

# **A Critical Analysis of the Small Business and Startup Community in the U.S. State of Maine: A Sustainable Way Forward**

**Logan J. Nimick**  
**University of Southern Maine**

**Ikechukwu Ndu**  
**University of Southern Maine**

*This study is a student-faculty research collaboration that examines the landscape in which small business owners, startups and entrepreneurs operate within the U.S. State of Maine with the aim of bringing invaluable insight and creating awareness. Supporting small business is a salient topic for local economic development councils, governments, and agencies. A survey was conducted and distributed to small business owners and entrepreneurs to gather their perspectives and opinions. One finding is that there are significant gaps in awareness with regards to support entities and their associated programs in general. Another finding is that survivorship bias has a large presence in the data collected previously by other agencies as well as by the data collected by the study. Finally, sustainable recommendations are suggested which, when implemented by the state of Maine as well as by municipalities, counties, or regional development boards, governments, and business support organizations, will increase the efficacy of existing policy and create a more cohesive, diverse, equitable, inclusive, resilient, and robust small business, startup, and entrepreneurship community.*

*Keywords: small business, startup, entrepreneur, business failure, survivorship bias, community, ecosystem, sustainability*

## **INTRODUCTION**

This research paper is a student-faculty collaboration between a university and the local community to identify, recognize and solve pertinent issues affecting small businesses, startups, and entrepreneurs within the U.S. State of Maine. The study illustrates how a university can work with the community, to integrate a similar project into the curriculum and as an extracurricular activity to address salient matters of topical interest in the society.

The purpose of this study is to explore the barriers to entry that small business owners and entrepreneurs face when beginning and continuing operations. This is because many small business owners and entrepreneurs begin from a position with a lack of access to education, mentorship, and funding, which in turn leads to greater difficulty.

A small business, as defined by the Small Business Administration (SBA), is an entity with 100 to 1,500 employees and \$1 million to \$40 million in annual revenue. This definition however, excludes those businesses owned and operated by fewer than 100 people. For the purpose of this study, micro businesses,

defined by Paul Greenbank as, “firms with fewer than ten employees,” also falls under the umbrella definition of small business (Greenbank, 2001). This results in a final definition of ‘Small Business’ as - “A business that employs between 1 and 1,500 employees and earns no more than \$40 million in a typical annual period.”

Startups are critical for any sustainably growing economy. The Federal Reserve Bank of Richmond states that startups are an important way of looking at an understanding economic factors such as employment - “While small in number, a small group of successful startups is important for understanding aggregate outcomes such as employment and productivity” (Yeh, 2023). For the purpose of this paper, the following definition for startups is adopted – “A startup is a young company founded to develop a unique product or service and bring it to market. These businesses are typically industry disruptors looking to drive change” (Baldrige, 2022).

Entrepreneurs help to effect social change and improve the way people live and work. “Entrepreneurs have been instrumental in spurring social change and improving the way people live and work. They help raise the standard of living for everyone by creating jobs and making products safer, less expensive, and more functional” (Maryville University, 2021). For the purpose of this paper, an entrepreneur is defined, as “a person who organizes and manages any enterprise, especially a business, usually with considerable initiative and risk,” (Maine Community Foundation, 2018).

Community and Ecosystem are terms that are used together to describe the collective organizations, individuals, and ventures that occupy the small business and startup space within the State. Boston Consulting Group defines a business ecosystem as, “a dynamic group of largely independent economic players that create products or services that together constitute a coherent solution” (Pidun et al., 2019). For the purpose of this study, these “economic players” are considered as organizations, individuals, and ventures that seek to either 1) promote the creation, development, incubation, or expansion of small businesses and startups; 2) individuals who are either part of the support organizations, serve as private investors in local business, or the owners and operators of these small businesses and startups; and/or 3) are the small businesses and startups themselves.

‘Small Business’ and ‘Entrepreneurship’ have long been thought of as the backbone of the United States economy. Part of the ‘American Dream’, beyond the house, dog, and white-picket fence, is the idea that a person can strike out on their own and make a living, assuming the market deems the idea of sufficient quality. These small businesses and startups employ millions of Americans and contribute significantly to the nation’s Gross Domestic Product (GDP). This is evidenced by the fact that 99.9% of all firms are small firms, 99.7% of those small firms have employees, and furthermore that 99.9% are responsible for 33.6% of United States export value (Small Business Administration, 2016).

The State of Maine is growing, especially when measured in terms of population, GDP, diversity of people, and business growth. Maine has taken a forward approach to foster the growth and development of their business community. As of September 2020, MaineBiz reports that 147,240 small businesses operate within the state employing 289,156 individuals, (Van Allen, 2020). As of the 2020 census, the State of Maine had a total population of 1,362,359 which reflected an increase of 3% compared to the 2010 census (US Census Bureau, 2021).

With regards to the region of New England, Federal Reserve Economic Data indicates that with a 2022 Gross State Product of \$86,936.1 (in millions), the State of Maine ranks fourth in New England, behind the State of Massachusetts (\$688,391.6 in millions), the State of Connecticut (\$321,844.6 in millions), and the State of New Hampshire (\$105,414.4 in millions) while leading the State of Rhode Island (\$71,402.2 in millions) and the State of Vermont (\$40,617.1 in millions). Additionally, U.S. Census data reports that between April 1, 2020 and July 1, 2022, Maine experienced a higher population growth rate than any other New England state at 1.7%, followed by New Hampshire at 1.3%; whereas Massachusetts and Rhode Island both experienced a negative rate of -0.7% and -0.3%, respectively. Furthermore, data reported by IBIS World states that while Maine ranks third in the United States in terms of business growth with a five-year annualized growth rate of 4.1%, the State’s employment and unemployment rates have been increasing at rates of 2.6% and 1.4%, respectively, annualized over the last five years.

A preliminary analysis of the data allows for the reader to conclude that 1) New England is a place that contributes about 5.03% to the United States GDP; 2) there is a desire to move to Maine; and 3) people want to start a business or grow their business here. There is therefore potential for Maine to increase its contribution to the regional and national GDP by taking steps to continue to support the small businesses and entrepreneurs of the state.

