Research by **Mikaella Polyviou**, *Assistant Professor of Supply Chain Management*

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The power of social capital

The epic wildfires that ravaged Northern California in recent years have scorched tens of thousands of acres and caused an estimated $16.5 billion in damage. When Hurricane Maria tore through Florida and Puerto Rico in 2017, it was one of the worst humanitarian catastrophes in U.S. history and one of the costliest, with damages hitting nearly $1 trillion.

Disasters both threaten the human population and destroy natural resources, they also tax the nation’s infrastructure and economy.

Put another way: They’re bad for business. Because natural disasters can have such a devastating impact on the economy and an individual organization’s abilities to stay afloat, Assistant Professor of Supply Chain Management Mikaella Polyviou studies how businesses avoid sinking and recover from disruptions to their supply chains.

What is a supply chain disruption?

“We look at a disruption as an interruption in the flow of products, services, or information from a supplier to a buyer,” Polyviou explains, adding that such interruptions are most often caused by natural disasters but could also be brought on by other events, such as a pandemic, labor strikes at ports or factories, or the imposition of tariffs.

Occasionally, disruption can result from something positive, such as a surge in customer demand. “A company might experience an increase in consumer demand but not have the product in inventory or its production capacity is tied up, so it has to do something to build up inventory or capacity quickly,” Polyviou says. Larger companies have built-in backup plans such as excess production capacity or additional supply sources and transportation providers, while smaller ones usually don’t.

Middle-market disruption challenges

A body of scholarship on how large companies cope with unexpected disruptions exists, but Polyviou and her colleagues found that medium-sized companies — those with annual revenues between $10 million and $1 billion — are under-researched, so the team made that sector the focus of their study.

“They are the backbone of the U.S. economy,” Polyviou says. “If they’re not doing well, that can have implications on larger companies, which are often customers of medium-sized companies, and a big part of the economy — a domino effect.”

Compared with large companies, medium-sized firms typically have fewer financial and technological resources and less access to capital, and lack many other capabilities that large companies have to deal with disruptions. “If things go wrong, large companies have buffers like additional inventory and multiple suppliers, or have power over their suppliers through their larger sourcing volume,” she says. “We don’t typically see that in the middle market.”

Given their limited resources, scale, and influence in the supply chain, if medium-sized companies don’t have the capabilities to weather storms, what are they relying on to avoid and bounce back from disruptions in their supply chain? According to these researchers, it’s the power of social capital.

The power of human relationships

Polyviou and co-authors Keely L. Croxton and A. Michael Knemeyer at the Ohio State University Fisher College of Business find that medium-sized companies gain strength from within, tapping internal social capital, a resource rooted in human relationships. In other words, managers and employees garner the strength of their relationships and work together quickly to formulate plans and solutions.

“The way medium-sized companies are configured and the way that the relationships develop among their people help them not only avoid disruptions but also recover from those disruptions quickly once they happen,” Polyviou explains. There’s hidden value in the relationships that form in close quarters and daily watercooler conversations.

The study, which resulted in the paper “Resilience of Medium-Sized Firms to Supply Chain Disruptions: The Role of Internal Social Capital,” published in the *International Journal of Operations and Production Management* in 2019, examined four different medium-sized companies based in the U.S. The findings revealed that medium-sized firms “excel in their ability to generate internal social capital through structural, relational, and cognitive components,” which improves their abilities to be resilient to interruptions in the supply chain.

Some of these components include having smaller, co-located teams, reducing the red tape to approving decisions, building close relationships among employees and managers, and retaining high-tenured employees.

Lessons for big, mid-sized companies

The researchers say this study is the first to look at resilience in medium-sized companies, and suggest a few key takeaways. One is that medium-sized firms should foster internal social capital and close management teams as they grow. “They should be careful about how their internal structure changes,” says Polyviou. “Do more people get added as key decision-makers as these companies build plants and expand their operations around the world? And what are the implications of that when a disruption happens and they need to reorganize quickly to deal with the disruption?”

Larger firms can also benefit from the findings by collaborating with medium-sized companies to build resilience in their supply chains.

What’s more, large firms could take the cue from their medium-sized counterparts and build up their internal social capital by establishing smaller, nimbler, co-located teams where close interpersonal relationships are more likely to develop. — *Claire Curry*

There’s more to this story with Mikaella Polyviou. Watch the video: wpcareymagazine.com/social-capital