

RESEARCH

Spotlight



The Eye of the Storm: Small Businesses and Natural Disasters

By Robert Press, Regulatory Economist • October 2024

Natural disasters impact all aspects of life when they occur, and small businesses are no exception. Between 2017 and 2021 the President issued 282 disaster declarations (excluding the COVID-19 pandemic) which are overseen by the Federal Emergency Management Agency (FEMA). These natural disasters¹ affected 2,302 counties in 49 states, as well as five territories (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands), and 53 Tribal Nations. In addition, the Secretary of Agriculture issued drought disaster designations² for 1,500 counties in 47 states, as well as two territories (Puerto Rico and the U.S. Virgin Islands), and 13 Tribal Nations. The Small Business Administration (SBA) provides disaster assistance to small businesses in need of relief to help them recover from disasters of all types. This research spotlight shows that small businesses are disproportionately affected by natural disasters and they warrant continued support as future disasters hit.

Small businesses with less than 500 employees are more likely to be in counties where a natural disaster is declared, when compared to large businesses. As Figure 1 shows, establishments owned by small employers were 1.8 percentage points more likely to be struck by a natural disaster than their large counterparts each year (42.4 vs. 40.7 percent).

¹ While FEMA can declare disasters for manmade events, such as a chemical spill, none occurred in the period considered in this spotlight.

² The USDA may also declare a disaster designation for other types of disasters. Most, except for drought, are coincident with FEMA declarations and are not discussed in this spotlight.

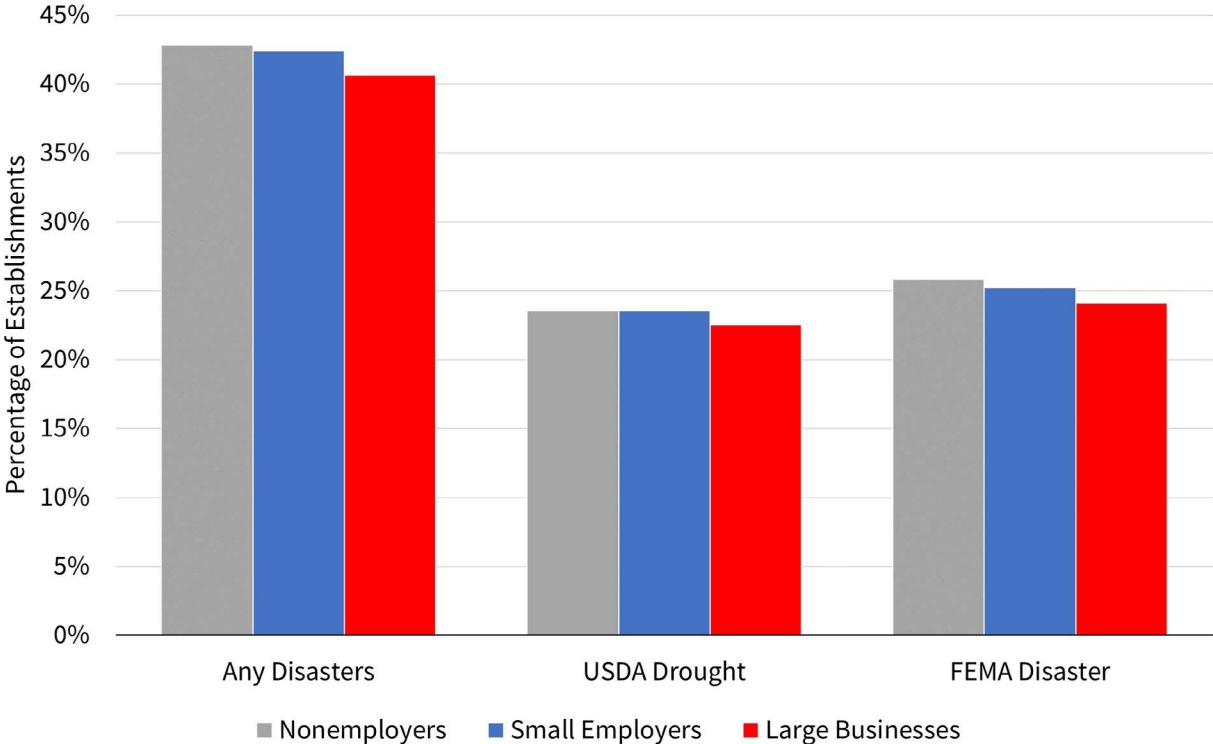
DATA NOTES

Due to data limitations, it is not possible to know if a business establishment was directly impacted by a disaster, only that it was in a county with a FEMA disaster declaration or USDA disaster designation. This spotlight combines data from four sources:

1. [FEMA's list of declared disasters](#) provides a list of counties, territories, and tribal governments which requested federal assistance from each disaster and approved by the President.
2. [The USDA's list of disaster designations](#) provides a list of counties, territories, and tribal governments which requested federal assistance for agricultural disasters and approved by the Secretary of Agriculture. While an agricultural disaster can be something other than a drought, most others are coincident with FEMA disaster declarations and are thus not considered in this spotlight.
3. [The Census Bureau's Statistics of U.S. Businesses](#) includes a tabulation of the number of firms, establishments, and employees for various sizes of firms with employees at the county level.
4. [The Census Bureau's Nonemployer Statistics](#) are used to find the number of establishments without employees in each county.

If small businesses were impacted at the same rate as large businesses, 580,000 fewer small employers would have experienced a disaster between 2017 and 2021.³ Nonemployers were the most likely to be in impacted counties, with 42.9 percent experiencing a natural disaster each year between 2017 and 2021.

Figure 1: Business Establishments in Disaster Areas by Firm Size, 2017 - 2021



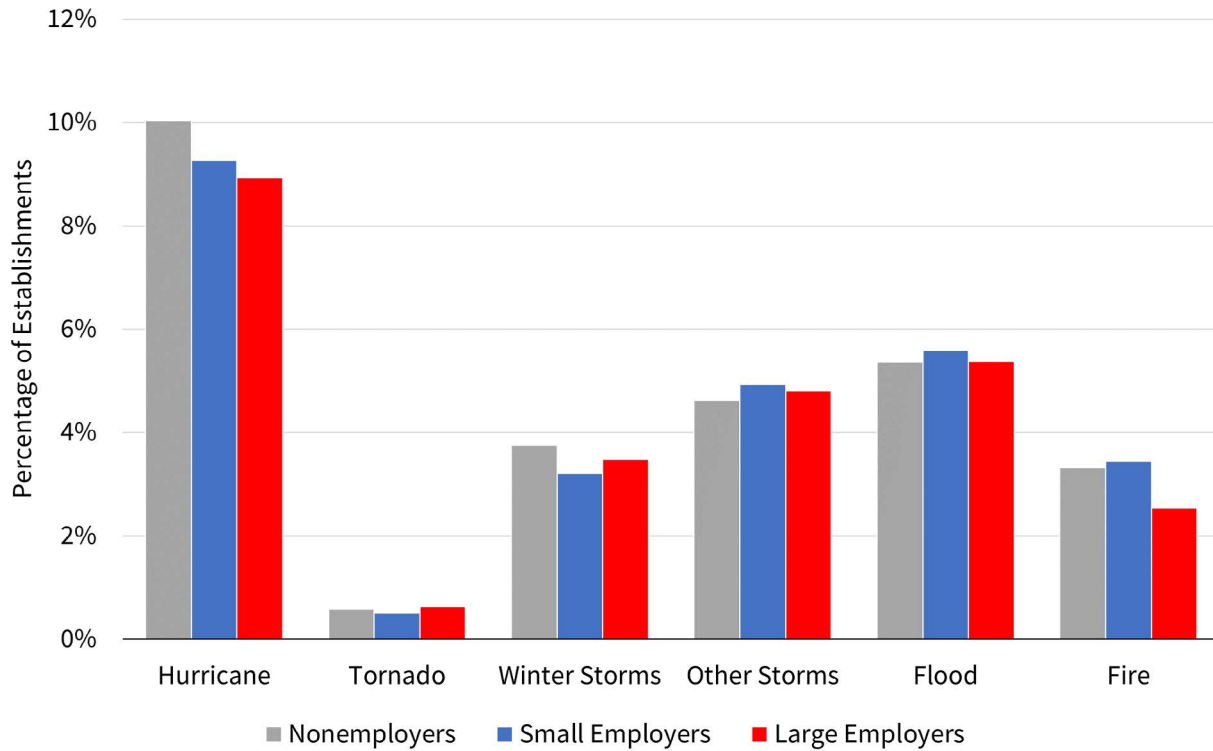
Source: FEMA, USDA, SUSB, NES 2017-2021, author's calculations

Establishments may experience disasters of multiple types in a single calendar year, so the sum of individual categories exceeds the total. Drought data comes from the USDA, while all other disaster data comes from FEMA. Small employer businesses are those with between 1 and 499 employees, while large employer businesses are those with 500 or more.