GDP, population growth, and employment, while important determinants to consider when analyzing the economic health of states, regions, and countries, these factors alone do not paint a complete picture. Studies have shown that persons belonging to minority groups such as black, indigenous, and other people of color, LGBTIQ+ (Lesbian, Gay, Bisexual, Transgender, Intersex, Queer/Questioning, Asexual), and women owned businesses are disproportionately affected by a lack of access to business resources and communities. Lofstrom et al. (2013) discuss the implications of access to education and financial capital on the rates of entrepreneurship. The authors conclude that education and access to capital are driving factors in entrepreneurship, both in high- and low-barrier to entry industries. This illustrates the ever-present gap between those with the privilege of growing up with, or growing into, access to these resources and those individuals that do not come from positions of privilege. During the period of February to April 2020, 41% of Black owned businesses went under versus 17% of White owned businesses (Fairlie, 2020). An article published by Forbes cites an Intuit Quickbooks report that revealed 57% of Black business owners were denied a loan whereas their non-Black counterparts were only denied 37% of the time (Lesonsky, 2023). Boyd (2008) cites race related obstacles in securing financing as the largest and most frequent barrier to entry that blacks face when attempting to enter into industries that are financial capital intensive. Additionally, because they have historically been relegated to industries with lower capital requirements and formal education, often servicing niche needs within minority communities, these niche avenues have been the primary way in which members of the Black community have risen through the United States socio-economic strata (Boyd, 2008).

A study conducted by the University of Chicago's Booth School of Business in conjunction with StartOut found that between 2005 and 2014, over a million jobs created as a result of LGBT (Lesbian, Gay, Bisexual, Transgender) entrepreneurs left states with unfriendly policies to states with more friendly policies. This same study also found that only 12% of companies owned by men identifying as gay, bisexual, or transgender experienced revenues over \$5 million; conversely only 3% of companies owned by women identifying as lesbian, bisexual, or transgender earned revenues over \$5 million (Chicago Booth, 2016).

Due to a greater reliance on informal banking and financing, 10%-15% of Native American business owners report relying on credit cards to finance startup costs. This reflects a 3%-5% higher reliance on credit cards compared to non-Native entrepreneurs (Beyer, 2022). Research conducted by the Ewing Marion Kauffman Foundation has found that the probability of an individual becoming an entrepreneur increases if they know other entrepreneurs. "With the low entrepreneurship rate on reservations and among Native American people, there is less exposure to entrepreneurship and its best practices" (Fetsch, 2015).

Due to the importance of small businesses in building communities, employment, and contributions to GDP, it is crucial that we expend every effort to ensure they have the tools required to have the best possible chance of success. This leads to the research question:

*"What effect does the current dissemination of information, support, and funding have on the ability of Maine's small businesses and startups to conduct sustainable business operations?"*

The rest of this paper is organized as follows. Section 2 discusses the literature review. Section 3 describes the methodology. Section 4 presents the results. Section 5 analyzes the results. Section 6 proposes the recommendations. Section 7 concludes.

## LITERATURE REVIEW

Literature surrounding the Entrepreneurial Economy points to the importance of small business and entrepreneurship as agents of employment, commerce, and innovation. Audretsch et al. (2006) discuss the evolution of opinions and conclusions in regard to small business and entrepreneurship following World War II through the 1990's. They identified that the post-war thinking of the Capital Economy was based on the Solow Model. The consensus of the Solow Model was that because larger businesses were better able to access economies of scale, small business and entrepreneurship was considered a luxury because they are inherently inefficient. When examining the later post-war era of the 1980's the authors noted that under the Knowledge Economy based on the Romer Model, entrepreneurship can play a role because of the importance of knowledge as a factor in addition to labor and capital. However, under the Romer Model, this entrepreneurship was relegated to large firms with access to the capital and labor to allow for sizable expenditures into research and development, citing the higher rates of patent submissions and innovation among developed versus developing countries - "Thus, there were compelling theoretical reasons supported by empirical evidence that entrepreneurship, at least in the form of new-firm startups, was not compatible with a knowledge-based economy" (Audretsch et. al., 2006). The authors also identified another economic model, the Entrepreneurial Economy, where, through the mid to late 1980's and 1990's, the small firms (in aggregate) overtook large firms in terms of employment, began to eat at the market share in manufacturing by accounting for 25% of the sales by 1986 versus 20% just ten years earlier, and a 14% decrease in firm contribution to GDP between 1980 and 1987 reflecting the rise of small businesses. Through this exploration, they conclude that even though knowledge and advances in technology persist in the market, they alone are not enough to secure economic and employment progression. Rather, in order to ensure economic growth and job creation, the authors posit that entrepreneurship serves an important role in not only knowledge generation, but also in the commercialization of that knowledge.

Bonsu et al. (2019) posit that in order to prevent closure, small businesses must adapt the same practices as their larger counterparts such as establishing identity, engaging in community involvement, practicing effective management, ensuring diverse hiring, providing quality and diverse products or services at competitive prices, responding to change, promoting customer service, and maintaining a website. The authors conclude that "Small and large businesses have the same purpose and thus require similar blueprints for profitability and sustainability." It therefore appears that the authors recognize commonalities among the goals of small and large businesses while also recognizing the benefits of identified good business practices. However, this conclusion omits the power of economies of scale; an element that many small businesses and start-ups have difficulty tapping into. While recognizing the value the authors present, there is the belief that there are additional steps that need to be implemented to address any gaps in support for startups and entrepreneurs as well as ensuring the equality of access to resources for minorities and disenfranchised groups. Furthermore, it is critical to be aware that economies of scale are a driving factor in maintaining a price point that is attractive to price-based consumers. This study therefore contributes by attempting to address this identified gap in the literature through investigating the effect the current dissemination of information, support, and funding have on the ability of small businesses and startups to conduct sustainable business operations in the U.S. state of Maine. Thus, this study is remains increasingly valid in today's economic climate of the United States.

## METHODOLOGY

This study is supported by both primary and secondary information gathered through surveys, interviews, and website research. Surveys, interviews, and website tools as methods for research generation were chosen because of their ties to data gathering with regards to small business and entrepreneurship. In their 2005 article "Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998-2003", Reynolds et al. utilized surveys and unstructured interviews as two methods of data collection. As the most common method of primary data collection, surveys have, since the 1930's, become the standard research tool within the social sciences, marketing, and official statistics (Nayak and Narayan, 2019).

