

# Syrian-Owned Businesses in Türkiye: Assessment After the 2023 Earthquakes

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Building Markets & BU ATARC  
Research Report



**Building  
Markets**

# Preface and Acknowledgements

This report is the product of the Building Markets research partnership project “Refugee Entrepreneurship Research Excellence Program-2024” between Building Markets and Boğaziçi University (BU) Applied Tourism Administration and Research Center (BU ATARC). The report was prepared by the authors below with the support of the Building Markets Türkiye team.

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The research team appreciates all business owners who participated with their insights and data in this research.

## About Building Markets

Building Markets addresses inequality worldwide by advancing inclusive economies that work for all. We do this by opening opportunities for small business owners — who fuel more than 70% of the world’s jobs — to transform their lives and communities. Since 2004, Building Markets has combined its deep local knowledge, comprehensive data, and global networks to build confidence and strength in more than 27,000 small business owners affected by marginalization. From securing \$1.4 billion in contracts or loans to creating more than 74,000 full-time jobs in places where they are needed most, Building Markets is elevating small businesses as engines of enduring social impact and economic growth.



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## About Boğaziçi University ATARC

BU ATARC is a research center established in 1994 to act as a platform for supporting scientific, multidisciplinary research, building a bridge between research and practice, and creating an integrative space for researchers and organizations in the field of tourism. BU ATARC is an affiliate member of the United Nations World Tourism Organization (UNWTO) and a member of the UNWTO Knowledge Network. Conducting national and international comparative research, providing tourism sector professionals with education programs, organizing and coordinating conferences, seminars, meetings, and workshops on hospitality and tourism topics, and providing national and international consultancy services for the sector are the activities of the Center.

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## ■ List of Abbreviations

AFAD	Afet ve Acil Durum Eğitim Merkezi (Directorates of Civil Defense Search and Rescue)
AI	Artificial intelligence
ASAM	Association for Solidarity with Asylum Seekers and Migrants
CORE	Community Organized Relief Effort
EQs	Earthquakes
FX	Foreign Exchange
KAGIDEM	Kadın Girişimci Destek Merkezi (Women Entrepreneurship Support Center)
KOSGEB	Küçük ve Orta Ölçekli İşletmeleri Geliştirme ve Destekleme Birimi (Small and Medium Sized Enterprises Development and Support Unit)
MENA	Middle East and North African countries
I-NGO	International nongovernmental organization
NGO	Nongovernmental organization
SME	Small and medium-sized enterprises
SuTP	Syrians under temporary protection
TPS	Temporary protection status
YSYD	Yerel ve Sığınmacılarla Yardımlaşma Derneği (Association for Local and Refugees Support and Solidarity)
UNDP	The UN Development Program

## ■ List of Boxes

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- Table 1. Quantitative results

**This report is the product of the Building Markets research partnership project “Refugee Entrepreneurship Research Excellence Program-2024:** It offers a comprehensive analysis of the impact of the catastrophic February 2023 earthquakes on Syrian-owned businesses in Türkiye, focusing on the period from February 2023 to July 2024. The report evaluates the resilience, challenges, and contributions of Syrian-owned small and medium-sized enterprises (SMEs) in the affected regions.

**This report utilizes survey data administered by Building Markets and qualitative data collected by the researchers:** Using a mixed-methods approach, this report draws on survey data from Building Markets and qualitative data collected by the research team. The research covers five of the eleven earthquake-affected cities: Adana, Gaziantep, Hatay, Mersin, and Şanlıurfa. The report provides valuable insights into Syrian entrepreneurs’ post-crisis actions, experiences, and perspectives through desk research, surveys, and interviews.

**Evolving needs of Syrian-owned SMEs and the factors contributing to their resilience:** In the wake of the earthquakes and against a backdrop of global economic recession and political instability, Syrian-owned SMEs faced amplified vulnerabilities. The report outlines the changing needs of SMEs after natural disasters, the role of these businesses in earthquake response and economic recovery, factors contributing to SME resilience, and the challenges inhibiting their business continuity.

The quantitative analysis results show collaboration, community resilience, product/service customization, and strong Syrian networks significantly enhanced organizational resilience among Syrian-owned SMEs. The qualitative analysis underscores the significance of business owners’ personal attributes, skills, and ability to learn from past experiences at the individual level, while at the business level, it highlights the importance of resource mobilization and commitment to social goals. Overall, the research results confirm that organizational resilience is a multilayered concept and should be examined at individual, team/community, and business levels.

**Recommendations:** Based on the findings, the report offers recommendations to support Syrian-owned SMEs in enhancing their resilience through business planning and actions, mitigating risk and challenges, and sustaining their businesses in the aftermath of natural disasters. The findings and recommendations serve as a critical resource for policymakers, governmental and non-governmental organizations, and all stakeholders involved in supporting and empowering Syrian-owned businesses in Türkiye. It underlines the importance of inclusive economic growth, and the pivotal role of SMEs owned by Syrian communities in driving social impact and economic development.

**Our research has its limitations.** The report covers those SMEs with at least one Syrian partner and that reside in the earthquake-affected areas of Türkiye. Even though the findings are specific to this group, some recommendations will also apply to locally owned SMEs. Yet, the team did not administer a comparative analysis to make these comparisons.

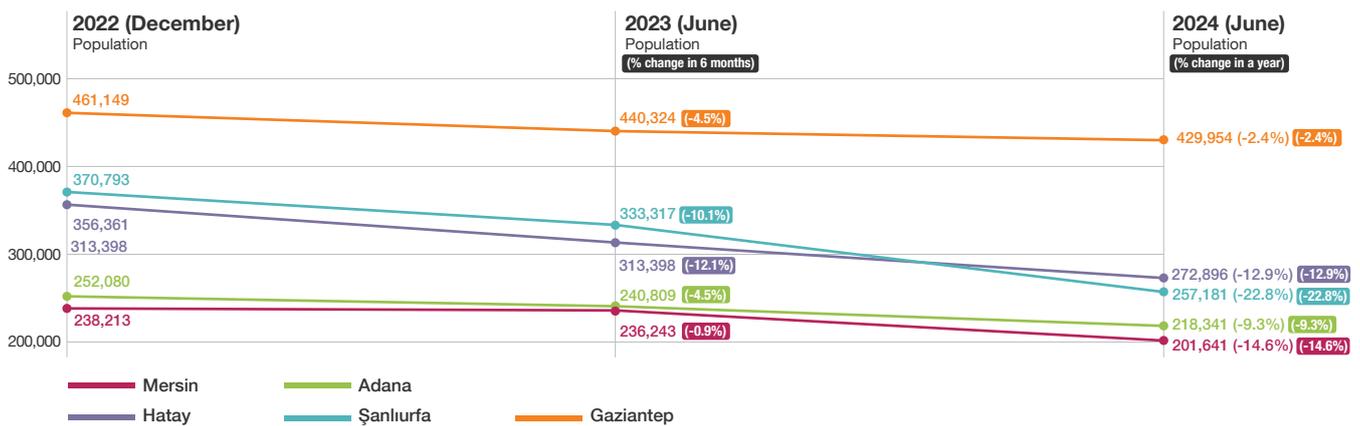
As our sample is driven by SMEs in the Building Markets database and those who agree to complete the survey, the dataset can possess a degree of volunteer bias. Considering the lack of empirical data of this size in previous studies and the geographical distribution of the SMEs, this potential sample bias is disregarded. A volunteer bias is also possible for the qualitative interviews. To triangulate the qualitative analysis, the findings were cross-checked with the quantitative analysis and other scientific research conducted during and after natural disasters. Furthermore, interviews were structured to include SMEs that relocated and did not relocate after the earthquakes. The analysis and recommendations are for businesses, yet individuals who experienced a natural disaster might need humanitarian aid that is not covered in this report.

# Introduction, Purpose, and Scope

Following the COVID-19 pandemic, the vulnerabilities of the Syrians had amplified under a global economic recession and the political instability in Türkiye. In early 2023, devastating earthquakes (EQs) struck southern Türkiye and northern Syria, severely compounding these hardships. The earthquakes left thousands dead and homeless on both sides of the Turkish-Syrian border, with health, food, water, shelter, sanitation, and hygiene becoming immediate and critical needs for survivors. People faced “physical, psychological, or material consequences” (Hannah et al., 2009, p. 897), further worsened by relentless aftershocks, cold weather, and limited rescue efforts. Many who could leave sought temporary or permanent refuge with family and friends in safer regions, yet hundreds were left with disabilities, impacting their ability to work (UNDP, 2024b).

In Türkiye, the extent of damage varied across the eleven affected provinces, depending on factors like proximity to the epicenter, geography, and building construction quality. Business owners, after securing their families, faced difficult decisions about continuing their operations amid collapsed infrastructure and limited external support. Nearly half of the Syrians in Türkiye—1.86 million—were living in these earthquake-impacted areas (Refugee Association, 2024).

**Figure 1: Syrian population before and after the earthquakes in the sample cities of this report**



Since December 2022, the total Syrian population in Türkiye has declined from 3.5 million to 3.1 million as of June 2024, with the earthquakes accelerating out-migration. Although Syrians were temporarily allowed to relocate to other districts to stay with extended family or friends, they did not receive additional public support and were expected to return to their registered cities once the situation stabilized (Ibrahim, 2023). Experiences from similar disasters indicate that around 40% of business owners do not return to affected regions even as the economy normalizes (Dinger et al., 2020).

***"Since December 2022, the total Syrian population in Türkiye has declined from 3.5 million to 3.1 million as of June 2024, with the earthquakes accelerating out-migration."***

Many Syrian refugees have established small businesses in various sectors, including retail, hospitality, and manufacturing. While most of these businesses are small-scale, they contribute significantly to local economic integration and foster economic links between Türkiye and the broader Middle Eastern market (Hatipoglu et al., 2023). In Gaziantep, for instance, approximately 6,300 businesses involve at least one Syrian partner, and about 12,000 Syr-

ians are formally employed (Erkiliç, 2024). Syrian-owned enterprises have also increased their share in Gaziantep's exports from 0.06% in 2011 to 4.3% in 2019 (ICMPD, 2020), demonstrating the resilience and economic potential of the Syrian refugee community.

Recognizing the role of entrepreneurship in sustaining communities, it is crucial to understand how small and medium-sized enterprise (SME) owners adapt and recover in the wake of natural disasters (Campagnolo et al., 2022; Dinger et al., 2019; Hällgren et al., 2018; Kwong et al., 2018; Oh & Oetzel, 2022a, b; Shepherd & Williams, 2020; Williams & Shepherd, 2018; Yeshi et al., 2022). This report aims to examine these aspects for Syrian-owned SMEs specifically.

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***"Recognizing the role of entrepreneurship in sustaining communities, it is crucial to understand how small and medium-sized enterprise (SME) owners adapt and recover in the wake of natural disasters."***

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In March 2023, Building Markets conducted a rapid needs assessment of 862 Syrian-owned SMEs in the earthquake-affected region to guide immediate aid and program services. That report asked thirty-eight questions to the respondents to identify the impacts of the EQs on the housing situation, personal and family needs, and the changes to the business operations. In addition to offering guidance on humanitarian aid and business needs, the 2023 report also serves as a baseline for our 2024 report.

Our 2024 report is conducted a little over a year after the first report (Building Markets, 2023), using a more comprehensive survey that covers the *responding and recovery stages* of a natural disaster. The main objectives of the report are to answer the following questions:

- What is the trajectory of the changing needs of the Syrian-owned SMEs after the EQs?
- How have Syrian-owned SMEs contributed to the affected areas' EQ response and economic recovery? What was their role in supplying goods and services to the response and rebuilding?
- What factors determine Syrian-owned SME resilience after the EQs?

This report reflects a collaborative effort between nonprofit organizations and academia. Its findings and recommendations will be useful to public and nonprofit organizations, Syrian-owned SMEs, local host community members, policymakers, and other researchers interested in supporting businesses affected by natural disasters.



