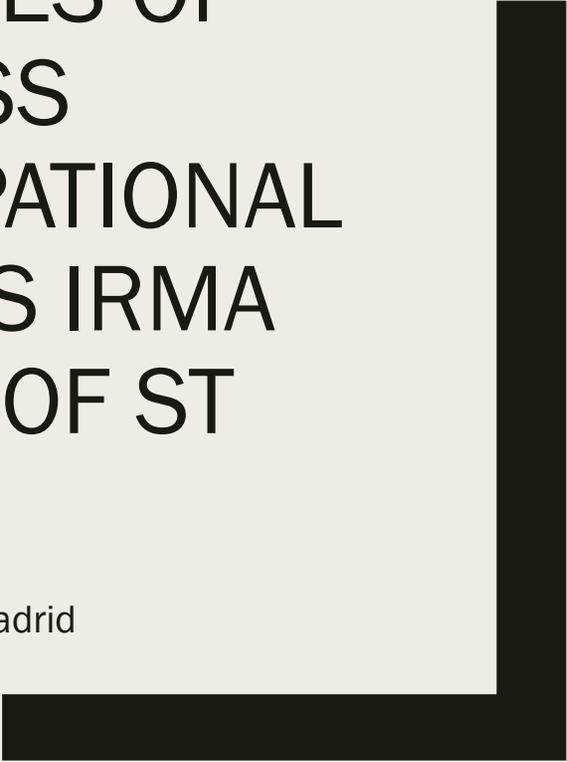


OPPORTUNITIES IN TIMES OF
TEMPEST: BUSINESS
ADJUSTMENT AND OCCUPATIONAL
LOSS POST HURRICANES IRMA
AND MARIA. THE CASE OF ST
MAARTEN

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Overview

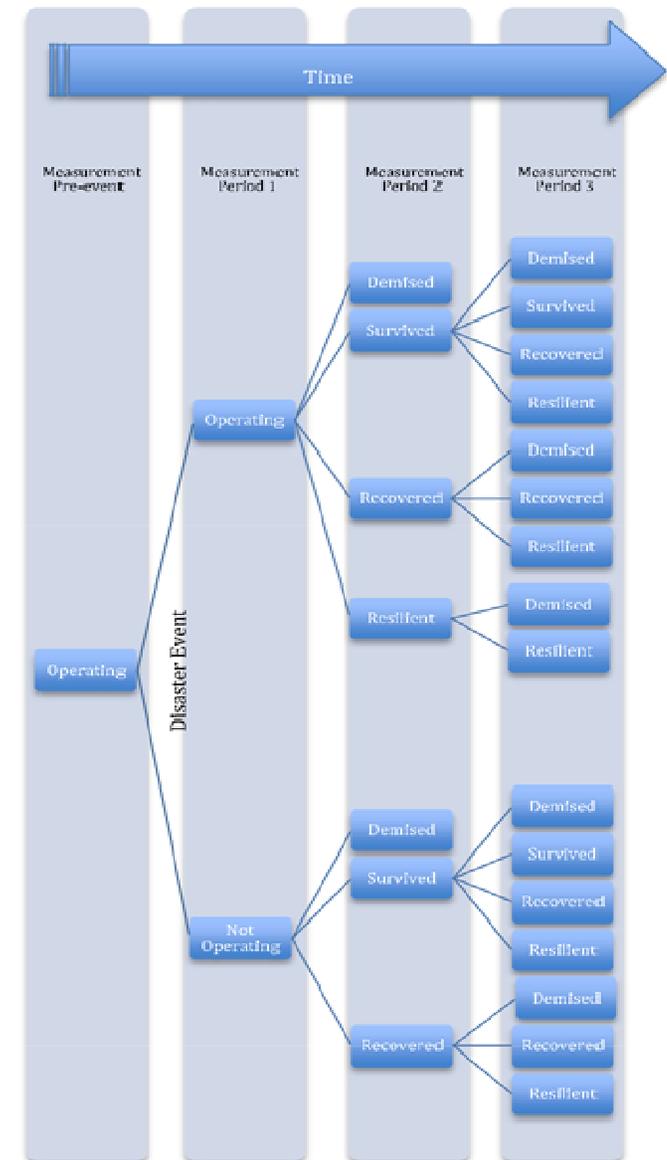
- This paper aims at identifying business adjustments as a consequence of hydro-meteorological events in the Caribbean, and provide recommendations for policy response towards resilience in natural disaster-prone Caribbean SIDS.
- This paper studied operators of (small) hospitality outlets on the island that have suffered severe damage and map the resurgence of the industry after two years.