Using the Oxford Dictionary definition that a survey “is an investigation of the opinions or experiences of a group of people based on a series of questions,” Nayak and Narayan (2019) elaborate that the survey generally consists of pre-established questions designed to collect certain “data from a particular group of people regarding their preferences, opinions, behavior, or factual information, depending on the survey purpose.” When designing the survey for this study, the Google Forms tool was chosen for its versatility and ease of use. Nayak and Narayan (2019) claim that the Google Forms tool gains much of its strength because the surveyor can customize the way in which they format the questions, i.e., text responses, checkboxes, or a scale. Further, they state that this format is useful when conducting a cross-sectional study. The survey in this study was distributed to business owners through the SBDC (Small Business Development Center), the regional Chambers of Commerce, the Sunrise Economic Council, and through the mentors’ extensive networks. The surveys provided the option of providing contact information allowing for a long format interview. Interviews were conducted with the Maine International Trade Center (MITC), Small Business Development Center (SBDC), and Orange Bike Brewing Company (a startup in Maine) to gather information on resources available and how an entrepreneur is utilizing those resources. Individuals within these organizations also serve as Community Mentors acting as an ongoing review board. By examining the online resources both in the State of Maine as well as other States in the Union, information was gathered to obtain an idea as to what resources are available across the United States and what resources in Maine could be leveraged from other organizations.

The survey was the result of brainstorming and refining ideas the researchers had for the pressing issues that business owners and entrepreneurs faced on an ongoing basis, while being cognizant of the need to prevent skew and bias that would result from the opinions of one industry having a strong reaction one way or the other. This resulted in 20 individual questions which were associated with a scale and business considerations based on the extant literature such as interest rates, diversity, and environmental impact; the remaining two questions were qualitative in nature to determine industry and business entity type. To quantify the data collected and allow for statistical analysis, each question is measured on a Likert Scale rated from 1 – 5, with 1 indicating an ‘Extremely Low’ response and 5 indicating ‘Extremely High’. As a final part to the survey, individuals had the opportunity to provide additional information in an open long-format response box and could indicate their interest in engaging in a one-on-one interview to gain a deeper insight beyond the Likert Scale. Beyond the conversations with individuals from the Small Business Development Center, Maine International Trade Center, and Chamber of commerce, the researchers in this study engaged in interviews with two business owners, one business president, and one startup founder.

It is important to note that an inherent issue of this study is the heavy influence created by survivorship bias. The data surrounding the ‘why’ of small business failures addresses broad points such as financing issues, lack of business plan, or poor management but fails to dig deeply into the issue on a more localized level. In addition, when surveying small business owners and entrepreneurs, it is difficult to aggregate data on business closures ex post facto if a relationship has not been established beforehand.

## **RESULTS FROM PRIMARY DATA**

Primary data was collected through a survey that was circulated through the Small Business Development Center, various regional Chambers of Commerce, the Sunrise Economic Development Council, as well as via personal mentors through their extensive networks. The final survey sample comprised a total of 35 responses from small businesses, 32 for profit and 3 non-profit organizations. Industry responses were spread across a number of sectors, including food and beverage, financial services, hospitality, real estate, media, forestry, law, and the blue economy. It is worth noting that there was a single response from a local government agency. Although this response was excluded from the data analysis, the resulting conversation provided a great insight into the views of rural Maine communities. The survey was structured using a Likert Scale 1 - 5, with 1 equaling ‘Extremely Low’ and 5 equaling ‘Extremely High’.

The first three questions in Table 10 gauged interest in hiring additional staff, expanding operations geographically, and expanding product/service offerings given an increase in revenue. Interpretation of the data would indicate that while there is low interest in engaging in international commerce currently, many

small businesses are interested in expanding locally. Analysis of the data gathered through our study reflects results consistent with the data gathered from the US Census Bureau, Federal Reserve, IBIS World, and MaineBiz. All secondary data obtained shows that Maine is growing in terms of population, business development, and total employment. Our primary data, as shown below, reflects the desire of small businesses to expand operations locally through product/service offerings, but also through the hiring of additional employees. The only question in this group with results that were lower than our expectations was that of engaging in international commerce which is surprising given that the U.S. State of Maine shares a border with Canada.

**TABLE 1**  
**SURVEY QUESTIONS ON RESPONDENTS’ EXPANSION INTERESTS AND OPERATIONS POTENTIAL**

Survey Question	Median	Mean	Standard Deviation	Additional Insight
1. Given an increase in revenue, I would like to hire additional staff.	4.00	3.90	1.30	Of businesses surveyed, 42.86% expressed “Extremely High” interest.
2. Given an increase in revenue, I would like to expand operations into an additional geographic market.	3.00	2.70	1.50	17.14% would expand to an additional geographic area (indicated by “Extremely High”).
3. Given an increase in revenue, I would like to offer additional products or services to my customers/clients.	5.00	3.80	1.60	48.57% indicated an “Extremely High” response.
4. I am interested in engaging in international commerce.	1.00	1.80	1.60	60% of respondents indicated “Extremely Low” interest.
5. International commerce is an important aspect of my business.	1.00	1.80	1.40	Of businesses surveyed, 68.57% of respondents indicated “Extremely Low” interest.

Overall, the findings in questions 1 to 5 in Table 1 were in line with our expectations. The U.S. Chamber of Commerce shared a post that also explained that the financing options for small enterprises are difficult to access and not as robust as those options available to larger enterprises - “Traditional bank loans for small businesses have historically been tough to obtain, but recent market trends are making it even more difficult for new startups to get the funding they deserve” (US Chamber of Commerce, 2019). As mentioned above, survivorship bias is something inherent with much of the data surrounding this ecosystem. It is important to keep this bias in mind because it could mean that the data is skewed heavily in favor of the survivors leading to a depressing of the low-end responses.

The next series of questions (Questions 6 to 11) centered on the respondents’ networks and the commencement of their business operations. The responses are summarized in Table 2. Our initial analysis

would indicate that nearly half of the respondents expressed that they were unaware of the organizations available to help them grow their business. Financing was noted as one of the largest struggles that respondents faced when getting started. A large portion of the survey respondents (48.57%) indicated that small businesses and startups are not given the assistance needed to get their operations started. More specifically, 80% of responses to this issue as surveyed in Question 9 were a 3 or lower. With respect to Questions 10 and 11, 42.86% of respondents indicated that State involvement through regulation or policy has had an impact on their business, with 68.57% recording a negative or neutral impact from those policies or regulations, respectively.