## Context: Macroeconomic environment & government policies

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When the disastrous earthquakes hit Türkiye on February 6, 2023, the Turkish economy was implementing a policy framework for recovering from the consequences of the macroeconomic imbalances following the 2018 economic turmoil, COVID-19 pandemic, and global economic slowdown. This policy framework consisted of loose monetary and prudent fiscal policy and aimed at increasing exports and employment, thereby contributing to economic growth and recovery, but it also increased the macroeconomic risks and vulnerabilities (World Bank, 2024).

Rapid economic recovery and high growth rates (i.e., 11.4 percent in 2021 and 5.5 percent in 2022) and steady decreases in unemployment have been achieved, however, inflation rates have soared, the current account deficit has increased, and foreign exchange (FX) reserves have significantly declined. Rising geopolitical risks and rapid increases in global energy and commodity prices have also contributed to increasing the inflation rate, which hit the 20-year record level in 2022, reaching 72.3 percent and 128 percent in consumer and producer price levels, respectively (OECD, 2023). All these developments have contributed to the deteriorating risk perception and macroeconomic outlook of the country. As a result, the growth momentum started to slow down in the last quarter of 2022. Leading up to the presidential and parliamentary elections in May 2023, the government started adopting populist policies, such as increasing wages and pensions, setting up an early retirement scheme, cutting taxes, and introducing subsidies, which all elevated the uncertainties and risk perceptions. The twin earthquakes happened in such an economic backdrop of increasing vulnerabilities.

The earthquakes had devastating effects in the region, influencing a population of 15.8 million (approximately 14 million domestic and 1.8 million migrant population) covering an area of 110,000 sq km. (approximately 14 percent of the total area of Türkiye) in the east, southeast, and Mediterranean regions of the country (IOM UN Migration, 2023).

The region contributed to almost 9 percent of the GDP, 10 percent of industrial value-added, 15 percent of agricultural value (Aksoy et al., 2023) and had an 8.6 percent share in total exports of the country in 2022 (T.C. Cumhurbaşkanlığı, Strateji ve Bütçe Daire Başkanlığı, 2023). According to official statistics, there were more than 50,000 casualties, 107,000 people injured, 1.9 million damaged or destroyed housing units, 3.3 million people displaced, and two million people needing shelter. EQs had devastating impacts on the physical, emotional, and economic well-being of society. While the recovery and reconstruction needs are around 81.5 billion USD, the total cost of the EQs to the economy is estimated at around 104 billion USD (Aydın Özüdoğru, 2023; T.C. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı, 2023), with overwhelming effects on the labor markets and businesses. While the largest cost is related to the loss of infrastructure and superstructure, the second largest cost belongs to machinery, equipment, vehicle, inventory, and consumption goods losses.

In the immediate aftermath, the disruptions to economic activity and loss of economic livelihood caused the local population to leave the region, which led to decreases in private employment and labor shortages (see Figure 1, in section 1). For example, 70 percent of the blue-collar workers are reported to have left Hatay following the earthquakes (Spark, 2024). One year after the earthquakes, some people continue to live in temporary shelters (e.g., İslahiye, Gaziantep), and not all the residents who have fled the region have returned, as decent living conditions have not yet been restored for all. Both unemployment and labor shortages prevail. Destruction of the buildings, loss of machinery, disruption of value chains, labor shortages, and scarcity of qualified workforce are reported as critical issues facing local businesses, which need technical and financial assistance to continue their operations (Building Markets, 2023).

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## **3 Support provided to SMEs after the earthquake by the government and other civil society actors**

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Leading international organizations, such as the UN and the World Bank, many international and national NGOs, and civil society actors have contributed to post-disaster recovery and reconstruction efforts, under the coordination of the Turkish Government. The total economic costs were expected to range between 8.6 to 11.6 percent of the GDP of Türkiye, which is expected to be covered by 80 percent of government funds (Yılmaz, 2023). To provide policy support, planning, and reconstruction, both government agencies international organizations, and NGOs have conducted rapid need assessments and early estimates of the damage to the economy. According to the official assessment, 94,297 businesses were destroyed and needed support to resume operations (T.C. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı, 2023).

The Global Rapid Post-Disaster Damage Estimation (GRADE) Report by the World Bank Group notes the fact that the regions affected by the earthquakes have the highest poverty rates in Türkiye and host almost 50 percent of the total Syrians under temporary protection (SuTP) and suggests poverty reduction and SuTPs will be among the key considerations in the recovery efforts (Gunesakara et.al, 2023). Supporting SMEs is a critical component of the economic empowerment and recovery efforts in the region. Most of the families affected by the EQs are small business owners, including small agribusinesses. To plan for supporting the SMEs, rapid need assessment surveys and studies were conducted by various organizations, such as CORE (Community Organized Relief Effort), IBC (International Blue Crescent Relief and Development Foundation), IOM (International Organization for Migration) and the UNDP (United Nations Development Program). The Building Markets was one of the first organizations to conduct a rapid need assessment for Syrian-owned SMEs.

SME support schemes not only contribute to economic recovery but also help communities to recover emotionally and socially. The region witnesses a multitude of NGOs providing various forms of assistance to small businesses for their recovery and revival, often in collaboration with local actors such as AFAD (Türkiye Disaster and Emergency Management Authority), ministries, municipalities, chambers of commerce, and NGOs.

With the support of the Government of Sweden, The UNDP has implemented a regional grant program and supported 4,616 SMEs to resume their operations. UNDP also specifically targeted women entrepreneurs and provided cash grants to 257 women whose businesses were destroyed (UNDP, 2024a). Following their assessment, the CORE has supported fifty-eight business owners in Hassa Business Park, collaborating with AFAD, Hassa municipality, and the YSYD (Yerel ve Sığınmacılarla Yardımlaşma ve Dayanışma ve Destekleme Derneği). It also implemented an initiative involving 77 SMEs in Hatay giving 75,000 USD in business grants and training (CORE, 2024). Collaborating with the Chambers of Commerce of Gaziantep and Adana, SPARK established two regional recovery centers supported these centers with technical assistance and human resources, and provided grants of €375,000 to 40 SMEs for their recovery (SPARK, 2024).

Building Markets, in collaboration with the Center for Disaster Philanthropy, provided financial support to thirty businesses, offering \$6,000 each. Additionally, in partnership with Give Directly, 216 businesses received \$1,000. Both projects focused on supporting SMEs in Hatay, Gaziantep, Urfa, and Adana. Building Markets office in Gaziantep was converted to a shared office space and used by the SMEs that had lost their office spaces. Furthermore, Building Markets delivered humanitarian aid in Hatay, by distributing 170 thousand meals.

# 4 Methodology

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## 4.1. Research Design

We began our desk research by reviewing prior scientific work on natural disasters and entrepreneurship (e.g., Gregg et al., 2022; Oh & Oetzel, 2022a, b; Shepherd & Williams, 2020; Williams & Shepherd, 2016) and analyzing reports from various agencies on the aftermath of the earthquakes (e.g., Building Markets, 2023; UNDP, 2024a & b; World Bank, 2024). Through this literature review, we clarified key definitions—such as crisis, disrupted, and extreme contexts—and examined how natural disasters impact business operations, including closures and resilience.

Although definitions of «crisis» vary, the term generally refers to events characterized by low probability, severe consequences, and high ambiguity (Williams et al., 2017). Natural disasters like floods, wildfires, droughts, hurricanes, and earthquakes represent a specific crisis category marked by significant environmental stress and resource loss (Gregg et al., 2022). Hannah et al. (2009, p. 898) define an extreme context as “an environment where one or more extreme events are occurring or are likely to occur that may exceed the organization’s capacity to prevent and result in an extensive and intolerable magnitude of physical, psychological, or material consequences to—or in close physical or psycho-social proximity to—organization members.”

If the triggering event lies outside a business’s core activities, as with a natural disaster like an earthquake, it creates a «disrupted context» (Hällgren et al., 2018). Disasters can negatively impact organizations through cash flow disruptions, earnings volatility, high employee turnover, reduced performance and stability, lower investment levels, decreased collaboration, and increased resource demands (Gregg et al., 2022).

Using this foundation, we developed a survey instrument in collaboration with Building Markets, ensuring alignment with findings from the literature and insights from quantitative analysis. Ethics approval for the interview guidelines was provided by the Boğaziçi University Institutional Review Board for Research with Human Subjects.

Our field research in Gaziantep included unstructured interviews with representatives from the Gaziantep Metropolitan Municipality, Gaziantep Chamber of Commerce, Ipekyolu Development Agency, UN Women, SGDD-ASAM, and KAGIDEM to understand how public institutions and NGOs supported earthquake survivors.

By combining desk research, quantitative analysis, and semi-structured and unstructured interviews, a well-rounded method was established for obtaining in-depth insights into the factors that contribute to the resilience of the Syrian-owned enterprises that experienced the earthquakes in Türkiye.

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*"Disasters can negatively impact organizations through cash flow disruptions, earnings volatility, high employee turnover, reduced performance and stability, lower investment levels, decreased collaboration, and increased resource demands."*

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## 4.2. Sample Dataset, Scales, and Data Collection for Quantitative Analysis

We collected survey data from Syrian-owned SMEs in the EQ-affected regions of Türkiye that have been collaborating with Building Markets.

The survey consisted of scales measuring various constructs that potentially have an impact on business resilience. We selected our scales from existing strategic management and organizational science literature (Ambulkar, Blackhurst, & Grawe, 2015; Campagnolo et al., 2022; Fenxia, 2022; Herbane, 2019; Kukanja, Planinc, & Sikošek,

