Micro and Small Enterprises in the Rubber Products Market in Poland during the COVID-19 Pandemic. *Resources, 10*(8), 85. [Google Scholar]

Dahles, H., & Susilowati, T. P. (2015). Business resilience in times of growth and crisis. *Annals of Tourism Research, 51*, 34–50. [Scopus]

De Vries, H., & Shields, M. (2006). Towards a theory of entrepreneurial resilience: A case study analysis of New Zealand SME owner operators. *New Zealand Journal of Applied Business Research, 9*(1), 33–43. [Google Scholar]

Doern, R. (2016). Entrepreneurship and crisis management: The experiences of small businesses during the London 2011 riots. *International Small Business Journal, 34*(3), 276–302. [Google Scholar]

Duchek, S. (2018). Entrepreneurial resilience: a biographical analysis of successful entrepreneurs. *International Entrepreneurship and Management Journal, 14*(2), 429–455. [Google Scholar]

Eijdenberg, E. L. (2016). Does one size fit all? A look at entrepreneurial motivation and entrepreneurial orientation in the informal economy of Tanzania. *International Journal of Entrepreneurial Behavior & Research.* [Google Scholar]

Eschker, E., Gold, G., & Lane, M. D. (2017). Rural entrepreneurs: what are the best indicators of their success? *Journal of Small Business and Enterprise Development.* [Google Scholar]

Etemad, H. (2020). Managing uncertain consequences of a global crisis: SMEs encountering adversities, losses, and new opportunities. *Journal of International Entrepreneurship, 18*(2), 125–144. [Google Scholar]

Fatoki, O. (2018). The impact of entrepreneurial resilience on the success of small and medium
enterprises in South Africa. *Sustainability, 10*(7), 2527. Google Scholar

Firdaus, M., & Witomo, C. M. (2014). Analysis of welfare and household income inequality of large pelagic fishers in Sendang Biru, Malang District, East Java. *Jurnal Sosek KP, 9*(2), 155–168. Google Scholar

Franco, M., Haase, H., & Antônio, D. (2020). Influence of failure factors on entrepreneurial resilience in Angolan micro, small and medium-sized enterprises. *International Journal of Organizational Analysis, 29*(1), 240–259. Google Scholar

Garcia, F. T., ten Caten, C. S., de Campos, E. A. R., Callegaro, A. M., & de Jesus Pacheco, D. A. (2022). Mortality Risk Factors in Micro and Small Businesses: Systematic Literature Review and Research Agenda. *Sustainability, 14*(5), 2725. Google Scholar

Giardino, T. J. (2016). *Industry best practices contributing to small business success*. Google Scholar

Gunasekaran, A., Rai, B. K., & Griffin, M. (2011). Resilience and competitiveness of small and medium size enterprises: an empirical research. *International Journal of Production Research, 49*(18), 5489–5509. Google Scholar

Hikmah, H., & Nasution, Z. (2018). Upaya Perlindungan Nelayan Terhadap Keberlanjutan Usaha Perikanan Tangkap. *Jurnal Kebijakan Sosial Ekonomi Kelautan Dan Perikanan, 7*(2), 127–142. Google Scholar

Hinton, M., & Hamilton, R. T. (2013). Characterizing high-growth firms in New Zealand. *The International Journal of Entrepreneurship and Innovation, 14*(1), 39–48. Google Scholar

Hirsch, P. B. (2021). Building a new resilience. *Journal of Business Strategy*. Google Scholar

Indarto, I., & Santoso, D. (2020). Karakteristik wirausaha, karakteristik usaha dan lingkungan usaha penentu kesuksesan usaha mikro kecil dan menengah. *Jurnal Riset Ekonomi Dan Bisnis, 13*(1), 54–69. Google Scholar

Irfan, M., Malan, S., Muchdar, F., & Abdullah, N. (2020). Seaweed Kappaphycus alvarezii cultivation production based on season in Indari waters, West Bacan Subdistrict, Regency of South Halmahera, Province of North Mollucas, Indonesia. *IOP Conference Series: Earth and Environmental Science, 584*(1), 12043. IOP Publishing. Google Scholar

Kantabutra, S., & Ketprapakorn, N. (2021). Toward an organizational theory of resilience: an interim struggle. *Sustainability, 13*(23), 13137. Google Scholar

Kantor, D., & İşeri-Say, A. (2012). Organizational resilience: A conceptual integrative framework. *Journal of Management & Organization, 18*(6), 762–773. Google Scholar

Karman, A. (2020). Flexibility, coping capacity and resilience of organizations: between synergy and support. *Journal of Organizational Change Management*. Google Scholar