**TABLE 2**  
**SURVEY QUESTIONS ON RESPONDENTS’ SUPPORT NETWORKS AND**  
**COMMENCEMENT OF OPERATIONS**

Survey Question	Median	Average	Standard Deviation	Additional Insight
6. I was aware of the organizations across the State whose purpose is to support small businesses and start-ups.	3.00	3.50	1.20	48.57% of survey respondents indicated a 3 or lower.
7. I am aware of organizations that provide grant money to assist in the growth and development of small businesses and start-ups.	3.50	3.20	1.30	45.57% indicated a 3 or lower.
8. Financing was the largest hurdle I faced or continue to face.	3.00	2.80	1.30	71.43% of respondents indicated a 3 or lower.
9. Small businesses and start-ups are provided with the assistance required to begin operations.	3.00	2.70	0.90	80% of respondents indicated a 3 or lower. 48.57% of survey responses indicated a 3 exactly.
10. How impactful have State regulations and policies been on your operations.	3.00	2.90	1.20	42.86% indicated a 2 or higher.
11. The State of Maine’s Rules and Regulations have been a net gain to my industry.	2.00	2.00	0.90	68.57% of respondents indicated a 2 or lower.

The results in Table 2 indicate that even among the survivors, there are still large gaps in awareness in regard to the support organizations available across the State with the expressed goal of assisting in the growth and development of these small businesses and startups. We expected that this would be a significant issue, and this data serves as confirmation of those assumptions. Financing also served as a prominent issue among these small business owners and entrepreneurs, a finding that was, again, in line with our expectations. It is worth noting that as this study was circulating, the United States was experiencing high rates of inflation and the United States Federal Reserve was beginning to implement interest rate hikes, therefore as credit was becoming more difficult to access, many of these small businesses and startups are

likely to have experienced additional difficulty accessing capital. As a last note, based on the findings of IBIS World, Maine was ranked third in the Union in regard to business growth annualized over the last five years, yet over 40% of respondents indicate being impacted by the State’s regulations and policies with 68.57% of respondents recording that the Rules and Regulations have not been a net gain to their industry. This finding was not in line with our expectations, as concluded earlier, that there appears to be a desire to move to and start a business in Maine. However, the survivors that were surveyed through this response seem to indicate that the State is at best not affecting these businesses and is at worst standing in opposition.

Some of the other notable data collected surrounded questions of technology, diversity, environment, COVID-19, and interest rates. Those questions and the data surrounding them are listed in Table 3 (Questions 12 to 18). Beginning with COVID-19’s impact on businesses, the information collected reinforces the data collected from Maine Policy Institute that found a significant number of businesses were impacted by the pandemic. We were surprised that only 34.29% of businesses surveyed were highly concerned about the impact of their business operations on the environment as evidenced in the response to Question 15. Notwithstanding, the responses to the other questions were consistent with our expectations.

**TABLE 3  
SURVEY QUESTIONS ON RESPONDENTS’ DIVERSITY, TECHNOLOGY ADOPTION, AND EXTERNAL FACTORS**

<b>Survey Question</b>	<b>Median</b>	<b>Average</b>	<b>Standard Deviation</b>	<b>Additional Insight</b>
12. How heavily influenced by technology is your business?	4.00	4.10	1.00	65.72% of respondents indicated a 2 or higher.
13. How important is the adoption of new technology to your business operations?	4.00	3.80	1.10	54.28% of responses were 2 or higher.
14. Diversity is an important consideration in my employment.	4.00	3.90	1.30	51.43% of respondents indicated a 2 or higher.
15. How concerned are you regarding the environmental impact of your business operations?	3.00	3.10	1.40	34.29% of responses were a 2 or higher.
16. How impactful was the COVID-19 pandemic on your business?	4.00	3.80	1.20	60% of respondents indicated a 2 or higher.
17. The current rise in interest rates has had an impact on my business.	3.00	3.10	1.40	40% of responses indicated a 2 or higher
18. The current rise in interest rates has had an impact on my ability to conduct operations.	2.00	2.50	1.30	20% of respondents indicated a 2 or higher.



In respect of technology and its adaptation as surveyed in Questions 12 and 13, there was the expectation to receive responses that indicated high levels of importance. The assumption surrounding technology is consistent with findings presented by Forbes - "From boosting efficiency in workforce management to simplifying finance and enabling scalability, small business owners are choosing software that works for them, at more sustainable costs," (Turner, 2021). As it relates to diversity, the findings were consistent with the initial assumption that diversity would be a large consideration for employers and with over half of the respondents selecting a 2 or higher in response to Question 14, the assumption appears to be validated. That said, the question itself does allow for a large degree of interpretation regarding the word 'diversity'. Some respondents may consider diversity in employment only in one area while neglecting others, such as in only considering gender, age, sexual orientation, race, ethnicity, and disability, as opposed to implementing all considerations within hiring practices. When examining this dataset, it would be wise to consider that while it appears that diversity in hiring practices is important amongst Maine employers, it is likely to become increasingly important as the population of the Maine grows and becomes more diverse.

## **ANALYSIS AND INTERPRETATION**

This policy recommendation aims to identify and address gaps in respect of the support offered to the small businesses and entrepreneurs in the U.S. State of Maine. Through data collected by way of survey (paired with conversations), entrepreneurs, small business owners, and the individuals dedicated to assisting those ventures across the state have painted their impression of the small business and start-up climate as it exists today. The picture these individuals have painted when paired with secondary data collected about the State of Maine's small business and start-up ecosystem forms a bright picture with an optimistic outlook. However, based on the conversations, collection of primary data, and examination of secondary data, there is the belief that there is still more that can be done to bridge the gaps between those small businesses and start-ups as well as the organizations and individuals across the state dedicated to assisting in their success. There are specific resolutions to the issues identified as well as details surrounding their nature.