Figure 2: Map breakdown of SMEs by city

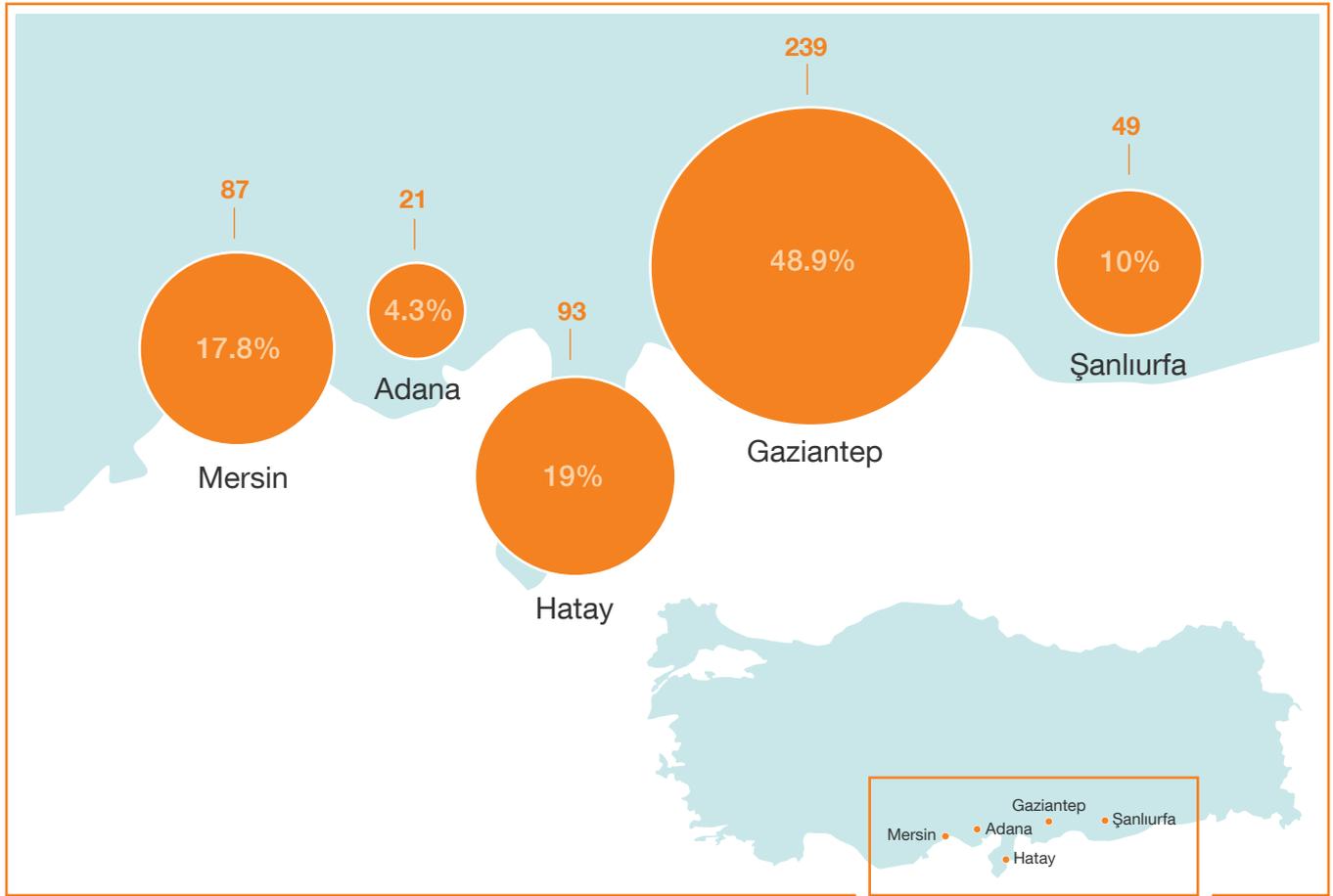
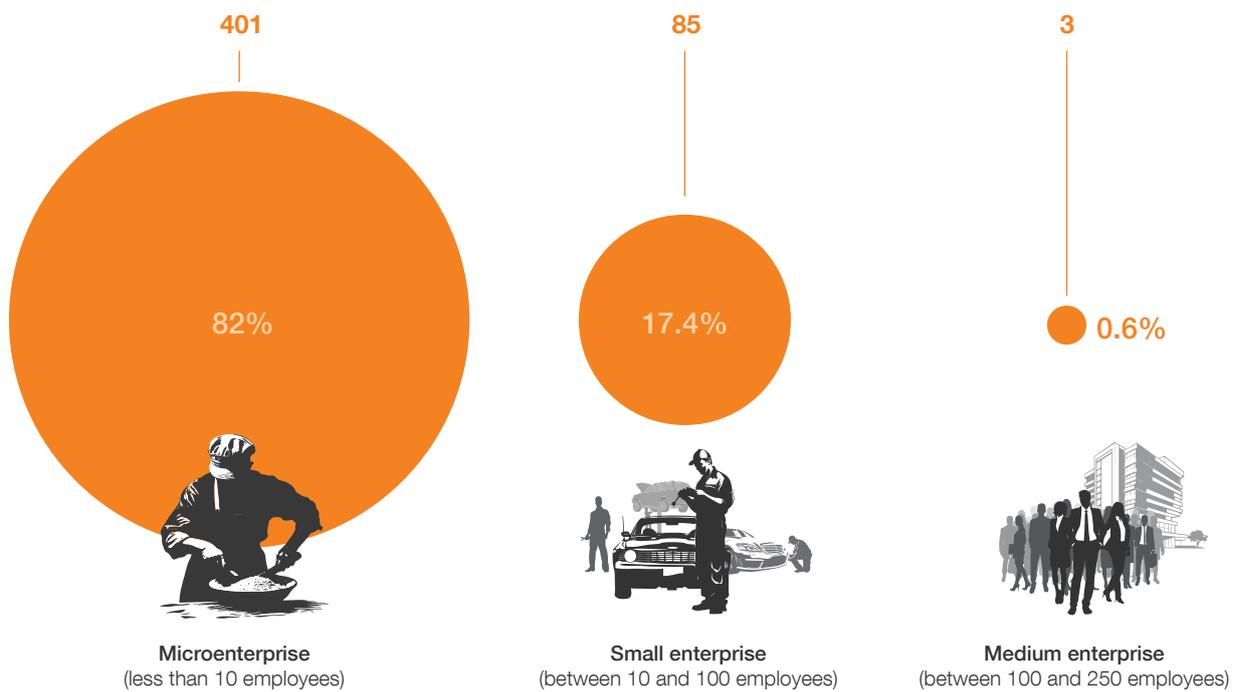


Figure 3: Breakdown of SMEs based on size

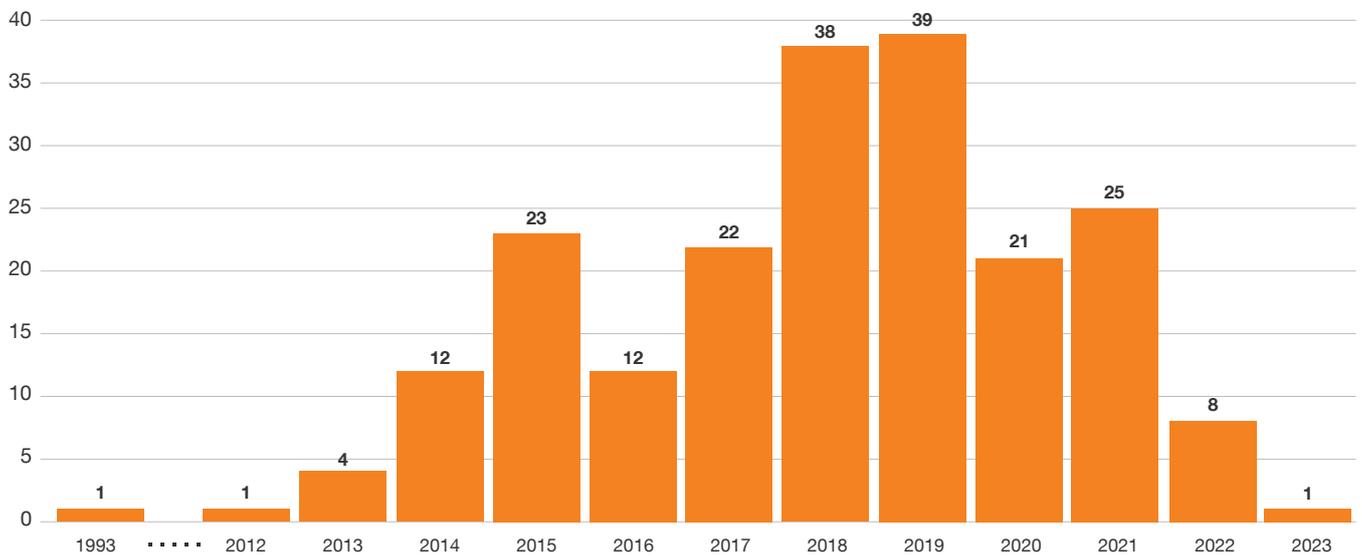


2020; Oh & Oetzel, 2011). All scales consisted of multiple indicators/items reflective of the constructs that they were supposed to tap into. For the list of the constructs that we used in the survey please see Appendix A.

The initial dataset had information on 489 Syrian-owned businesses, some of which had been surveyed and whose operational activity was verified multiple times every year via telephone calls by Building Markets staff before the earthquake.

Building Markets reached the respondents either via a WhatsApp message or via telephone calls. The respondents contacted via WhatsApp filled in their surveys online by clicking the survey link shared with them, while those contacted via telephone calls responded to our questions orally. We received eighty-eight complete responses via the former method and 401 via the latter.

**Figure 4: Year of establishment of the SMEs in the sample (companies for which this information exists)**



### 4.3. Quantitative Data Analysis

To answer the main research question of this report, which is to determine the factors that determine Syrian-owned SME resilience after the EQs, we collected and analyzed data on business resilience as well as potential factors that will influence resilience. These constructs were collaborative capability, community resilience, customization, Syrian network, crisis management actions/strategies, quality of social capital, quality of infrastructure, Turkish network, and organizational learning from other parties.

In this report, we defined organizational resilience as:

A) Rebound back: “the process by which an actor (i.e., individual, organization, or community) builds and uses its capability endowments to interact with the environment in a way that positively adjusts and maintains functioning before, during, and following adversity” (Williams et al., 2017, p.742).

B) Thriving under adverse conditions: “developing novel abilities and capabilities that allow the organization to capitalize on unexpected challenges, and exploiting opportunities for a successful future” (Smith et al, 2023, p.4).

We asked three questions to measure resilience as below:

To what extent do you agree with the following regarding your business' response to disruptions due to a future disaster such as the 2023 earthquake? (1 = Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; 5 = Strongly agree)

- We are able to cope with changes in our business brought on by earthquake disruptions.
- We are able to easily adapt our business operations to earthquake disruption.
- We are able to provide a quick response to the negative effects of an earthquake on our business.

We created scores for each of the constructs above by taking the mean of all corresponding scale items. All scales had acceptable levels of internal consistency (Cronbach's alphas ranging from 0.75 to 0.92). We used an ordinary least squares regression equation in which we regressed business resilience on all constructs mentioned in section 4.1.

### 4.4. Sample and Data Collection for Qualitative Analysis

The qualitative component of this study aimed to complement the quantitative analysis and provide nuanced insights into the crisis management strategies of Syrian-owned businesses after the earthquake through an in-depth examination. Consequently, the quantitative analysis results informed the design of the interview questions. The investigation focused on how these businesses overcame the initial challenges they encountered while establishing their businesses in Türkiye. Additionally, the study explored the challenges encountered after the earthquake and whether they needed to adapt their business practices. The interview protocol consisted of twenty-four open-ended questions, with twelve dedicated to demographic information; detailed guidelines are available in Appendix C.

To identify representative interviews, criteria from the quantitative findings and the literature were utilized, including their location (Gaziantep), business continuity (open vs closed or moved), involvement in community recovery, and change in product or service offering. Building Markets reached out to potential participants, explaining the study's purpose, and businesses that consented were included. From May to June 2024, twenty interviews were conducted: sixteen with businesses in the Gaziantep area and four with businesses that had relocated to other cities (listed in Appendix B).

Face-to-face interviews in Gaziantep were conducted either at the Building Markets headquarters or at the enterprise facilities, enabling researchers to make ethnographic observations within the participants' social environments. Interviews with business owners who had relocated from Hatay to other cities were conducted over the phone.

Interviews were conducted in Turkish and English, with Arabic-speaking participants assisted by the Building Markets program officer and field agent for translation. Each participant received an Arabic consent form, approved by the Boğaziçi University Ethics Board, and all participants provided informed, voluntary consent. Interviews were voice-recorded, with face-to-face sessions lasting 23–58 minutes and telephone sessions lasting 15–51 minutes.

## 4.5. Qualitative Analysis

All interviews were transcribed verbatim into MS Word, followed by a meticulous review and editing process to ensure accuracy. The qualitative analysis employed both inductive and deductive coding techniques. Inductive coding allowed new themes, such as «infrastructure challenges» and «support mechanisms,» to emerge directly from the data, while deductive coding applied predefined categories from existing literature, such as «resource mobilization» and «business customization.» Similar codes were grouped into overarching themes, following the approach recommended by Gioia et al. (2013).

Throughout the process, researchers engaged in continuous discussions, refining these themes through constant comparison and validation. The final step involved crafting a summary that contextualized the identified themes within the study's objectives, resulting in a narrative that synthesized the data and offered meaningful insights and conclusions.





# The Results of Syrian-Owned Businesses after the Earthquake

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## 5.1. The trajectory of the changing needs after a natural disaster

The economic decisions of SMEs in the extreme context of earthquakes (EQs) are deeply intertwined with social relationships (Alvi et al., 2019). In the immediate aftermath, SME owners' actions were influenced by the evolving conditions around them. On a micro level, owners were primarily concerned with the well-being of family and friends, interpreting the disaster's impact, and determining their immediate response. At the macro level, they considered resource availability, how best to reach out to their networks, and how to access support from various institutions. These micro- and macro-level factors must be viewed together to fully understand SME owners' decision-making and resilience in crisis contexts.

### 5.1.1. Infrastructure

Building Markets' (2023) needs analysis highlighted that the EQs had a severe impact on the housing and operational stability of Syrian business owners. Immediately following the EQs, over half of the SME owners who relocated were staying with family and friends (50.8%), while others found alternative solutions, such as new rentals or temporary accommodations (e.g., cars, hotels). Concerns over safety led many business owners to move, with 70.2% relocating to other cities and 55.4% to other areas within the same city.

