



Demand Surge and Worker Migrations in Disaster Aftermaths: Application to Florida in 2004 and 2005

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This article provides an analysis of how reconstruction costs increased in the aftermath of the 2004 and 2005 Florida hurricanes, disasters that made demand become much larger than production capacity in the construction sector. Data on 14 Floridian cities was used to analyze the historical changes in reconstruction costs and to quantify the rapid increase in repair costs above the expected level of costs should no catastrophic events have occurred. This analysis shows that the demand surge was a significant contributor to price increases for reconstruction between the period of January 2004 and December 2006, with local reconstruction price increases of up to 60 percent in some regions. This paper presents an economic model reproducing this price evolution. The model is used to investigate the geographical details and temporal evolution of the demand surge. Finally, demand surge determinants were investigated. Important drivers were found to be the total amount of losses, the spatial distribution of losses, the simultaneous presence of several disasters, the existence of a reconstruction backlog from previous years, and the pre-existing economic situations. The model suggests that the large demand surge observed after the 2004 season was largely due to the good health of the construction sector in Florida before the event.