The increased disaster risk of small businesses is because they are disproportionately located in disaster prone areas. Rural areas outside metropolitan statistical areas⁴ and along the southeastern coast of the country⁵ are more likely to experience droughts and hurricanes, respectively. While 83.6 percent of all employer establishments were operated by a small business in 2021, the percentage rises to 85.2 percent in rural areas and 84.3 percent along the southeastern coast. Similarly, 56.6 percent of employees in rural areas and 50.3 percent of employees along the southeastern coast worked for small business, while 48.3 percent of employees worked for small businesses nationwide.

³ In SUSB, there are 33.1 million small employer establishments over the five-year period.
⁴ Counties inside Metropolitan Statistical Area can be found at [2017 Metropolitan Area Delineation, Census Bureau](#).
⁵ For the sake of this spotlight, an establishment is on the southeast coast if is in a coastal county in the following states: Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, or Texas.

Figure 2: Business Establishments in FEMA Disaster Areas by Firm Size, 2017 – 2021



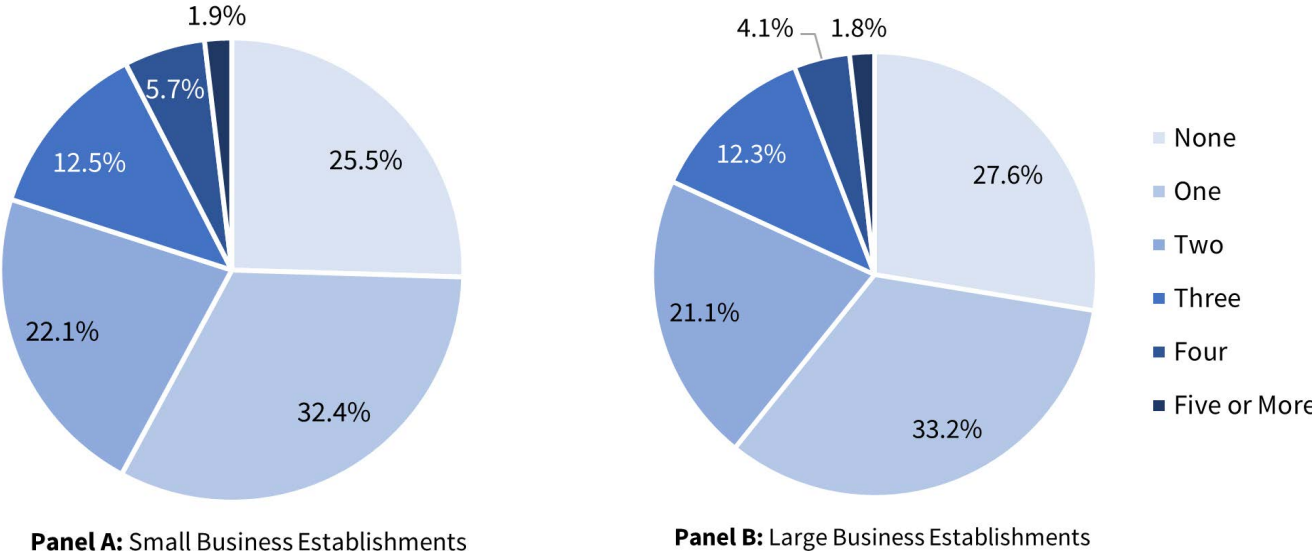
Source: FEMA, SUSB, NES 2017-2021, author's calculations

Establishments may experience disasters of multiple types in a single calendar year, so the sum of individual categories exceeds the total. Small employer businesses are those with between 1 and 499 employees, while large employer businesses are those with 500 or more.

The most frequent type of disaster affecting all businesses is drought, with 23.5 percent of all establishments experiencing a drought each year. Whereas the onset of drought can be slow, other disasters can appear suddenly. As Figure 2 shows, businesses, large and small, can be struck by many different disaster types. In addition to droughts declared by USDA, FEMA declares disasters for hurricanes, tornadoes, storms, flood, and fires. When broken down by type of disaster, droughts, hurricanes, and fires are the types which disproportionately impact small businesses.