The first issue is the siloing of organizations and resources. There appears not to be a shortage of organizations whose primary objective is to promote the growth and development of small businesses and startups within the State of Maine. These organizations do work together to host events and promote initiatives. However, this is relegated predominantly to the greater Portland (the business capital of the State of Maine) area. A recurring theme found in conversations with members of these organizations, was that while cooperation on a few events was expected, each entity exists in its own sphere. Each organization operates independently of feedback or goal orientation in conjunction with the other organizations within the community. For instance, one individual business owner and interview respondent and (Participant 1) expressed that information and helpful individuals are quartered off from each other, and do not go out of their way to communicate. Additionally, Participant 1 pointed out that helpful individuals and information are not the only aspects of small business and entrepreneurship that present a lack of interaction, the same issue is present in the funding sources for many of these small businesses and startups. Lastly, Participant 1 stated that there appears to be no central location for information, again showcasing that the information, people, and funding are all siloed off in their own individual camps with very little crossover. Further to this point, another individual business owner and interview respondent (Participant 2) mentioned that the SCORE (Service Corps of Retired Executives) program through the Small Business Administration was incredibly helpful. Participant 2 further elaborated that they were unaware of any other resources available to help them as they began and grew their business. Additionally, they stated that they were not aware of know where or who to ask for required help, or to assess and determine if they even needed assistance.

When organizations silo and isolate themselves from their partner organizations with the same mission, the only people that win are those who already know where those resources are and how to access them; as we have identified already, those 'winning' individuals tend not to be members of disenfranchised minority groups. All the silo effect does is to create barriers to entry, preventing new market entrants from offering goods and services. Pursuant to the literature review in respect of Audretsch et. al's work, if individuals are unable to enter the market to sell their goods and services, the macroeconomy suffers the lack of knowledge

spillover and resulting lack of innovation - “Entrepreneurship takes on new importance in a knowledge economy because it serves as a key mechanism by which knowledge created in one organization becomes commercialized in a new enterprise, thereby contributing to the economic growth, employment, and vitality of the overall economy” (Audretsch et al., 2006).

Second, there seems to be gaps in awareness and access to information. An observation arising from the survey indicated that even among the businesses that are currently still in operation, many owners stated their level of awareness of the resources available to be moderate or less. Through the course of collecting secondary data, it was found that minority communities are disproportionately affected by these gaps in awareness and access to support networks. Additionally, one of the small business owners (Participant 3) that was interviewed expressed concerns in this area, stating that in their attempt to open a local bakery they felt alone, unaware of any resources at their disposal. This individual stated that no resources have helped her establish the business. Additionally, Participant 3 expressed that no one reached out to her to offer her assistance when she was starting her business. Rather, Participant 3 stated that they reached out to the one organization that they were aware of, only to receive a rejection in the form of a no call back.

Third, there is the existence of survivorship bias in the data collected. Survivorship bias is an issue with this study because of the lack of data pertaining to the closure of specific businesses in Maine. This study attempted to mitigate this problem to a degree through implementing the use of secondary data that showcases trends across the United States. However, survivorship bias is still prevalent and is a limitation of this study in the sense that if there is no collection of comprehensive data on the reasonings behind the closing and shuttering of businesses on the state level, then only educated assumptions can be made when formulating policy.

## **RECOMMENDATIONS**

It is important to acknowledge there may be unforeseen consequences to any policy implemented. Due to unforeseen repercussions, regulations designed to combat inequality in information dissemination must be crafted with care as these unexpected costs disproportionately impact low-income families (O’Reilly, 2022; Chambers et al., 2019c; Gorry and Thomas, 2017). Further, scrutiny should be applied to statements made by market incumbents as they have inherent motivators to protect their market share from new entrants. The tollbooth theory states that legislators and other government officials use regulation to increase the cost of entry for entrepreneurs (O’Reilly, 2022; Djankov, 2009; Shleifer and Vishny, 1993). Additionally, existing firms can access the levers by which regulation is created, allowing them to utilize statutes to protect themselves from competition (O’Reilly, 2022; Stigler, 1971).

### **Joint Powers Board**

There are several recommendations to address the identified issues while keeping in mind the goal of the research question. The first is the formation of a Joint-Powers Board to serve as the linchpin for this policy recommendation. This board would consist of organizations across the state that focus on the incubation, formation, development, continued existence, and expansion of small businesses and startups. The formation of this entity would remove the “silo effect” that has been noted through conversations with individuals working within the small business and startup ecosphere. Succinctly, this board would serve as the center body and main integration point of reference and collaboration for businesses, startups, and entrepreneurs.

It should be noted that the Maine Department of Economic and Community Development (DECD) hosts a website that allows business owners and prospective entrepreneurs to select the type of business they are seeking to enter or expand and then view the licenses required for that business, (<https://www.maine.gov/dec/d/>). Further, DECD links to other resources available in a comprehensive website that allows for easy navigation. The DECD is a great resource in and of itself and the first step towards the unification of the resources in the State. However, the formation of the Joint Powers Board would build upon the resources provided by the DECD and also ensure that clients that enter the small

business and entrepreneurship pipeline are guided successfully to whichever resource they require to succeed.

By selecting a representative from each of these organizations to serve on this board and leaders in the business community, they would be afforded the opportunity to coordinate events, share ideas and data. It would also provide opportunities for creating professional relationships as well as to provide meaningful introductions to small businesses and startups. Many of the organizations across the State are one organization with localized branches, such as the Small Business Development Center, Small Business Administration, and regional Chambres of Commerce. This joint-powers board would not exist as a governing body but rather one of an administrative nature. Allowing for statewide representation on a central body would also allow for members in both rural as well as metropolitan areas to express challenges and ideas on an equal platform.

### **Business Tracking**

The second recommendation is to track closed businesses. As mentioned above, survivorship bias has been a primary concern when collecting data and then making inferences from those data. This section explains how better data will help: 1) assist the businesses that are already in operation; 2) support entrepreneurs in their endeavors; 3) better assist the organizations whose missions are to help Maine businesses and startups; and 4) provide future researchers a comprehensive database which may assist them in their research. Beyond these four points, it would also allow Maine to serve as an example to the rest of the United States on the importance of this data collection. While it is true that there is the awareness of examples of why businesses fail in the United States, better tracking on the state and local level will allow for a more targeted response.

The Small Business Development Center (SBDC) does currently track the businesses they work with to evaluate services that are utilized as well as which of those services have been of the most assistance to their clients. However, this data could be expanded upon if data is more freely shared amongst the support network as administered by the joint-powers board. The data collected by these organizations can be improved by tracking and surveying businesses that have been closed due to one reason or the other. Because of the perceived sensitive nature of closure due to failure, an assumption could be made that this data may be difficult to collect thereby leading to an element of permanent survivorship bias. On the other hand, it is reasonable to assume that some individuals will be willing to autopsy their business and provide valuable insights.