After EQs of this size, there are various physical challenges such as road closures, damaged infrastructure, and disrupted communication. Furthermore, besides the damage to infrastructure, housing, and business property, SMEs' equipment and inventory could be destroyed and harmed and their supply chains could be broken (McKnight and Linnenluecke, 2016; Williams and Shepherd, 2018). Some of these impacts will be direct (damages to physical assets), whereas the others are more indirect (infrastructure damages and delays) (Oh and Oetzel, 2022a). As noted in the natural disasters literature, the Syrian-owned SMEs experienced direct and indirect impacts. For example, Zakariya Watfa had difficulties with his export shipment from the port of Iskenderun which had an indirect effect impacting his business. Khalid Akil (Ask Egitim) stayed in Gaziantep, but he had to change offices as the prior building was found to be damaged (direct impact). Abudrezzk Rahal (Oris Magic), sent his family to Istanbul, but he chose to stay in Hatay with his brother so that they could save machinery and equipment from destruction and theft (direct impact) and move them to a safe place in Kilis.

After a natural disaster, businesses will not be affected the same. Smaller businesses can be affected more as they can be operating in a single location, serving local customers and with limited resources (Miklian and Hoelscher, 2022). In addition to these challenges, Syrian-owned SMEs also face the negative consequences of being new to the market. Among the companies for which we have data on their start of operations, the maturity of our sample ranges between 1-11 years (excluding the one from 2003), but a majority (63.8 %, 132 out of 207) had a maturity under five years (2018-2023) when the EQs happened. Thus, we propose that the physical challenges can severely impair the resource mobilization of SMEs to rebuild or activate their businesses.

In our 2024 surveys, we asked SMEs how the disaster affected them directly and three questions about the state of the infrastructure (indirect effects) in the cities where they currently live.

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*"At the macro level, they considered resource availability, how best to reach out to their networks, and how to access support from various institutions. These micro- and macro-level factors must be viewed together to fully understand SME owners' decision-making and resilience in crisis contexts."*

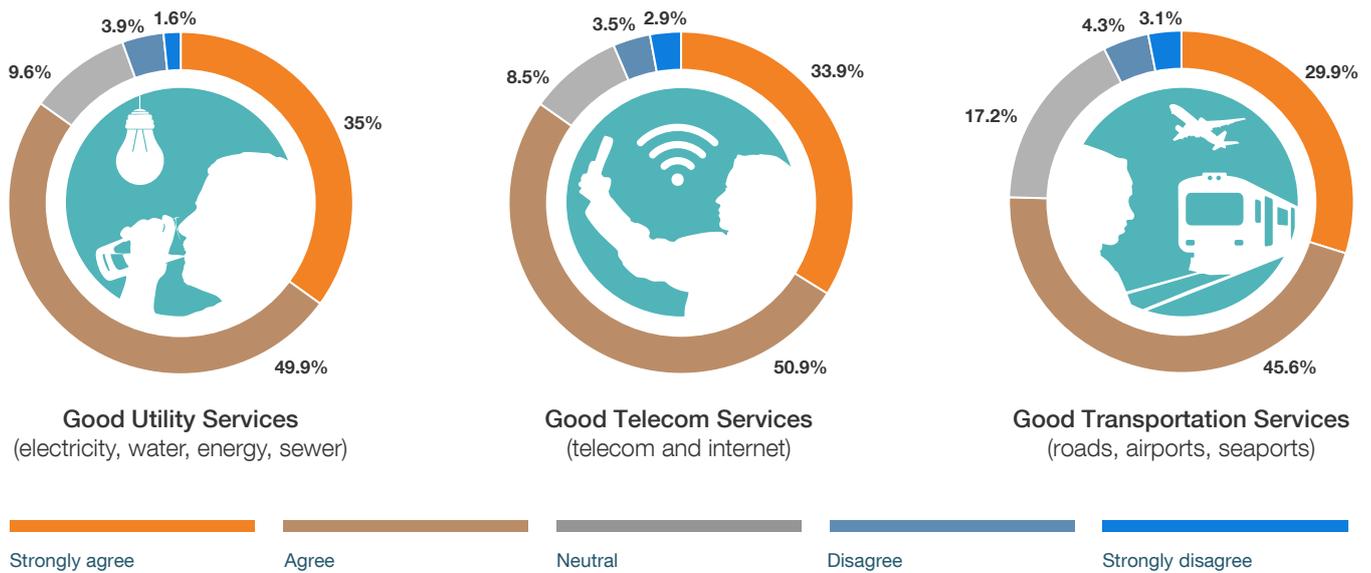
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Their supply chains were disrupted (71.9%, 352), employees had difficulty getting to work (65%, 318), and shipments were delayed (63.4%, 299). And for more than half of the SMEs, their storage facilities were damaged (59.9%, 293). As a result, 84.7% (414) SMEs had temporarily closed their businesses.

***"We find that the respondents are satisfied with the utility (84.9%), telecommunication and internet (84.8%), and transportation (75.5%) services in the cities where they lived at the time of the 2024 surveys."***

We find that the respondents are satisfied with the utility (84.9%), telecommunication and internet (84.8%), and transportation (75.5%) services in the cities where they lived at the time of the 2024 surveys. These results confirm our interview results, in which respondents report that even though in the first 3-4 months there were delays, they do not continue to experience severe problems with sourcing or delivery of their goods. Exceptions to some destinations remain, for example, Abudrezzk Rahal (Oris Magic) continues to experience delays in his shipments from other parts of the nation to Kilis (indirect impact).

**Figure 5. Satisfaction of SMEs with the services received after the earthquakes (%)**



**5.1.2. Resources received**

Natural disasters, such as the EQs experienced in the region, are systemic in their disruption and deplete the resources at the individual (economic, physical, and psychological), team/ community (relational and functional), and organizational levels (strategic and financial), which then affect the organizational performance results (Gregg et al., 2022). After a disaster, business owners will assess the availability of their resources (cognitive, emotional, relational, and structural) to recover and restart again.

For example, Joumana Alyousef (Jiji Shop) used to design and produce most of her jewelry and souvenirs from her home office in Hatay. After the EQ, she lost her inventory as well as the products that were sold and ready to be shipped. She could salvage only two of the machinery from the building, which needed repairs before they could be utilized. Months later, when she started to recover from the psychological effects of the EQ, she repaired the equipment with the funds she received from Care International, started to manufacture her designs, and showed a presence on social media.

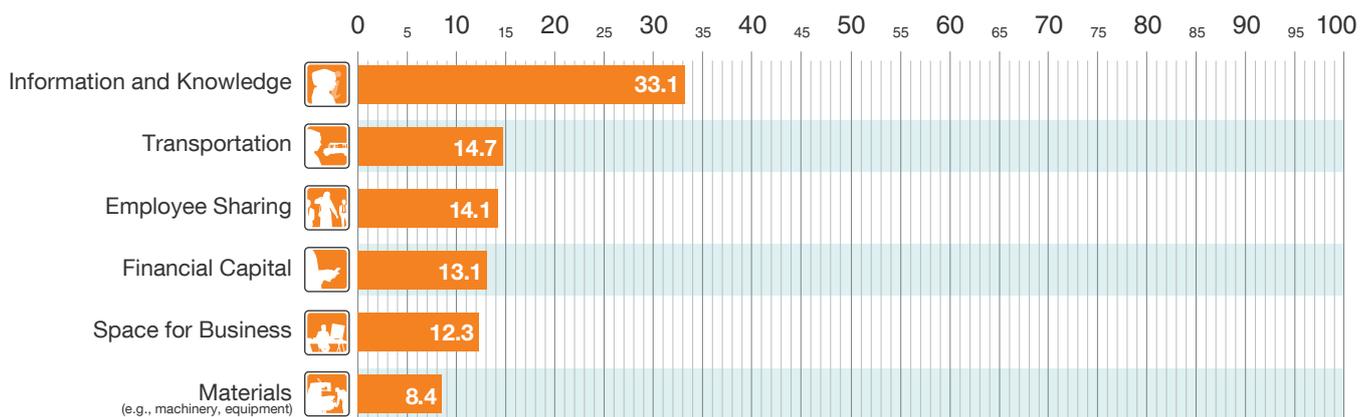
To deal with the adversity created by a disaster or shock, resources should be kept in a form that is “flexible, storable, convertible and malleable” (Williams and Shepherd, 2016, p.2071), so that they can be used to recover in an uncertain environment. As such, for business owners to operate as before and/or take advantage of the entrepreneurial opportunities after a disaster they should proactively manage their resources, which will include reaching their customers, suppliers, or financial services (relational resources) (Conz et al., 2023; Digger 2020). For example, as Safa Sawan (Gözlerin Işığı Merkezi), could not borrow money from the bank, she reached out to her long-term customers to invest in her beauty center. This allowed her to renew her machinery and offer new services after the EQs, which were needed to regain customers.

Thus, successful business continuity is more than having these resources after the EQ, but the ability of the business owner to manage and reconfigure them, so that they will enable the SME to develop adaptive capabilities, mitigate the impact of the disaster, and become more resilient (Parker and Ameen, 2022).

*"During field interviews, participants noted that the widespread impact of the EQs left most people in urgent need, with many fleeing the affected cities. This limited the sharing of physical resources, as individuals were primarily focused on their survival and relocation."*

To explore the types of resources SMEs received from their social networks, we included six specific questions in the surveys. Unfortunately, support from external sources was limited for the SMEs. During field interviews, participants noted that the widespread impact of the EQs left most people in urgent need, with many fleeing the affected cities. This limited the sharing of physical resources, as individuals were primarily focused on their survival and relocation. Consequently, material and equipment sharing were the least common form of support (8.4%, 41). However, SMEs were in immediate need of information and guidance—resources that could be more easily shared via phone. This type of support was the most frequently received (33.1%, 162) (see Figure 6).

**Figure 6. Type of resources SMEs received from social sources for business, after the earthquake (%)**



Access to capital or bank credits is constrained for Syrian-owned SMEs, which did not change after the EQs. Only one percent (5) of our sample had received formal loans after the EQs. To overcome this challenge, Syrian entrepreneurs often borrow money from their social networks. For example, Münira Elmeşal (Rotana Textiles) had received money from her mother to open her first shop in Tarsus. Borrowing money from the social network did not change after the EQs, however, it became complicated if their social network had also suffered from the EQ. Khalid Akil (Ask Eđitim), used to receive financial support from his network to provide free of charge vocational training to the community, but after the EQs, the financial support he received from them dropped in value.

Close to two-thirds (72.6% 355) of our respondents reported that they lost customers in the first six months after the disaster. And for many (45.1%, 225) this continued to be the case after the following six months. Thus, big or small, financial support is essential for business owners to get on their feet after the EQs. For example, Mohamad Hani (Hani Tekstil, Perde ve Aksesuarları) using the grant he received, paid employee salaries and bought raw materials. After the EQs, 37.8% (185) of the respondents reported that they received financial assistance or grants, which were provided by the Centre for Disaster Philanthropy (CDP) and Give Directly Foundation (GD).

Building Markets also helped many SMEs with application writing processes for loans, grants, and tenders. As such, Muhammed E. Kattan (Efkar Design), for the first time was able to receive loans provided by a partnership between Albaraka Türk Bank and Spark. Building Markets also supported office sharing after the EQs; it opened its doors to SMEs and for many months the second floor of their offices was shared by the SME owners.

Many residents stayed in their cars or left the region (to Istanbul, Bursa, Ankara, Kütahya, and Mersin) in the following days and weeks of the EQs; and came back after 1-2 months when the aftershocks slowed. But some never returned. This outmigration from the region created an additional layer of difficulty in finding skilled employees for all types of businesses. Employee sharing was not a popular practice, as in our sample only 14.1% (69) shared employees (Figure 6). The total number of full-time employees dropped from 5,171 (a year before the EQs) to 3,200 (a year after the EQ) in our sample companies. Even though the loss of business and uncertainty could be holding back SME owners from hiring employees, the absence of skilled employees in their respective regions is also a contributing factor to these results.