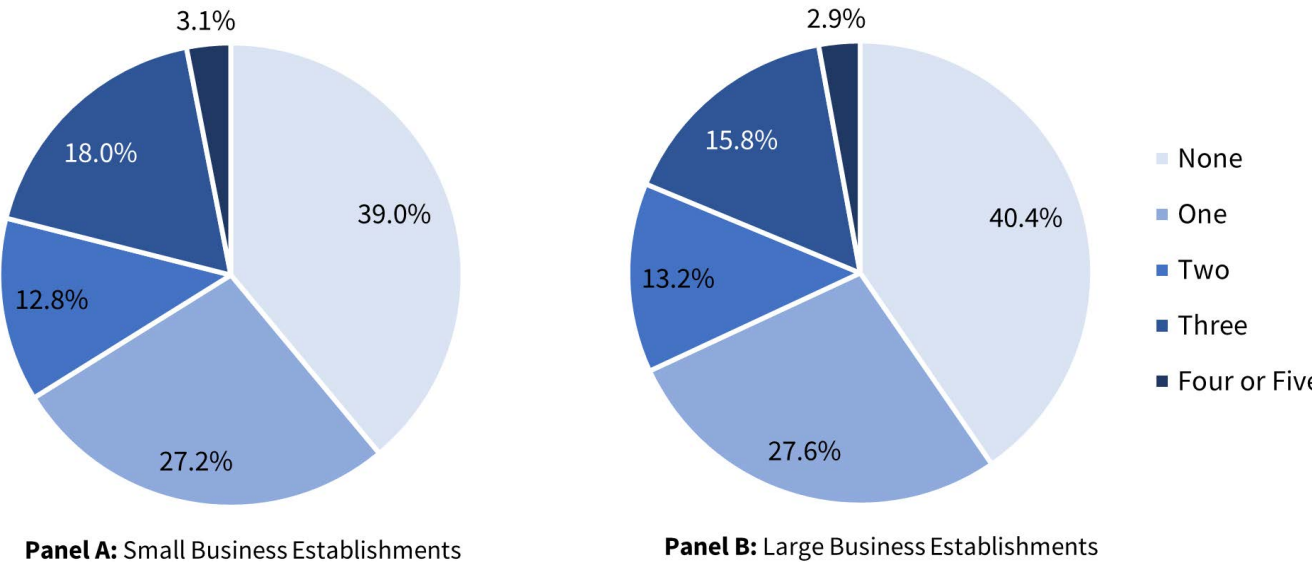
While in any given year most small business do not experience a disaster, some have repeatedly experienced disasters between 2017 and 2021. As seen in Figure 3, 22.1 percent of small employer establishments experienced two FEMA disasters, 12.5 percent experienced three disasters, 5.7 percent experienced four disasters, and 1.9 percent experienced five or more. All these rates exceed those experienced by large business establishments. Similarly in Figure 4, small businesses are more likely to have experienced multiple years of drought with 18.0 percent experiencing three years of drought and 3.1 percent experiencing four or five years of drought.

Figure 3: Employer Establishments Experiencing Multiple FEMA Disasters, 2017-2021



Source: FEMA, SUSB 2017-2021, author's calculations.

Figure 4: Employer Establishments Experiencing Multiple USDA Droughts, 2017-2021



Source: USDA, SUSB 2017-2021, author's calculations.

Values in Figures 3 and 4 represent the number of disasters declared over the full five-year period. The percentage of establishments is calculated based on 2021 SUSB numbers. Small employer businesses are those with between 1 and 499 employees, while large businesses are those with 500 or more.

As part of its mission to support small businesses the SBA loaned out \$2.2 billion to business experiencing disasters between fiscal years 2017 and 2021,⁶ but these loans represent just a fraction of the total damage. According to the 2017 Small Business Credit Survey, only 25 percent of small businesses with disaster-related losses applied for SBA disaster relief. The majority of affected small businesses do not apply for SBA disaster loans because they may not be aware of the assistance, lack the time or resources to apply, or favorable interest rates may only be available to businesses which have exhausted their other options first, including insurance payouts, aid from state or local governments, or private loans. Furthermore, while small businesses are potentially impacted by many disasters, the majority of damage comes from hurricanes. In 2017, 92 percent of small business with losses from a disaster came from just three hurricanes (Irma, Harvey, and Matthew), while between 2020 and 2023, 58.8 percent of SBA disaster loans were directed towards hurricane relief.⁷ Because of their vulnerability to natural disasters, it is vital that small businesses receive support following a disaster.

⁶ Available at [Disaster Summary Report, Small Business Administration](#). Excludes home loans.

⁷ Available at [Disaster Declaration Summary, Small Business Administration](#), excludes COVID-19 pandemic, manmade events, and home loans.