It is also important to note that organizations such the Maine Policy Institute collected data surrounding closures due to the COVID-19 pandemic of 2020. Many of the businesses listed in the Maine Policy Institute spreadsheet indicate a permanent shuttering which supports the assumption that owners are willing to share their experiences surrounding closures.

### **Education Initiatives**

The third recommendation is to implement education initiatives. As mentioned above, the formation of a Joint Powers Board will allow for better coordination among the business ecosystem, particularly as it pertains to the support network. Organizations such as the Maine International Trade Center, Small Business Administration, and Small Business Development Center offer events where business owners can learn more about a given subject. Coordination of these events across the State, with an emphasis on allowing remote attendance, will allow business owners to make more informed decisions.

The primary data collected shows that technology and its adoption heavily impact existing businesses and startups. Further, over one third of businesses surveyed indicated high levels of importance in understanding the environmental impacts of their operations. Hosting and coordination by the proposed Joint Powers Board of events designed to address these points would be beneficial to these businesses. Further, low interest in international commerce could indicate low awareness of the opportunities available through external markets, especially in neighboring Canada. Events showcasing these benefits could lead to an increase in the total value of Maine's exports.

As a point of reference to the secondary data and review of existing literature, Lofstrom et al. (2013) find education to be one of the most strongly correlated factors when determining an individual's likelihood of entering business. This conclusion is further corroborated by the discoveries of education and its impact on entrepreneurship rates among minorities as presented by Boyd (2008) and Fetsch (2015).

### **Business Guide and Checklist**

The fourth recommendation is to introduce a business guide and checklist. It is important to note that to help address the disparity between Native American and non-Native entrepreneurs the proposed Joint Powers Board must work closely with Tribal leadership across the state. Furthermore, the developers of this guide and checklist should remain cognizant of the challenges minority communities face when operating or starting a business.

The State of California offers a "Business Guide Checklist" that outlines a simple to-do list for individuals seeking to start a business in California, ([sos.ca.gov](https://sos.ca.gov)). Further research also shows that the State of Maine and the Small Business Development Center both host webpages that provide detailed information surrounding the necessities of starting a business in Maine. These are very useful resources for any individual(s) that are seeking to begin or expand operations in the State. Additionally, the Finance Authority of Maine (FAME) provides owners and entrepreneurs with step-by-step instructions on business planning and approaches towards accessing capital.

This resource could be improved upon by the compilation of the guides offered by the individual organizations, paired with data surrounding operations requirements set forth by the State of Maine, and contact information for all support organizations and State offices into a single comprehensive and downloadable PDF. The compilation of these data into a single document will allow for ease of distribution by the proposed Joint Powers Board and its membership, online access for business owners, and offline retention for those without access to reliable internet.

### **Enhanced Advertising and Marketing**

The fifth recommendation is to enhance the advertising and marketing functions. One of the common recurring themes throughout this research study is that many of the support organizations rely on word of mouth to spread awareness of their presence. This is further supported by the observation that of the businesses that were surveyed as a part of the primary data research - only 31% of those businesses indicated 'Extremely High' in response to the question, "I was aware of the organizations across the State whose purpose is to support small businesses and start-ups."

By consolidating all the support organizations into a single network, administered by a joint-powers board, the small businesses and start-ups will have a 'one-stop-shop' for all their needs. However, if the support network and its members must rely on word of mouth to maintain awareness of its existence, the system will continue to perpetuate several problems including a lack of access by the less privileged and those with fewer resources; and the underdevelopment of businesses in rural communities.

It is important to remember that many aspects of any business community are more easily accessible if the business is already plugged into that community. This creates a barrier of entry for individuals that are not in the know, as it were. More specifically, if the earlier cited national trends hold true locally in the State of Maine, this has a disproportionate effect on minority communities and their ability to establish businesses across the state. As mentioned previously, Maine has a growing population, and according to the Migration Policy Institute the population of individuals born outside of the United States that reside in Maine (as of 2021) has increased 52.8% to a total of 56,068 individuals since the year 2000. This lack of access is likely to impact Mainers that associate with minority communities such as the LGBTQ+ community at 4.9% of Maine's adult population (Movement Advancement Project, 2023), Persons of Color at 5.8% of the total population (US Census Bureau, 2022), and female identifying persons at 50.7% of the population, (US Census Bureau, 2022).

Through her initiative to provide broadband to any community that wants it, the current State of Maine under Governor Janet Mills has made great strides in bridging the gap between those with internet access and those without, (The Daily Yonder, 2023). Lack of access to reliable internet by individuals residing in

rural Maine may be a contributing factor to the lack of awareness of all the resources available to those looking to start a venture or expand an existing business.

### **Government Actions**

As a final recommendation, there are steps that can be taken by the State and municipalities to further support these small businesses as urgent issues task force actions. In recent years, as a response to the COVID-19 pandemic, the States in the Union have designated funds for small businesses, startups, and non-profit organizations, in the form of loans and grants. Under Governor Janet Mills and Commissioner of Community and Economic Development Heather Johnson, the State of Maine issued economic recovery grants backed by \$200 million in COVID Relief Funds. The State of Wyoming dedicated \$100 million in COVID Relief Funds that was then distributed by the Wyoming Business Council. Washington State, under Governor Jay Inslee, dedicated \$20 million in grants for small businesses, backed by COVID Relief Funds, (National Governors Association, 2020). These are just a few of the measures taken by States in the U.S. to support their local businesses during the pandemic. Three of the goals specifically laid out by the National Governors Association in this December 16th, 2020 memorandum are as follows: 1) “Support for small business employees, including for employees returning to work, quarantined employees, employees working in hazardous industries, and coordination of federally-funded layoff aversion programs;” 2) “Strategies to build community resilience, including support for local community economic development strategies supporting small businesses, broadband grants, and grants to promote consumer confidence and marketplace resilience;” and 3) “Strategies with specific purposes for assisting small businesses, including funding strategies that reward data-driven recovery plans, liability protections, support for small business technical assistance, and more.”