Overall, the business owners that we interviewed all agreed on the severity of the issue. Rami Sawas (We Plus) noted that the number of employees in his company dropped from 18 to 1, as all employees besides one loyal employee had left the city. After a year, they have four employees, but they have difficulty finding employees for specialist positions such as accountant.

Nour Almushref (Livingit Education Center) reports that their language students demand learning from native English teachers, but she is unable to find teachers anymore in the region. Münira Elmeşal (Rotana Tekstil) had opened a manufacturing facility four months before the EQs and employed eight people, yet none of them remained and she worked on her own for months. Skilled workers for garment production, such as designers or pattern makers, have become rare to find in Gaziantep.

Muhammed E. Kattan (Efkar Design) asked the Chamber of Industry for help in finding workers, but no eligible candidates applied to the advertisements. Those who apply asked for daily jobs rather than full-time employment. When Khalid Akil (Ask Eğitim) could not find engineering trainers in Gaziantep, he used the company's social media to seek candidates, and out of the fourteen that applied they were able to hire one suitable engineer.

The group of business owners that we are examining in this report are typically used to making creative and efficient use of their resources as they are in a "disadvantaged resource position" (Williams and Shephard, 2018, p. 913) because of their forced migrant status. Yet, after the EQs, their "doing best with whatever is at hand" (defined as bricolage in the displacement and disaster contexts, Kwong et al., 2018, p. 10), intensified.

We observed that the business owners performed some of the tasks themselves or asked family members to step in when they could not (or chose not to) hire new employees (reconfiguration of human capital). They allowed some employees to stay in the offices as their homes were not safe to stay in (multiple applications of the same resources). They shared Building Markets offices to stay in touch with their customer and supplier networks. They asked extended family for places to stay and financial support and applied for new grants and loans with the help of NGOs (assisted resources acquisition through pre-existing networks). They chose not to acquire new machinery or equipment but tried to mend the damaged machinery (frugal physical resource acquisition).



Meet the entrepreneur:

**Solo Lasagna**  
Food & Beverage Service

# Fadi Fael

Fadi, a trained optometrist and a factory owner in Halep, arrived in Gaziantep in 2013, after he lost all he had. He worked as a human resources manager for NGOs before starting his restaurant business. He used the food preparation skills he had acquired during his years in Italy and started an Italian restaurant in Gaziantep in 2020. Unfortunately, the earthquake harmed the building, and he had to close the restaurant. They did not consider leaving town as their children were attending university.

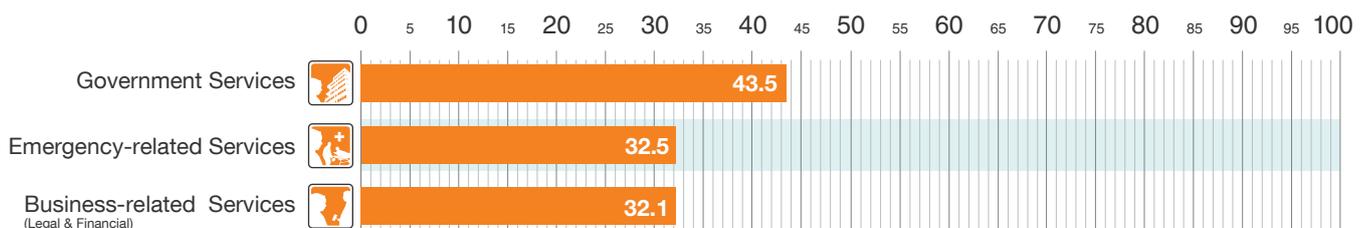
Through his wide network, Fadi was introduced to a partner, and after the earthquake, he started a new food business, Solo Lasagna, as part of a food collaborative, Cloud Kitchen. He and his son continue to research and develop

other food products that they could potentially commercialize with international partners. He continues to support the community by sharing his business knowledge.

### 5.1.3. Social support for SMEs

Studies that examine recovery after natural disasters take the magnitude of physical damage as a significant determinant of the recovery (Aldrich, 2012). The quality of governance, humanitarian aid and support from various institutions (national governments, NGOs, aid organizations) are also considered important for recovery. In our survey, we asked three questions to evaluate SMEs' satisfaction with the support they received during and after the EQs (Figure 7). The owners are dissatisfied with the government services the most (40.3%, 197) and then emergency services (32%, 159) and business-related services (32.5%, 159). During our interviews with the SME owners in Gaziantep, participants recalled receiving humanitarian aid (from various agencies) in the days following the EQs, on the other hand, they were not offered any support for their businesses from the government immediately or in the following months.

**Figure 7. Dissatisfaction of SMEs with the services received after the earthquakes (%)**



Along with external support, utilizing local-level networks and social capital is suggested to be significant for business and community recovery (Aldrich, 2012). Those business owners with high place attachment or ties to the community are more likely to return or stay in the disaster area and try to find recovery solutions (Grube and Storr, 2018). We asked our participants why they stayed in Gaziantep and did not consider leaving<sup>1</sup>. One said his children were attending university in town, another suggested his customers were in the region and the other shared that they feel at home as it resembles their hometown in Syria. These and similar answers confirm that those business owners were motivated by high place and community attachment.

SME owners' social capital (networks) can enable them to make connections with others, have access to and secure the flow of resources, and find new opportunities (Grube and Storr, 2018; Williams and Shephard, 2018). Fadi (Solo Lasagna) lost his factory during the war in Syria, and then his restaurant was destroyed during the EQs; yet

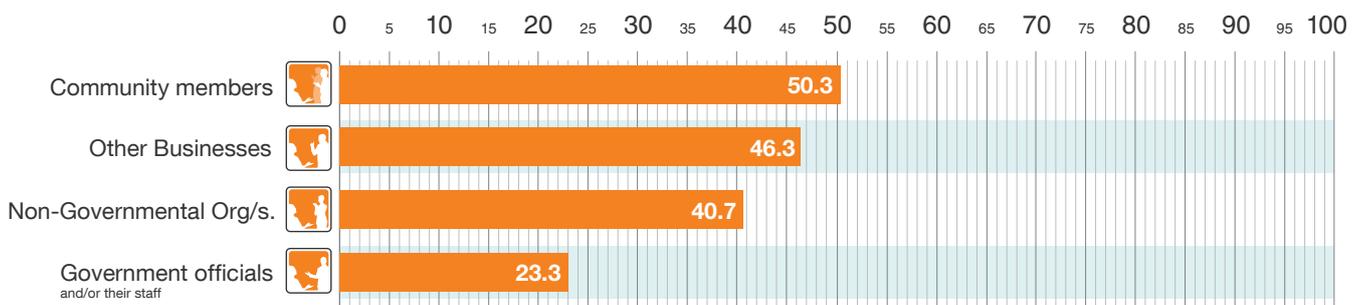
<sup>1</sup> Footnote: Syrians who have a TPS are to live and work in the towns where they are registered.

according to him, his most important asset is his social capital. He has a large network of friends from his community. Through his connections, he partnered with another Syrian, and together they capitalized on an opportunity to open a new food outlet after the EQs. Under extreme uncertainty (the aftermath of the disaster), discussing problems with others can help SME owners to find solutions for themselves and their communities.

In the survey, we asked SME owners whether they were able to discuss problems with others after the EQs (Figure 8). They were highly likely to share concerns and discuss problems with their community (50.3%, 246), other business owners (46.3%, 226), and NGOs (40.7%, 199). They were less likely to share concerns with the public agencies (23.3%, 114), pointing to their low political capital in Türkiye.

Syrian business owners are highly embedded in their communities. For example, in the survey, we questioned their communication patterns with five questions (Figure 8). Every week, they communicate with their Syrian network in Türkiye (73%, 357) and Syria (39%, 191); whereas their communication weekly is much less with the Turkish host community (24.7%, 121). Even though some business owners suggest they have trusting relationships with their local suppliers, customers, and other businesses, some share that no matter how much they tried they were not able to establish similar links, including their neighbors.

**Figure 8. Business owners' social network: Discuss problems with (%)**



## 5.2. How have SMEs contributed to the affected areas' earthquake response and economic recovery?

In the case of natural disasters, the magnitude and the response speed of public agencies, emergency services, and civic organizations are important for the response effectiveness, thereby the level of recovery of the communities from the negative impacts of the disaster. Entrepreneurs and businesses as active members of the economy can also participate in community recovery after the disasters (Grube and Storr, 2018).

Firstly, business owners can supply resources to the earthquake victims. They can offer their products and services free of charge. For example, according to Radwan Mouaket (Urban Research Center), local furniture producers, both from the local and Syrian communities in Gaziantep sent furniture and sofas to the victims in the first three months after the disaster.

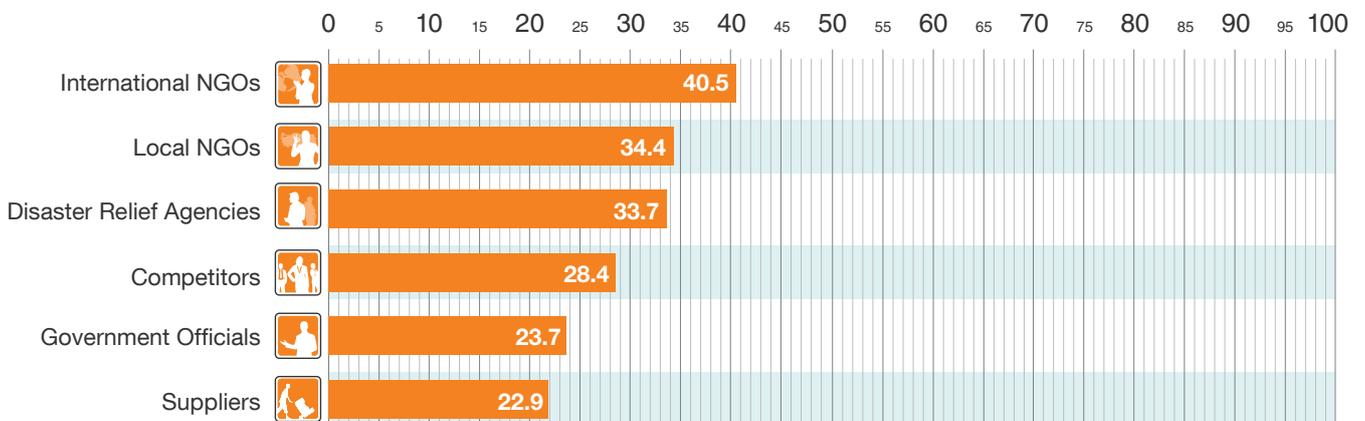
***"Entrepreneurs and businesses as active members of the economy can also participate in community recovery after the disasters"***

Business owners can also access and mobilize much-needed resources faster than external parties. For example, Rami Sawas (We Plus), was in Mersin only a day after the disaster, purchasing and sending truckloads of humanitarian aid to the region. In times of extreme events, when business owners search for new resources, their ability

to learn and grow is also enhanced (Williams and Shepherd, 2018). The supplier in Mersin provided Rami with all the humanitarian aid merchandise on open credit. But because of this trust-based encounter, they later continued to do business, and their mutual trade reached millions of dollars. Thus, Rami’s search for resources to help the victims led him to grow his own business as well.

Going through natural disasters can improve business owner’s risk awareness and how to respond during a crisis. For example, when Nour Almushref (Livingit Education Center) was investing in a subsidiary in Adana, she never included an earthquake as a risk factor in her business plan. She had never experienced an earthquake before. In the surveys, we asked SMEs about their sources of learning for how to respond to a natural disaster affecting their business in the future (Figure 9). They learned to respond best from the international (40.5%, 198) and national NGOs (34.4%, 168), and disaster relief agencies (33.7%, 165). Perhaps the rest were learning from their own experiences as they practiced. In the future, it is worthwhile to ask further about their learning experience.