Korber, S., & McNaughton, R. B. (2018). Resiliencia y emprendimiento: una revision sistematica de laliteratura. *International Journal of Entrepreneurial Behavior and Research, 24*(7), 1129–1154. Google Scholar

Kusdiantoro, K., Fahrudin, A., Wisudo, S. H., & Juanda, B. (2019). Capture fisheries in Indonesia: a portrait and challenges for its sustainability. *Journal of Marine and Fisheries Socio-Economics, 14*(2), 145–162. Google Scholar
Characteristics of Fishery Industry MSMEs in Takalar Regency that are Resistant to Interferences in Uncertainty Era

Lim, D. S. K., Morse, E. A., & Yu, N. (2020). The impact of the global crisis on the growth of SMEs: A resource system perspective. *International Small Business Journal, 38*(6), 492–503. Google Scholar

Linnenluecke, M., & Griffiths, A. (2010). Beyond adaptation: resilience for business in light of climate change and weather extremes. *Business & Society, 49*(3), 477–511. Google Scholar

López-Castro, L. F., & Solano-Charris, E. L. (2021). Integrating Resilience and Sustainability Criteria in the Supply Chain Network Design. A Systematic Literature Review. *Sustainability, 13*(19), 10925. Google Scholar

Martin, R., & Sunley, P. (2020). Regional economic resilience: Evolution and evaluation. In *Handbook on regional economic resilience*. Edward Elgar Publishing. Google Scholar

Nababan, B. O., Christian, Y., Afandy, A., & Damar, A. (2020). Integrated Marine and Fisheries Center and priority for product intensification in East Sumba, Indonesia. *IOP Conference Series: Earth and Environmental Science, 414*(1), 12014. IOP Publishing. Google Scholar

Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in family firms. *Family Business Review, 20*(1), 33–47. Google Scholar

Namotemo, H., Kour, F., Dilly, A., Akerina, F., & Amahorseja, A. (2021). Strategy for Micro and Small Businesses Development in the Fisheries Sector in North Halmahera Regency, Indonesia. *Indonesian Journal of Business and Entrepreneurship (IJBE), 7*(1), 63. Google Scholar

Nurhayati, A., Pical, V., Erfani, A., Hilyaa, S., Saloko, S., Made, S., & Purnomo, A. H. (2020). Manajemen Risiko Perikanan Tangkap (Studi Kasus Di Tengah Pandemi Covid-19). *JFMR (Journal of Fisheries and Marine Research), 4*(3), 417–427. Google Scholar

Nursini, N. (2020). Micro, small, and medium enterprises (MSMEs) and poverty reduction: empirical evidence from Indonesia. *Development Studies Research, 7*(1), 153–166. Google Scholar

Octasylva, A. R. P., Yuliati, L. N., Hartoyo, H., & Soehadi, A. W. (2022). Innovativeness as the Key to MSMEs’ Performances. *Sustainability, 14*(11), 6429. Google Scholar

Ortiz-de-Mandojana, N., & Bansal, P. (2016). The long-term benefits of organizational resilience through sustainable business practices. *Strategic Management Journal, 37*(8), 1615–1631. Google Scholar

Pal, R., Torstensson, H., & Mattila, H. (2014). Antecedents of organizational resilience in economic crises—an empirical study of Swedish textile and clothing SMEs. *International Journal of Production Economics, 147*, 410–428. Scopus

Pasman, H., Kottawar, K., & Jain, P. (2020). Resilience of process plant: what, why, and how resilience can improve safety and sustainability. *Sustainability, 12*(15), 6152. Google Scholar

Pornparnomchai, M., & Rajchamaha, K. (2021). Sharing knowledge on the sustainable business model: An aquaculture start-up case in Thailand. *Cogent Business & Management, 8*(1), 1924932. Google Scholar

Quendler, E. (2017). Organisational resilience: building business value in a changing world. *Journal for International Business and Entrepreneurship Development, 1*(2), 101–119.
Rahatiningtyas, N. S. (2019). Social and Ecological Resilience in Coastal Livelihood (Case Study: Kepulauan Seribu Regency Jakarta Province and Takalar Regency South Sulawesi Province Indonesia). *IOP Conference Series: Earth and Environmental Science, 338*(1), 12007. IOP Publishing. [Google Scholar]

Reijonen, H., & Komppula, R. (2007). Perception of success and its effect on small firm performance. *Journal of Small Business and Enterprise Development*. [Google Scholar]

Rochman, G. P., Indratno, I., & Agustina, I. H. (2021). Rural Agri-Food Industry Resilience in Indonesia. *IOP Conference Series: Earth and Environmental Science, 830*(1), 12063. IOP Publishing. [Google Scholar]

Ropega, J. (2011). The reasons and symptoms of failure in SME. *International Advances in Economic Research, 17*(4), 476–483. [Google Scholar]