When this precedent is paired with the primary data collected surrounding the impact of COVID-19 and the current rise in interest rates, it would be recommended that the State of Maine takes steps to assist in the form of loans and grants. As outlined above, of the businesses surveyed, 60% indicated a high impact due to COVID, 40% indicated that the rise in interest rates has highly impacted their business, and 20% indicated that the rise in interest rates has had a high impact on their ability to conduct operations. This recommendation is to create and maintain a fund that would be dedicated to mitigating the effects of these types of events on small businesses. When looking towards minority communities, as stated earlier by Boyd (2008), Lofstrom et al. (2013), Fairlie (2020), Beyer (2022), and Lesonsky (2023), access to finance is one of the largest challenges faced. This problem, as evidenced during and after the pandemic, appears to be exacerbated by situations where the economy is stressed.

### **CONCLUDING REMARKS**

The U.S. State of Maine is already a great place to start and/or own a business due to the vast support network that already exists and the Government’s desire to see people succeed. The data and literature demonstrate that entrepreneurship and small business play a critical role in the United States economy, especially in the areas of employment, GDP contributions, and innovation. The data also shows that Maine’s population has been steadily growing and that the state is poised to increase its contribution to the regional economy. As part of this study, the researchers set out to discover answers to the research question, “What effect does the current dissemination of information, support, and funding have on the ability of Maine’s small businesses and start-ups to conduct sustainable business operations?”

It is the opinion of the authors that in order to make effective change within the small business and entrepreneurship communities, one must recognize the importance of recognizing the differing needs between large and small business, while balancing the entrepreneurial needs of both types of businesses. Furthermore, the impacts that are felt by members of minority and underrepresented groups are demonstrably disproportionate to those felt by individuals that identify as cisgendered, heterosexual, white, males. The recommendations outlined above take into consideration both the economic factors in addition to those outlined by corporate social responsibility.

When looking to the United States State of Maine, it is observed that there is still work to be done to facilitate the creation of a more diverse, inclusive and efficient economy that will empower disenfranchised individuals, contribute more to the regional and national GDP, and ultimately support those individuals engaged in commerce through their small businesses, startups, and entrepreneurship. By establishing the proposed Joint-Powers Board, tracking closed businesses, developing a business guide and checklist, allowing for an advertising budget the support organizations, and promoting education initiatives, as well as actions implemented by the State itself, small business owners and entrepreneurs in Maine will be better positioned to have access to the sustainable support they require for long term success and survival.

Finally, it is important to recognize that because of the survivorship bias shortcoming within the data collected by the researchers and other parties, this study has an inherent bias. Consequently, future research should be conducted to identify possible remedies to address survivorship bias. In the interest of shoring up the research in this area, it would be beneficial to conduct further research such as separate case studies that follow entrepreneurs as well as small business and startup owners as they face the challenges and work through the obstacles of starting, operating, and growing a firm. As some subject firms inevitably close due to bankruptcy, partner disputes, and burn out and other reasons, the researchers will gain invaluable insight into the exact “cause of death”.

## REFERENCES

- Audretsch, D.B., Keilbach, M.C., & Lehmann, E.E. (2006). *Entrepreneurship and Economic Growth*. Oxford University Press.
- Baldrige, R. (2022, October 16). What Is A Startup? The Ultimate Guide. In B. Curry (Ed.), *Forbes Advisor*. Retrieved from <https://www.forbes.com/advisor/business/what-is-a-startup/#544a2a9a4c63>
- Beyer, D. (2022, May 13). *Native American Communities Continue to Face Barriers to Opportunity That Stifle Economic Mobility*. Retrieved from <https://www.jec.senate.gov/public/index.cfm/democrats/2022/5/native-american-communities-continue-to-face-barriers-to-opportunity-that-stifle-economic-mobility>
- Bonsu, S., & Kuofie, M. (n.d.). Small Business Survival. *Journal of Marketing and Management*, 10(1). Retrieved from <https://gsmi-ijgb.com/wp-content/uploads/JMM-V10-N1-P03-Samuel-Bonsu-Business-Survival.pdf>
- Boyd, R.L. (2008). Trends in the occupations of eminent black entrepreneurs in the United States. *The Journal of Socio-Economics*, 37(6), 2390–2398. doi: 10.1016/j.socec.2008.02.006
- CO by US Chamber of Commerce. (2018, December 10). *Biggest Challenge When Starting Out: Financing*. Retrieved from [www.uschamber.com/co/run/business-financing/business-financing-challenges](http://www.uschamber.com/co/run/business-financing/business-financing-challenges)
- Fairlie, R. (2020, May). *The Impact of COVID-19 on Small Business Owners: Evidence of Early Stage Losses From the April 2020 Survey Current Population*. Retrieved from <https://drive.google.com/file/d/14SCx4ZhqxepgCGEnqp5PpLDBCzZhuBz8/view?pli=1>
- Fetsch, E. (2015, August 6). *5 Sets of Challenges Native American Entrepreneurs Face*. Retrieved from <https://www.kauffman.org/currents/5-sets-of-challenges-native-american-entrepreneurs-face/>
- IBIS World. (2023). *Industry Market Research, Reports, and Statistics*. Retrieved from <https://www.ibisworld.com/united-states/economic-profiles/maine/#:~:text=ln%202022%2C%20Maine's%20GDP%20reached,the%20five%20years%20to%202022>
- Lesonsky, R. (2023, February 21). *Reports Show Black Small Businesses Still Face Major Challenges*. Retrieved from <https://www.forbes.com/sites/allbusiness/2023/02/20/reports-show-black-small-businesses-still-face-major-challenges/?sh=72dc563874d9>
- Lofstrom, M., Bates, T., & Parker, S.C. (2014). Why are some people more likely to become small-business owners than others: Entrepreneurship entry and industry-specific barriers. *Journal of Business Venturing*, 29(2), 232–251. doi: 10.1016/j.jbusvent.2013.01.004