**Figure 9. Source of learning for business about how to respond to a natural disaster**



Meet the entrepreneur:

# Rami Sawas



Rami arrived in Gaziantep when he was only 20 years old in 2014 but accomplished a lot in the time in between. He graduated as a computer engineer from Gaziantep University and completed a master’s degree at Cambridge University. When his first business endeavor was unsuccessful, he quickly founded a second company that was engaged in construction and trade.

His business financially and physically suffered substantially during the EQs. Rami’s inventory was stolen from the warehouse and despite the landlord receiving state support to fix the damages to the offices, he asked Rami’s company to pay for the repairs. Rami suggests that the trust he has built with his suppliers and customers over the years is his biggest asset. When he was in

need, a Syrian merchant in Mersin, with whom Rami had not previously worked, provided him with all the humanitarian aid goods he wanted to purchase on open credit. Thereby, Rami was able to support the victims by shipping eight truckloads of humanitarian aid in the aftermath of the EQs.



Secondly, business owners are also earthquake victims. Hence, they will better understand what is locally needed, bundle resources that they can get access to, and respond promptly in comparison to the time that will be spent to integrate outside help (Williams and Shepherd, 2018).

For example, Nour Almushref (Livingit Education Center) and her family had to leave their house immediately after the EQs. They came to stay in their office space, as the building was more secure. But when she saw that people in the neighborhood had gathered across the park, cold, thirsty, and hungry, she forgot about her state and took action. Nour quickly activated the coffee shop kitchen and started cooking food (human capital resource) with the items in the pantry (material resources); she served four hundred meals a day on her own. Only days later, AFAD, the emergency services, noticed what she had accomplished and asked her if she could also cook for communities in other EQ-affected areas of Gaziantep.



Meet the entrepreneur:

## Nour Almushref



Nour came to Gaziantep with her husband, daughters, and her in-laws in 2015. In Syria, she worked as a geography teacher at a high school and her husband was a manager at a university. After her arrival, she worked as a project coordinator at social cohesion and gender equality and empowerment programs for NGOs in the region. She wanted to open a business in which she could apply what she had learned, aid cohesion, and decrease “hate speech”. With a partner, they opened a language learning center and a coffee shop next to it where people can come not only to learn a new language but also to gather and get to know each other around food and drinks.

They opened a second place in Adana, yet it was closed as the building was evacuated after the EQs. She felt that the earthquake was psychologically worse than what she experienced during the war in Syria.

Their business is only beginning to pick up after a year and a half since the EQs. The fear and the uncertainty initiated Nour to produce a new business idea, which they are producing a new app for learners. She helps others by offering scholarships at their learning center and plans to open a second center in Mersin.



During and after natural disasters, business owners can observe and look for ways to alleviate the suffering of others through their businesses. Williams and Shepherd (2018, p. 913), call such activities “compassion venturing”, defined as ‘arranging and generating resources and organizational routines in novel ways by pursuing opportunities to bring into existence goods and services that alleviate others’ suffering’. When SME owners act with compassion towards the victims, they can pursue both social and commercial goals (Grube and Storr, 2018). Below are several examples of these.

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***"When SME owners act with compassion towards the victims, they can pursue both social and commercial goals."***

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Lobna Heli (Lazord), is a highly resourceful person and is networked with local and international NGOs and Syrian associations in Gaziantep. After the EQs, she became aware that women in her community needed a safe outlet, where they could showcase their homemade products. Lobna opened the doors of her restaurant (social goal), and once a week the restaurant holds a “Hayir Pazarı” (Charity Market) at which women sell their food and handicrafts.





Meet the entrepreneur:

## Lobna Heli

**4** Lazord  
Food & Beverage  
Service

Lobna moved to Gaziantep in 2015 with her mother and two daughters. With a background in law, she previously worked as an HR manager at a public agency in Syria. After relocating, she began working with NGOs while also cooking meals from home for those in need, including an orphanage.

In 2017, Lobna launched her chocolatier business but soon partnered with two others to transform it into a restaurant. Responding to customer feedback, they began offering ethnic cuisine, which helped attract a diverse clientele, including locals and visitors from other cities, thanks to Lobna's extensive network from her NGO work.

Lobna is passionate about fostering connections between Syrian and Turkish communities through food. Her social responsibility initiatives have garnered support from local and international NGOs, business leaders, and the municipality. During the pandemic, she organized a project called "Hayır Mutfa ı" (Charity Kitchen), mobilizing five women to cook at home and deliver meals to their neighborhoods. In Ramadan, they distributed 2,000 meals funded by generous customers eager to help others.

Following the earthquake, Lobna quickly responded by providing food to victims, serving over 11,000 meals in the hardest-hit areas of Gaziantep, such as Nizip and Islahiye. She remains committed to creative projects that benefit the community, although she is concerned about the future of her restaurant due to rising rents and food prices.

Safa Sawan (Gözlerin Işığ ı Merkezi) became aware that women needed a safe space to exercise and socialize at the same time. After the EQs, she converted the second floor of her shop to a sports center, where women-only gym classes are offered (social and commercial goals).

Amr Bitar (Imaar for Training and Development), after the EQs, stopped working for a very long time, before activating the business in Gaziantep. They started providing free-of-charge training (e.g. data analysis, human resources, and Arabic language) both face-to-face and online. By doing so, they want to return to the market (commercial goal) which has become very competitive and support the community (social goal).

Before the EQs, Khalid Akil (Ask Eğitim) offered training services (e.g., IT, business administration, and languages) free of charge via the financial support of NGOs and Syrian businesspeople. After the EQs, he became aware of the gaps in youth's education, and now they offer training to youth in data and robotics (social and commercial goals).

Abdulaziz Neccar (Elite) and his brother provide consultancy services to Syrian-owned firms and local and international NGOs as well as engage in logistics services with companies from the MENA region. Abdulaziz believes in the importance of education; he is pursuing a doctorate. To support his community, he built an open library and offers internships (commercial goal) and training to youth in his company (social goal).



### 5.3. Factors that determine Syrian-owned SME resilience after a natural disaster

#### 5.3.1 Quantitative Results

The study's primary objective was to reveal the factors that influence the resilience of Syrian-owned SMEs after the earthquakes that took place in 2023. The statistical analysis results are shown in Table 1.

The findings of our analysis indicate that the following factors have a significant and positive impact on organizational resilience.

- *Collaborative capability*, an organization's ability to leverage external partnerships and networks for better preparedness, response, and recovery, while also recognizing when independent actions are necessary.
- *Community resilience*, the collective efforts within the community to mitigate negative impacts and build sustainable mechanisms for both immediate disaster response and long-term recovery.
- *Customization*, the ability of a firm to adjust its products, services, and operations in response to changing market conditions or customer needs, particularly in the aftermath of a disruptive event.
- *Syrian network*, the social and professional connections that business owners have within the Syrian community.

We also observe that the following factors do not have a significant impact on organizational resilience:

- *Quality of social capital*, the effectiveness, accessibility, and utility of the social networks and institutional relationships that a company can leverage for support, services, and problem-solving in the aftermath of a crisis, such as the 2023 earthquake.
- *Quality of infrastructure*, the adequacy, reliability, and effectiveness of the foundational services and systems that support a company's operations in a given location.
- *Turkish network*, the social and professional connections that business owners have within the Turkish community.
- *Organizational learning*, the process by which a company acquires knowledge, skills, and insights from various external sources to enhance its ability to respond effectively to natural disasters or other disruptions.

**Table 1. Quantitative results**

Dependant Variable: Business Resilience				
Predictors	Estimates	Standard Errors	Confidence intervals	p-value
(Intercept)	-0.57	0.29	-1.15 – 0.00	0.050
Quality of social capital	0.04	0.06	-0.08 – 0.17	0.485
Quality of infrastructure	0.07	0.05	-0.02 – 0.17	0.134
Collaborative capacity	0.26 ***	0.08	0.11 – 0.41	<b>0.001</b>
Community resilience	0.36 ***	0.06	0.25 – 0.47	<b>&lt;0.001</b>
Customization	0.27 ***	0.05	0.17 – 0.37	<b>&lt;0.001</b>
Syrian network	0.12 *	0.05	0.02 – 0.22	<b>0.021</b>
Turkish network	0.06	0.05	-0.03 – 0.15	0.213
Organizational learning	-0.10	0.06	-0.22 – 0.03	0.132

Observations: 489, R<sup>2</sup> / R<sup>2</sup> adjusted = 0.355 / 0.344, p<0.05 \*\* p<0.01 \*\*\* p<0.001

### 5.3.2. Qualitative Results

The qualitative analysis points to multiple themes as vital in understanding business resilience under extreme conditions for Syrian business owners. Even though, from the start, we questioned factors that determine resilience at the organizational level, there were striking attributes of business owners that stood out (individual level) and therefore we grouped the themes under two headings that are business owner attributes and business actions.

■ **Business Owner Attributes** An entrepreneurial attitude enables individuals to identify and seize opportunities in uncertain environments. Therefore, an entrepreneurial attitude serves as a foundation for developing organizational resilience when facing adverse events and for acting in uncertain situations. The business owners that we examined in this report displayed all or some of the below entrepreneurial attitudes before, during, or after the natural disaster.

**Personality traits:** Willingness to adapt, flexibility, proactivity, self-efficacy, openness to learning, and high place and community-based motivation. For example, as cash from family and friends dried, they had to learn how to apply for loans, grants, and tenders—some did not get these grants, but they kept trying and held a positive attitude. They do not stop and wait for the state or other institutions to aid business (motionless state) but deviate from concrete plans (flexibility) and consider what they can achieve with the available resources (proactive state).

**Skills and competencies:** Ability to interact with suppliers, distributors, customers, and NGOs; ability to recognize market trends, and gaps after the disaster; ability to use multiple skills that they developed in different parts of their lives. For example, a business owner who cannot continue his manufacturing business because it requires high investment, first acts as a manager for others and then uses the cooking skills that he acquired when he was a student in Italy to go into the food business.

**Learning from past experiences:** The SME owners in our sample have gone through multiple crises all within a decade. Many of them had to cross the border on foot or with no belongings. They experienced the pandemic and then the EQs. Even though none of the incidents are similar, their former crisis management experience (personal and business) taught them to be proactive and look for alternative solutions. ASAM, observing how the two communities (Syrian versus Turkish natives) acted after the EQs in Gaziantep, noted that Syrians were faster in acting. Business owners, who had previously worked in NGOs also knew how to organize and deploy humanitarian aid much faster than others.

■ **Business Actions** Despite many adverse outcomes of a natural disaster, SMEs can recover, continue their businesses, or form new ventures (Williams & Shephard, 2016). Clustering their resources with competitors, pivoting to a new way of doing business, or starting over could be some of the post-crisis strategies for SMEs (Miklian, & Hoelscher, 2022). Some may find opportunities to fill gaps in the market, better communicate with their communities, show organizational creativity and resilience, and learn from past mistakes regarding risk management (Gregg et al., 2022). As such, organizational resilience is more than the business owner attributes, it is a multilayered and dynamic process (Yeshi et al., 2022). The SMEs we examined in this report performed the following actions.

**Mobilization of resources:** Reconfiguring the tangible (equipment, machinery, financial resources) and intangible resources (brand and company reputation, industry experience, and technological capabilities) at hand in a creative manner and when resources are absent, locating and providing them from external sources. For example, for Rami (We Plus), his “company reputation”, became a critical resource and helped him to secure merchandise in the resource-constrained environment of the EQs.

**Customization of products and services:** SMEs can adapt or change their products and services to match the needs and circumstances of the victims after the disaster. These changes may alleviate the suffering of the victims and at the same time bring in new business for the SMEs. One of many SMEs that changed their services is Radwan (Urban Research Center); they shifted their work from Syria to Türkiye and built container houses, toilets and wash cabins for the victims in Türkiye.