Literature

- Economic disruption and infrastructural damage to cause displacement, unemployment, occupational loss and migration (Groen, Kutzbach, & Polivka, 2016).
- Studies on the labor impact in areas less prone to hurricanes show that the impact seems to be mostly positive on wages and formal jobs for low educated workers, regardless for intensity of the hurricanes (Rodríguez-Oreggia, 2013).
- Businesses suffering physical damage (particularly for small firms and less-productive establishments) have lower levels of survival (Basker & Miranda, 2014).
- Previous studies have recommended policies should explicitly integrate climate change impacts into their design, such as providing temporary support to facilitate migration, in situ adaptation or integration and adaptation in destination areas (Schwan & Yu, 2017).

Literature

- When assessing recovery of small businesses, it is imperative that this assessment is of longitudinal nature, enabling examination of all decisions made by business owners, business operators, the self-employed and entrepreneurs before and after disaster strikes, and if possible, during the disaster itself (Marshall & Shrank, 2014)



Literature and RQ

- Studies have shown that disaster-induced migrants are most affected, even if relocation is temporary (Zissimopoulos & Karoly, 2010).
- Other studies provide surprising evidence that in Hurricane Katrina victims' incomes actually surpass that of controls from similar unaffected cities (Kawano, 2014).
- Considering that island dynamics are different than mainland:
 - *How does disaster-induced migration guide business model adjustment in disaster prone Caribbean SIEs?*

Literature & RQ

- After disaster has struck, it is expected that creativity and speed of adoption of technologies increase (Shklovski et al., 2010), as a means to catch up in the absence of typical inputs.
- Businesses need to use technologies to communicate their needs and request support. The need for support is immense and businesses turn to the means that are available through a process of bricolage (Baker & Nelson, 2005; Evers & O’Gorman, 2011; Mair & Marti, 2009).
- Considering that island dynamics are different than mainland:
 - *How technological gaps guide business model adjustment in disaster prone Caribbean SIEs?*

Small Island Economies

- Susceptible to extreme climate events & foreign market developments (Briguglio, 1995)
- Diverse in administration and crisis coping mechanisms
 - *Small Island Developing States*
 - Sovereign nations with supreme authority on coping mechanisms
 - *Sub National Island Jurisdictions*
 - Exclusive access to more advanced coping mechanisms, through shelter agreement with partner nation (Thorhallsson, 2018)
 - Citizens of SNIJ's can migrate with less hurdles, so as to cope with adverse effects of storms
- Underrepresented in Research, despite recurrence of hurricanes

METHODS



St. Maarten

- It is expected that adverse effects are unobservable at first sight, due to migrant response differing from permanent residents, and nationals.
 - *The island of St. Maarten hosts migrant workers in the hospitality industry on a seasonal basis, which is only observable in their disproportionately large general pension fund (SVZ, 2019)*
- The proximity of the island and its ability to accept cruise ships, however, enable the island to rebound in a relatively timely manner, allowing for demand in the hospitality sector to return.
- This allows for business rebirth, as opposed to socially inefficient exits observed in the post disaster scenes in the United States cited by Baker et al (2014).

Research Setting

Puerto Rico

- Quantitative secondary data from Puerto Rico have been reviewed to determine impact and medium/long term effects in SNIJ's

St Maarten

- Qualitative primary data from St. Maarten has been collected from a sample drawn from the owners of surviving businesses, by means of a focus group.