Saad, M. H., Hagelaar, G., van der Velde, G., & Omta, S. W. F. (2021). Conceptualization of SMEs’ business resilience: A systematic literature review. *Cogent Business & Management, 8*(1), 1938347. [Google Scholar]

Seville, E. (2018). Building resilience: how to have a positive impact at the organizational and individual employee level. *Development and Learning in Organizations: An International Journal*. [Google Scholar]

Siemens, L. (2010). Challenges, responses and available resources: Success in rural small businesses. *Journal of Small Business & Entrepreneurship, 23*(1), 65–80. [Google Scholar]

Spivey, S. (2016). Micro-entrepreneurship: Exploring factors that influence failure, success, and sustainability of microenterprises in the United States. *PHD Desse ration, School of Business and Technology Management, Northcentral University, USA, 23*. [Google Scholar]

Sullivan-Taylor, B., & Branicki, L. (2011). Creating resilient SMEs: why one size might not fit all. *International Journal of Production Research, 49*(18), 5565–5579. [Google Scholar]

Sumbodo, B. T., Anggraeni, R., & Ika, S. R. (2021). Financial Feasibility Analysis of Gourami Farming in A Collaborated Business Association System. *IOP Conference Series: Earth and Environmental Science, 662*(1), 12008. IOP Publishing. [Google Scholar]

Suresh, N. C., Sanders, G. L., & Braunscheidel, M. J. (2020). Business continuity management for supply chains facing catastrophic events. *IEEE Engineering Management Review, 48*(3), 129–138. [Google Scholar]

Suryaningtyas, D., Sudiro, A., Eka, T. A., & Dodi, I. W. (2019). Organizational resilience and organizational performance: examining the mediating roles of resilient leadership and organizational culture. *Academy of Strategic Management Journal, 18*(2), 1–7. [Google Scholar]

Tambunan, T. (2008). SME development, economic growth, and government intervention in a developing country: The Indonesian story. *Journal of International Entrepreneurship, 6*(4), 147–167. [Google Scholar]

Tsuruta, D. (2020). SME policies as a barrier to growth of SMEs. *Small Business Economics, 54*(4), 1067–1106. [Google Scholar]
Characteristics of Fishery Industry MSMEs in Takalar Regency that are Resistant to Interferences in Uncertainty Era

Utami, W., & Nugroho, L. (2022). Internal Control and Risk Management Issues on The Sustainability Micro and Small Enterprises in Indonesia. *BİLTÜRK Journal of Economics and Related Studies, 4*(1), 1–19. [Google Scholar]

Varona, G. (2017). Business Resilience and Dealing with Economic Crises: Developing a Model to Measure Business Resilience. *Journal of Business and Economics in Times of Crisis, 2*(2), 23–46. [Google Scholar]

Vogus, T. J., & Sutcliffe, K. M. (2007). Organizational resilience: towards a theory and research agenda. *2007 IEEE International Conference on Systems, Man and Cybernetics*, 3418–3422. IEEE. [Google Scholar]

Wahyudi, I., Suroso, A. I., Arifin, B., Syarief, R., & Rusli, M. S. (2021). multidimensional aspect of corporate entrepreneurship in family business and SMEs: A systematic literature review. *Economies, 9*(4), 156. [Google Scholar]

Wishart, M. (2018). Business resilience in an SME context: A literature review. *Enterprise Research Centre*. [Google Scholar]

Witmer, H., & Mellinger, M. S. (2016). Organizational resilience: Nonprofit organizations’ response to change. *Work, 55*(2), 255–265. [Google Scholar]

Wiyono, E. S. (2016). Faktor-faktor Yang Mempengaruhi Kinerja Pembangunan Perikanan: Studi Kasus Pada Perikanan Tangkap Di Indramayu (Factors Affecting the Performance of Fisheries Development: a Case Study of Capture Fisheries in Indramayu). *Marine Fisheries: Journal of Marine Fisheries Technology and Management, 7*(1), 109–115. [Google Scholar]

Xiao, L., & Cao, H. (2017). Organizational resilience: The theoretical model and research implication. *ITM Web of Conferences, 12*, 4021. EDP Sciences. [Google Scholar]

Zapkau, F. B., Schwens, C., & Kabst, R. (2017). The role of prior entrepreneurial exposure in the entrepreneurial process: A review and future research implications. *Journal of Small Business Management, 55*(1), 56–86. [Google Scholar]

Zaridis, A. D., & Mousiolis, D. T. (2014). Entrepreneurship and SME’s organizational structure. Elements of a successful business. *Procedia-Social and Behavioral Sciences, 148*, 463–467. Scopus