**Collaborative capability:** SMEs can collaborate with actors in the institutional system (public agencies, NGOs, and other businesses) to better cope with the effects of the disaster on their operations (as opposed to inde-

pendent decision-making or acting). Almost all participants we interviewed reached out to local and international NGOs to ask for support. They received training on entrepreneurship, export markets, legal matters, digital marketing, and loan and tender applications.

**Social capital:** Social capital is important for providing information, fellowship, and support during the crisis. SMEs can develop strong ties with suppliers, distributors, customers, NGOs, and experts and utilize these partnerships after the EQs to minimize the effects of the disaster on their operations, find capital, or start new businesses.

**Social Goals:** Those SME owners with high place and community-based motivation pursued dual goals that are social and commercial. They have opened their doors for the needy and they have provided financial and material resources to their communities. Many mentioned that they continued to pay for their employees even though business had stopped (moral duty). Furthermore, they pursued social goals (e.g. fostering social cohesion through language education or educating the youth free of charge) that complemented their business strategies.



Meet the entrepreneur:

Urban Research Center  
Construction

## Radwan Mouaket

Radwan worked as a maintenance engineer at a cement factory before moving to Türkiye in 2012. He has an undergraduate and a postgraduate degree in mechanical engineering. His grandfather traded with vendors in Gaziantep for years, and as they were familiar with the region they chose to move there. After his arrival, Radwan continued to work in the same sector and later became a subcontractor.

He stopped working as a professional and became an entrepreneur when he was defrauded by the owner of the cement company. He founded an engineering and research consultancy company with a Syrian friend, and their first job was to deliver Syrian city profiles for UN-Habitat. There were times when they were defrauded again or with no contract for months. Yet, they did not give up, and as they learned more about the needs of the region, they also altered their services. They worked for charities and I-NGOs and built schools, hospitals, and tunnels in Syria.

After the earthquakes, all the construction activity stopped in the region, and they had no business. Yet a collaboration of I-NGOs (ACTED, CARE International, and Watan Foundation) opened a tender for building container towns in Türkiye, and Radwan's company won the tender for this project. Their experience in Syria with the NGOs, timeliness in answering the call and delivery, and their flexibility in moving into this new field helped them to receive the contract.

### 5.3.3. Bringing it all together: Factors that determine Syrian-owned SME resilience after the EQs.

The quantitative analysis identified four factors determining the resilience of SMEs after the disaster, which are *collaborative capability, customization, Syrian network, and community resilience*.

While the qualitative analysis reinforced the quantitative findings for the first three factors contributing to organizational resilience, the insights regarding community resilience were less definitive and therefore excluded from the qualitative results section. Several factors may account for this ambiguity. First, our interview sample was relatively small (20 out of 489 participants) and included primarily SMEs in Gaziantep that had rebounded or thrived post-disaster, along with four businesses that had relocated from Hatay. This sampling strategy may have influenced responses, as experiences likely differed in other cities. Additionally, the phrasing of questions related to community preparedness during interviews may have affected participant responses. Many interviewees expressed feeling unprepared for the disaster, receiving minimal external assistance for their businesses (with few exceptions), and perceiving a lack of preparedness services.

*"The quantitative analysis identified four factors determining the resilience of SMEs after the disaster, which are collaborative capability, customization, Syrian network, and community resilience."*

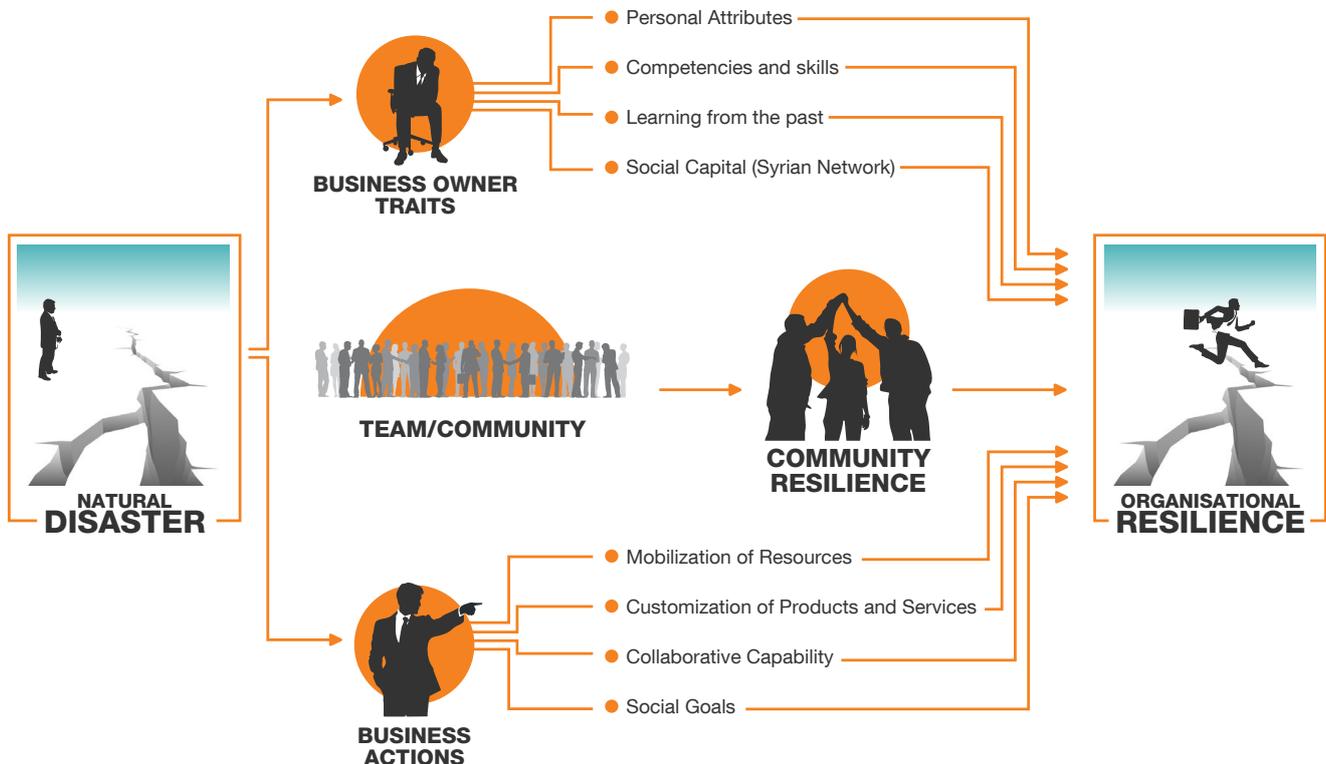
In interpreting the research results, we bring the variables of qualitative and quantitative analysis together. Adapting from the work of Conz et al., (2023), we called the process of becoming a resilient organization “surfing the natural disaster” (Figure 10). Surfing suggests that SMEs interact with the environment in a way that they positively adjust and maintain their functioning before, during, and following adversity. They could rebound but also thrive under these adverse conditions. This is opposed to closing the business, taking no action, or keeping the business as usual against natural disasters.

Overall, the mixed study results confirm that organizational resilience is a multilayered concept and should be examined at individual, team/community, and business levels.

To practice certain business actions towards becoming more resilient, the business owner should have positive traits and competencies that are willingness to adapt and learn, be flexible and proactive, benefit from past experiences, display the ability to interact with multiple parties, and identify gaps in the market after the disaster.

**Figure 10: Organizational resilience of Syrian-owned SMEs explained at individual, community, and business levels**

Source: Adapted from Conz et al., (2023)



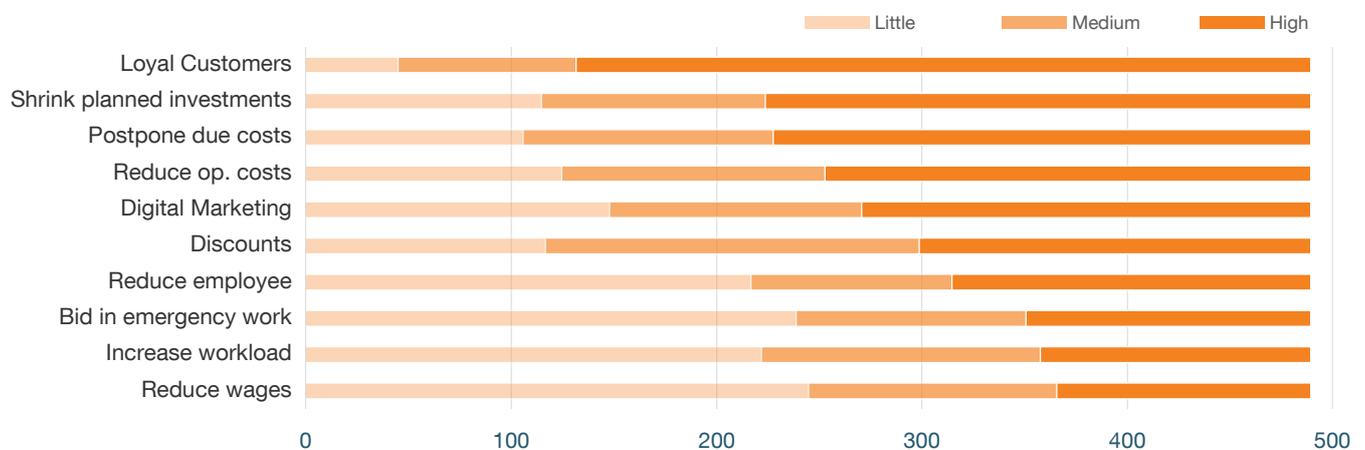
At the business level, the SME should take certain actions that are to mobilize resources and customize products and services to align with the needs and circumstances of the victims, use the wide Syrian network and collaborative capability to better cope with the effects of the disaster on their operations, and ethically and responsibly support their community. Learning from previous disasters should happen at all levels, but particularly learning, preparedness, and programs at the community level will support the SMEs and lead them to become more resilient after a natural disaster.

## 5.4. Strategies and challenges in continuing their business

### 5.4.1. Crisis Management Strategies

We asked SMEs how they managed their business in the aftermath of the crisis. Their actions can be summarized under two headings. They minimized spending by slowing their investments (54%, 265), postponing payables 53.3%, 261), and reducing operating costs (48%, 236). Then they targeted to increase their sales by focusing on loyal customers (73.0%, 357) and utilizing digital marketing (44.5%, 218). As confirmed through the face-to-face interviews, the SMEs continued to pay employees as before and tried to keep the employees they had, as it was already highly difficult to find new employees in the disaster environment. Despite it might seem low (28.1%) as a percentage, a substantial number of the SMEs (138) bid in the emergency work to find a new business (Figure 11).

**Figure 11. Crisis management strategies of SMEs**



### 5.4.2. Challenges in continuing their business

SMEs in the region are grappling with several challenges, both old and new, as they navigate the aftermath of the earthquake. The business environment has been significantly impacted, creating a complex web of issues:

#### Economic and Financial Challenges

- The ongoing economic instability, which has been exacerbated by the earthquake, continues to pose significant difficulties for businesses in the region.
- Office rents have increased due to a reduced number of safe office spaces in the cities affected by the earthquake, adding financial pressure on businesses.
- Customers are increasingly reluctant to make early payments, fearing that another disaster could prevent goods from being delivered, which has led them to seek alternatives outside the region.
- According to our survey, the total number of products and services offered by small and medium-sized enterprises (SMEs) has drastically dropped from 17,706 to 8,760, reflecting the severe impact on their business operations. Our qualitative research indicates that supply chain issues and, in some cases, equipment damage may have contributed to this outcome.
- Businesses continue to face persistent challenges in accessing finance, which is crucial for their recovery and growth in the post-earthquake environment.

#### Market and Customer-Related Challenges

- There has been a decline in the number of Syrians in the region (migrating to other regions or back to Syria), which has negatively impacted the business, particularly those catering to ethnic markets.
- Many customers are hesitant to visit the region due to the perceived risks, further reducing sales and limiting business opportunities.

### Operational and Logistical Challenges

- Mobility within Türkiye and to other countries remains challenging even after the earthquake, leading some business owners to establish companies in other nations (e.g., Dubai) and secure residency there to mitigate these issues.
- Renewing work permits has become increasingly difficult, affecting the availability of skilled labor essential for business operations.