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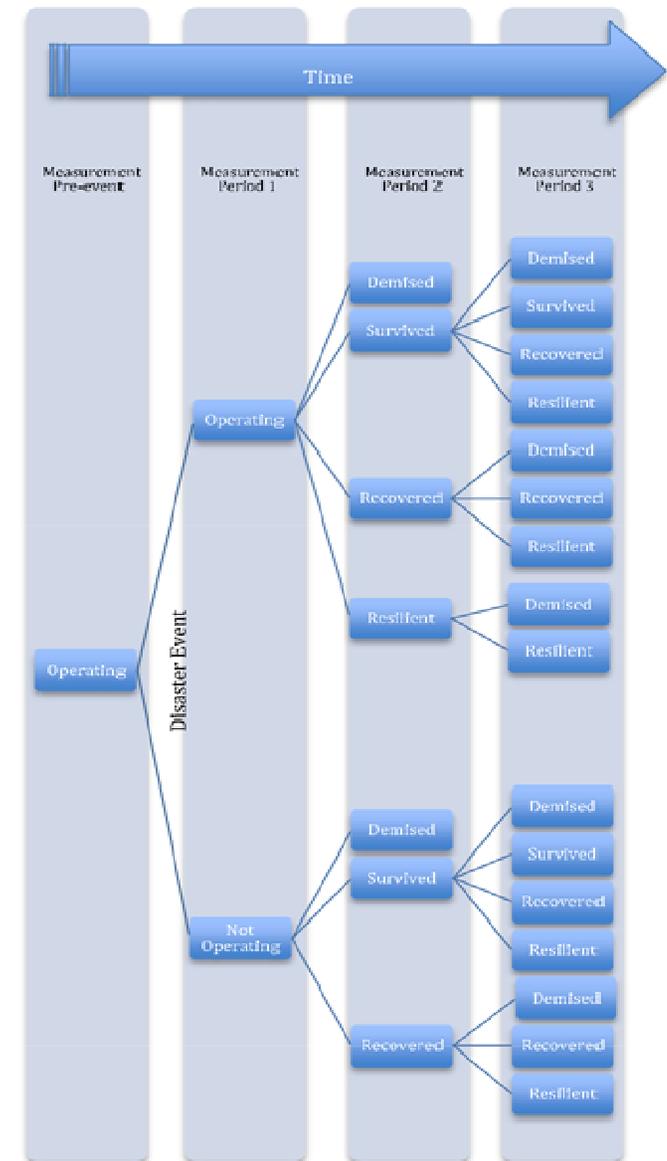


Puerto Rico

- The Airline Passenger Traffic Domestic Data (APT) measured 301,304 net out-migrants during 2017 and between the months of September 2017 to December 2017 a net 195,957 net out-migrants alone, with adjustments to these tallies along the way (Schachter, 2019)
- The island of Puerto Rico remains damaged in its infrastructure, technology adoption and its business recovery (Martín et al., 2020).
- However, this has brought an increase in business formation as well as registered number of businesses (Gonzalez Cotto & Rodriguez Martinez, 2018).

Assessment

- Puerto Rico: 3rd Stage
- St Maarten: transitioning between 2nd and 3rd stage



Findings

- Economic and Administrative Intrusion by Shelter provider (the Netherlands)
- Participants indicated that many business owners were unable to return to business because of the high dependence on tourism, having both airports on the island and the cruise terminal inoperative for several weeks after passing of the storms.
- Temporary abandonment of property or seeking work elsewhere (particularly in metropolises) enable another financial position that facilitate a recovery on the longer term. So business owners have had little incentive to adjust business models.
- Owners felt a responsibility towards the employees and have taken it upon themselves to search for and care for employees; so as accelerate the chances of survival of the business.

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Contribution

- Findings in this study suggest that SNIJs face more difficulties in the process to recovery, as considerable amount of dependence is placed on the supranational government. Occupational recuperation, through business renewal/rebirth.
- Migration patterns determine, in substantial part, whether or not business owners adjust business models
- Migration influences the size of domestic economy and fortifies businesses that are more resilient, due to loss of competition of small businesses vulnerable for hurricane damage
- These developments do not raise the need to close technological gaps observed on the islands.

Recommendations

- Occupational Loss Insurance for Employed population, relieves financial pressure for business owners and speeds up business recovery.
- Mandatory Insurance review can improve the position of vulnerable businesses, so that they can recover.
- Adoption of a centralized Climate Relief and Recovery scheme by Government is welcomed by business owners.

Thanks

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References

- Chamlee-Wright, E. (2018) The power of narrative in post-disaster entrepreneurial response: The Review of Austrian Economics 31-4
- Irizarry, J.G., Rolon Dow R; Godreau, I.P. (2018) Después del Huracán: Using a Diaspora Framework to Contextualize and Problematize Educational Responses Post-María, Centro Journal 30-3, 254-278.
- Jiang, L., Tedeschi, C. & Subaiya, S. (2018) Cross-sectional Survey of Long-Term Care Facilities in the Rockaway Peninsula: Preparedness and Response During Hurricane Sandy: Disaster Medicine and Public Health Preparedness 12-2 pp. 194-200
- Hedges, J.R.; Soliman, K.F.A.; D'Amour, G.; Liang, D.; Rodríguez-Díaz, C.E.; Thompson, K.; Romaguera, J.; Rabionet Sabater, S.E.; Yanagihara, R. (2018) Academic Response to Storm-Related Natural Disasters—Lessons Learned. *Int. J. Environ. Res. Public Health*, 15, 1768.
- Lyster, R. & Verchick, R. eds., (2018) Research handbook on climate disaster law: barriers and opportunities
- Simmons, K. & Kovacs, P. (2018) Real estate market response to enhanced building codes in Moore, OK: *International Journal of Disaster Risk Management*, 27-1