- Macan, D. (2022, May 20). *The Challenges of LGBTQ+ Entrepreneurship - and Resources to Help*. Retrieved from <https://www.joinsourcelink.com/2021/07/08/the-challenges-of-lgbtq-entrepreneurs-and-resources-to-help/>
- Maine Community Foundation. (2018). *Cultivating Rural Entrepreneur Network Development in Maine*. Retrieved from <https://www.mainecef.org/wp-content/uploads/2018/11/Cultivating-Rural-Entrepreneur-Network-Development-in-Maine.pdf>
- Maine Policy Institute. (n.d.). *Covid Business Closures (Compiled by Maine Policy Institute)*. Retrieved from [https://docs.google.com/spreadsheets/d/1p3p24\\_UG5S4quelNJpPE2qAPqP4T83eFx4CP2apLsw/edit#gid=0](https://docs.google.com/spreadsheets/d/1p3p24_UG5S4quelNJpPE2qAPqP4T83eFx4CP2apLsw/edit#gid=0)
- Maine SBDC. (2017, March 2). *Starting a Small Business in Maine: Resources and Tools for New Small Businesses*. Retrieved from <https://www.mainesbdc.org/new-business/new-business-resources/resources-starting-a-business-checklist/>
- Maine.gov. (n.d.) *Starting a Business*. Retrieved from <https://www.maine.gov/portal/business/starting.html>
- Maryville University. (2021, February 16). *Importance of Entrepreneurship: Types, Benefits, and Styles*. Retrieved from [online.maryville.edu/blog/importance-of-entrepreneurship/#:~:text=Entrepreneurs%20have%20been%20instrumental%20in,less%20expensive%2C%20and%20more%20functional](https://online.maryville.edu/blog/importance-of-entrepreneurship/#:~:text=Entrepreneurs%20have%20been%20instrumental%20in,less%20expensive%2C%20and%20more%20functional)
- Migration Policy Institute. (2023). *State Demographics Data - Me*. Retrieved from <https://www.migrationpolicy.org/data/state-profiles/state/demographics/ME>
- Movement Advancement Project: State Profiles. (2023). *Movement Advancement Project | State Profiles*. Retrieved from [https://www.lgbtmap.org/equality-maps/profile\\_state/ME](https://www.lgbtmap.org/equality-maps/profile_state/ME)
- National Governors Association. (2020, December 16). *State Initiatives for Small Business Recovery During the COVID-19 Pandemic Economic Crisis*. Retrieved from <https://www.nga.org/publications/small-business-initiatives-covid19/>
- Nayak, M., & Narayan, K.A. (2019, May). *Strengths and Weakness of Online Surveys*. Retrieved from [https://www.researchgate.net/publication/333207786\\_Strengths\\_and\\_Weakness\\_of\\_Online\\_Surveys](https://www.researchgate.net/publication/333207786_Strengths_and_Weakness_of_Online_Surveys)
- O'Reilly, C. (2022). Barriers to entry, entrepreneurship and income inequality within the USA. *Journal of Entrepreneurship and Public Policy*, 11(4), 332–356. doi: 10.1108/jep-06-2022-0069
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., . . . Chin, N. (2005, April). Global entrepreneurship monitor: Data collection design and implementation 1998-2003. *Small Business Economics*, 24(3), 205–231. doi: 10.1007/s11187-005-1980-1
- Small Business Administration. (2016). How Can Small Businesses' Share of Net New Jobs Be Larger than Their... Retrieved from [https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016\\_WEB.pdf](https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf)
- St. Louis Federal Reserve Economic Data. (2023a, March 31). *Gross Domestic Product: All Industry Total in Connecticut*. Retrieved from <https://fred.stlouisfed.org/series/CTNGSP>
- St. Louis Federal Reserve Economic Data. (2023b, March 31). *Gross Domestic Product: All Industry Total in Maine*. Retrieved from <https://fred.stlouisfed.org/series/MENQGSP>
- St. Louis Federal Reserve Economic Data. (2023c, March 31). *Gross Domestic Product: All Industry Total in Massachusetts*. Retrieved from <https://fred.stlouisfed.org/series/MANGSP>
- St. Louis Federal Reserve Economic Data. (2023d, March 31). *Gross Domestic Product: All Industry Total in New Hampshire*. Retrieved from <https://fred.stlouisfed.org/series/NHNGSP>
- St. Louis Federal Reserve Economic Data. (2023e, March 31). *Gross Domestic Product: All Industry Total in Rhode Island*. Retrieved from <https://fred.stlouisfed.org/series/RINGSP>
- St. Louis Federal Reserve Economic Data. (2023f, March 31). *Gross Domestic Product: All Industry Total in Vermont*. Retrieved from <https://fred.stlouisfed.org/series/VTNGSP>

- The Daily Yonder. (2023, January 19). *Maine's Ambitious Plan to Run Fiber-Optic Cable to Rural Towns*. Retrieved from <https://dailyyonder.com/running-fiber-optic-cable-to-rural-communities-is-part-of-maines-ambitious-broadband-plan/2023/21/10>
- The University of Chicago Booth School of Business. (2016, July 13). *New Study Sheds Light on State of LGBT Entrepreneurs in the U.S.* Retrieved from <https://www.chicagobooth.edu/media-relations-and-communications/press-releases/New-study-sheds-light-state-lgbt-entrepreneurs-us>
- Turner, G. (2022, April 21). *Council Post: How Technology Is Leveling the Playing Field for Small Business Underdogs*. Retrieved from [www.forbes.com/sites/forbestechcouncil/2021/12/01/how-technology-is-leveling-the-playing-field-for-small-business-underdogs/?sh=50b097dbda66](http://www.forbes.com/sites/forbestechcouncil/2021/12/01/how-technology-is-leveling-the-playing-field-for-small-business-underdogs/?sh=50b097dbda66)
- Ulrich, P., Reeves, M., & Schüssler, M. (2019, September 27). *Do You Need a Business Ecosystem?* Retrieved from <https://www.bcg.com/publications/2019/do-you-need-business-ecosystem>
- United States Census Bureau. (2023). *U.S. Census Bureau Quickfacts: United States: QuickFacts Maine; Massachusetts; New Hampshire; Vermont; Rhode Island; Connecticut*. Retrieved from <https://www.census.gov/quickfacts/fact/table/US/PST045222>
- US Census Bureau, & State of Maine. (2021, August 12). *Total Population\_2023\_3*. Retrieved from <https://www.maine.gov/dafs/economist/sites/maine.gov.dafs.economist/files/inline-files/Maine%20Population%20Outlook%20to%202028.pdf>
- Van Allen, P. (2020, September 7) *From the Editor: Small Businesses Are Maine's Economic Backbone*. Retrieved from [www.mainebiz.biz/article/from-the-editor-small-businesses-are-maines-economic-backbone](http://www.mainebiz.biz/article/from-the-editor-small-businesses-are-maines-economic-backbone)
- Yeh, C. (2023, February). *Why Are Startups Important for the Economy?* Retrieved from [www.richmondfed.org/publications/research/economic\\_brief/2023/eb\\_23-06](http://www.richmondfed.org/publications/research/economic_brief/2023/eb_23-06)