### Physical and Environmental Challenges

- Even when the business did not suffer any physical damage, personal residences were often damaged, adding to the difficulties faced.
- The initial lack of necessities, such as electricity, gas, food, water, and medicine, compounded the challenges faced by businesses and their employees in the aftermath of the earthquake.



Meet the entrepreneur:

**Gidmak Food Machinery**  
Manufacturing

## Ahmad Almahmoud

Ahmad's company, established 24 years ago in Syria, relocated to Türkiye in 2013, where it continued operations while navigating language barriers and regulatory challenges. Regulations were initially more accessible, but complexities grew over time. Though the business itself sustained no physical damage during the earthquake, Mr. Ahmad's residence was affected, making housing a significant challenge. For 2.5 months, he had to sleep in the workplace, facing difficulties in securing housing as well as essential resources like food, water, and medicine. Initial support was limited, though later, government aid, including food, was provided. KOSGEB also offered assistance, albeit unrelated to the earthquake.

The company faced workforce challenges as five employees left following the earthquake. However, Ahmad responded by acquiring new machinery, allowing operations to resume within a month, and eventually hiring seven new employees. In the aftermath, the company expanded its marketing efforts to international markets, including Romania, the Netherlands, Russia, and Germany, while also targeting new cities within Türkiye, such as Konya, Bursa, Kayseri, and Ankara. With a goal of becoming a leading industry player in the next five years, Gidmak Food Machinery is now focused on stability and strategic growth.



# Recommendations & Conclusions

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Our analysis led to key recommendations for both Syrian SME owners and supporting public agencies and NGOs. Implementing these strategies can significantly bolster the resilience of SMEs in the wake of disasters.

## ■ Syrian SME owners

**a. Risk Assessment and Mitigation:** Integrate realistic risk assessments and mitigation strategies into business planning. Diversify inventory and manufacturing locations to prepare for natural disasters. These risk assessments not only guide business continuity but also enhance applications for loans, grants, tenders, and partnerships.

**b. Customer and Supplier Diversification:** Avoid relying solely on local customers, as demand, purchasing power, and availability can drastically shift post-disaster. Geographically diversifying customer and supplier bases can buffer against these impacts.

**c. Assurance of Business Continuity:** Reinforce customer trust by assuring continuity post-disaster. Increase communication through online meetings, active social media presence, industry fairs, and customer visits. For those unable to travel, consider pooling resources with other SMEs to hire sales representatives.

**d. Digitalization Strategy:** Invest in digital marketing, sales, and operations. Leveraging AI tools can reduce costs, save time, and enhance impact in both marketing and operational efficiency.

**e. Competitive Strategy Beyond Cost:** Businesses focused solely on low costs may struggle as input prices rise. Explore hybrid competitive strategies that blend cost leadership with differentiation, emphasizing unique services, innovation, and branding.

**f. Employee Attraction and Retention:** To address labor shortages in a region that has lost appeal due to cost and safety concerns, consider non-financial incentives. Flexible hours, remote work, shared housing, internships with vocational schools, and inclusive hiring (e.g., for women and people with disabilities) can help attract and retain skilled employees.

## ■ Public Agencies and Emergency Services

**a. Emergency Training for Business Owners:** Provide localized training for SMEs on disaster preparedness, including sheltering, evacuation routes, and tenant rights. This prepares owners to protect themselves, their employees, and their assets during disasters.

**b. Continued collaboration with civil society actors** Syrians who have worked in humanitarian NGOs after they arrived in Türkiye, have benefited from this experience as 1) they met future business partners, 2) they learned how to assess forced migrant needs and mobilize resources to assist them, 3) they developed their social capital that supports their business, and 4) they became aware of social issues in the community. In a way, the NGOs and civil society organizations acted as incubators for future entrepreneurs. We suggest policymakers continue to allow these NGOs to work along with public agencies in supporting forced migrants.

**c. Collaboration with community leaders:** Recognize Syrian business owners who actively mobilize resources in crises. It is easier and faster for local social networks and community-based organizations to organize emergency support during natural disasters in their communities. As our research suggested there are those Syrian business owners who can mobilize resources swiftly during a crisis. Government and emergency services can collaborate with these community-based leaders to enhance emergency preparedness and response efforts.

## ■ NGOs and other Civil Society Organizations

**a. Improved training modules:** Information is not enough to deal with the uncertainty in the disaster environment; business leaders need to have an adaptive posture and display flexibility in dealing with changes in the external environment. The assumption that Syrians will be adaptable and survive through any change because they have gone through several crises (the war and the pandemic), would be oversimplifying the severity of the situation. Go beyond basic disaster preparedness and business planning. Introduce training in change management skills such as agility, proactive thinking, and scenario planning to strengthen adaptability.

**b. Insurance coverage:** Mentor SMEs on the importance of insurance for risk coverage. Advocating for collective insurance arrangements can make premiums more affordable, while also providing guarantees to risk-averse customers.

**c. Assistance with labor shortage:** Many NGOs aim to match Syrian workers with local employers, yet candidates often lack the required skills. Partner with vocational schools to better prepare candidates for skilled positions in SMEs.

**d. Financial assistance:** Micro-grants from NGOs and I-NGOs have significantly helped SMEs rebound. Continuing and scaling these grants, combined with technical training, will further support SME resilience.

**e. Social entrepreneurship:** As some SMEs are acting similarly to social entrepreneurs and pursuing hybrid goals (commercial and social), it will be in the best interest of the owner to be recognized as such and receive further mentoring for scaling up their operations.

■ **Conclusion:** In conclusion, enhancing the resilience of Syrian-owned SMEs in the face of earthquakes requires a multifaceted approach that addresses their unique vulnerabilities. By integrating targeted preparedness programs, fostering community support networks, and ensuring equitable access to resources and services, we can empower these communities to better withstand and recover from seismic events. Collaborative efforts between governments, NGOs, and local communities are essential in creating sustainable strategies that not only mitigate the immediate impacts of earthquakes but also build long-term resilience, ensuring that forced migrants are not left behind in disaster risk reduction efforts.



# Appendices

## A: Constructs used in the survey and a selection of the survey questions

Variable	Item	Survey Question
Business Resilience	Business response to the disruption	<ul style="list-style-type: none"> <li>■ Coping with changes</li> <li>■ Adapt business operations</li> <li>■ A quick response</li> </ul>
Community Resilience	Community response to the disruption	<ul style="list-style-type: none"> <li>■ Taking precautions</li> <li>■ Preparation for future disasters</li> <li>■ Providing emergency services</li> <li>■ Helping others</li> </ul>
Customization	Business response to the changing customer demand	<ul style="list-style-type: none"> <li>■ Response to the changing demand</li> <li>■ Change in the variety of products and services</li> <li>■ Adapt business operations</li> </ul>
Collaborative Capability	Collaborative capability vs Self-solving capability of the business	<ul style="list-style-type: none"> <li>■ Independent working</li> <li>■ Collaboration with the government, NGOs, or other businesses</li> </ul>
Quality of Social Capital	Received support in	<ul style="list-style-type: none"> <li>■ Emergency related services</li> <li>■ Business related services</li> </ul>
Quality of Infrastructure	Infrastructure's quality in the cities where they are	<ul style="list-style-type: none"> <li>■ Good utility</li> <li>■ Good transportation</li> <li>■ Good telecom</li> </ul>
Personal Networks	Networks' role in business recovery Syrian and Turkish	<ul style="list-style-type: none"> <li>■ Availability of a Syrian/Turkish network</li> <li>■ Resource transfer from networks</li> </ul>
Organizational Learning from Others	Sources of learning	<ul style="list-style-type: none"> <li>■ Competitors</li> <li>■ I-NGOs</li> <li>■ Local NGOs</li> </ul>

## B: List of the twenty businesses that took part in the interviews

	SME Name	Business Owner	Primary Industry
1	Ask Eğitim	Khalid Akil	Education
2	We Plus	Rami Sawas	Wholesale and retail sales
3	SOLO Lasagna	Fadi Fael	Food and beverage service
4	Ocean Perfumes	Abdulkarim Alfaleh	Manufacturing
5	Watfa	Zakariya Watfa	Manufacturing
6	Gidmak Food Machinery	Ahmad Almahmoud	Manufacturing
7	Hani Tekstil, Perde ve Aksesuarları	Mohamad Hani Battikh	Manufacturing
8	Lazord	Lobna Heli	Food and beverage service
9	Gözlerin Işığın Merkezi	Safa Sawan	Wholesale and retail sales
10	Efkar Design	Muhammed E. Kattan	Manufacturing
11	Elite	Adbulaziz Neccar	Transportation and storage
12	Livingit Education Center	Nour Almushref	Education
13	Rotana Tekstil	Münira Elmeşal	Manufacturing and wholesale-retail sales
14	Najmat Al Furat	Abdulrahman Alsahen	Wholesale and retail sales
15	Trust Consultancy and Development	Youssef Almustafa	Professional, scientific, and technical activity
16	Urban Research Center	Radwan Mouaket	Construction
17	Jiji Shop	Joumana Alyousef	Manufacturing
18	Space Toon Oyuncak	Zübeyde Elşiyhyasin	Wholesale and retail sales
19	Oris Magic	Abudrezk Rahal	Manufacturing and wholesale
20	Imaar for Training and Development	Amr Bitar	Education

## C: Interview guidelines

### Part 1 Open Ended Questions

- 1 Can you tell us about your migration story? (e.g., countries visited, or cities settled; the jobs that are undertaken)
- 2
  - a. What was your profession before moving to Türkiye?
  - b. Did you own a business before moving here? What was the sector of the business?
  - c. Were you trained in this profession at school, or did you learn this in practice?
- 3
  - a. What were some challenges you faced when establishing your business in Türkiye?
  - b. Did these challenges continue when operating your business?
- 4
  - a. Where was your business before the 2023 earthquakes (city)?
  - b. What happened to your house (and family), business place and employees after the earthquake (physically)?
- 5
  - a. If you had to move, where did you move to (city, and stayed with whom?),
  - b. When did you come back to this town?
  - c. What were your needs as a businessperson (immediate, three months, six months, and a year)
- 6
  - a. Can you tell us what happened to your business after the earthquake (immediately, three months, six months, and a year) (Relocate, shut down, continued as is, scaled-down, added new products & services, had to find new partners, etc.)
  - b. What were the business opportunities you followed after the EQ? How did you decide?
  - c. Following the earthquake, did you offer assistance to your business partners, family, or community members who were affected by the earthquake? If yes, could you share the details?
- 7
  - a. What changed your business after the earthquake?
  - b. How did you find suppliers?
  - c. How did you reach your customers? (Local vs. Syrian or other nationality)
  - d. How did you find employees?
  - e. How did you access capital?
- 8
  - a. Who supported you (your business) in the aftermath of the earthquake?
  - b. Whom did you consult after the earthquake (family & business partners, community members, family and friends living abroad, Syrian-owned businesses, Chambers of Commerce, etc.)
- 9 What were some of the factors that contributed to your enterprises' survival/ failure after the earthquake?
- 10 Where do you see the business in 1- and 3-years' time? (e.g., stability vs. growth)
- 11 What is needed to achieve these goals (Legal, Financial, Technological, or Human Capital based)?
- 12 What are the challenges you foresee for your business in the near future?»

### Part 2 Demographic Questions for the Owner and the Enterprise

- 1 Name of the enterprise
- 2 Business sector
- 3 Primary Enterprise city, borough, number of subsidiaries (cities, if any)
- 4 Name of the participant
- 5 The year arrived; the year temporary protection status (TPS) taken or citizenship(ID)
- 6 The profession (including education)
- 7 Position of the participant (Owner, Partner, Manager)
- 8 Establishment year of the enterprise
- 9 Ownership structure, Partners as local/TPS or from overseas?
- 10 Number and breakdown of employees (Local vs. TPS)
- 11 Local language proficiency
- 12 Exporting of products and/or imported materials.

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