Hurricane Katrina as a natural experiment of "creative destruction"

Introduction

Hurricane Katrina slammed into the Mississippi Gulf Coast on August 29, 2006. In coastal Harrison County, Mississippi, 62% of owner-occupied housing and 78% of renter-occupied housing were damaged (FEMA).¹

Katrina was a natural disaster. It could not be prevented or controlled. But the response was anything but natural. The cumulative effect of the response was (to use a cliché) a perfect storm of concurrent interests. Mind you that each of these entities acted in their own economic and political self interests and there is no overt evidence of collusion. However their collective actions have radically changed the course of redevelopment for the Gulf Coast.

Nor is this the story of just one place. Neither this natural disaster, nor it long term effects, are unique to the Gulf Coast. The redevelopment lessons are applicable to every level of human settlement, from towns to major metropolitan areas.

To evaluate and interpret this redevelopment process, I employ Schumpeter's term "creative destruction." Joseph Schumpeter first coined the term in his book *Capitalism, Socialism and Democracy.*² He used it to focus on and describe the process of industrial transformation that accompanies a radical innovation. Those innovations can range from the creation of new markets, the invention of new equipment or processes and new methods of transportation or communication.

In the context of this article, I am using the term creative destruction to describe the process of regeneration after a destructive event (e.g., hurricane, earthquake, massive urban renewal, etc.). This is more similar to Max Page's usage of the term in *The Creative Destruction of Manhattan*, 1900-1940.³

This paper will evaluate how competing private and government interests, through their response, effectively delayed the rebuilding of home and businesses. Some 13 months, and more, after the storm, many homes and businesses remained empty shells. The result has been an economic and regulatory exclusion of previous residents and employees from the coastal area.

The Situation 13 Months After the Storm

During an October 2006 trip to Harrison County, Mississippi, the hurricane's destruction was still evident. The housing photographs were taken in a residential neighborhood near Back Bay just south of I-10, while the business photographs were taken on US 90 just west of Biloxi, as depicted in Plate 1 "US 90 and I-10." In Plate 2 "Empty Slab with Sign", the only trace of the home is a wooden sign with the street address and name of the home insurance company. All debris has been removed from the site, leaving only a cement slab. In Plate 3 "Non-FEMA trailer on Slab", the residents continue to live at the site of their former house. We will return to the significance of the non-FEMA trailer later. In Plate 4 "Empty Sears", the building that the retail merchant Sears occupied on U.S. 90 facing the Gulf of Mexico remains an open shell.

Agents of Delay

Although operating independently of each other, the slow response by private and government interests produced the same effects. Their technique of multiple delays cost time, money and lost opportunities. The major agents of delay were private insurance companies, the state of Mississippi and the Federal Emergency Management Agency (FEMA).

The primary barrier to residential rebuilding was the time that it took for reimbursement of homeowner insurance and recovery of jobs. For the vast majority of families one third of their net worth is the equity in their home. That equity was destroyed in the hurricane, and without prompt payouts from homeowner insurance companies to rebuild, families had to live off their savings. Further note that, following a disaster in which a home is destroyed, the mortgagee (homeowner) is required to continue to make monthly mortgage payments unless temporarily released from that obligation by the mortgage holder. But, 60% of families have only one month's of savings to pay bills and expenses. Even the next richest 20% have only 3-4 months of savings.

The second barrier to residential rebuilding was the refusal of home insurance companies to pay for water and flood damage associated with the hurricane. Most home insurance policies provide coverage for most perils (including wind) to the home. However, there is a specific exclusion for flood damage. The homeowner must purchase a separate flood damage policy. After the storm, insurance companies claimed that the bulk of the damage was due to water (driving rain and storm surge) and thus was not covered. In some cases, homeowners were offered the paltry sum of \$3,000 in exchange for signing waivers that their house was damaged by water and thus not a covered loss. The public outcry grew so large that the state of Mississippi's Attorney General filed legal suit against the insurance companies to force payments. The insurance companies won the initial suit and were not required to pay for damage caused by water, although State Farm later went on to reach an agreement with the state of Mississippi in early 2007.

As an aside, one controversy was the interpretation of whether or not homeowners should have purchased flood insurance. The federal agency FEMA is responsible for producing flood maps. Properties that fall within flood zones on these maps are required by the mortgage holder to purchase separate flood insurance. However, the Katrina experience demonstrated that these maps were inaccurate. Many homes outside of the designated flood zone were damaged by water. Their purchase of flood insurance would have been optional, and some homeowners claim that insurance agents mislead them regarding the cost and necessity of purchasing optional flood insurance.

The third barrier to residential rebuilding was the lack of home insurance and the lack of affordable insurance. In the first case, many insurance companies stopped writing policies in coast areas.^{8,9} In those areas where insurance was not available, the state of Mississippi had created a wind insurance pool, the insurer of last resort.¹⁰ However, rates for this pool have recently risen by 90% for homeowners and 268% for businesses.

The state of Mississippi has been equally slow to support residential rebuilding. A state grant program for homeowners was announced in the Spring of 2006. The program drew more than 17,000 applications from homeowners. Incidentally, to be eligible the

home had to be located outside of a flood zone. As of September 14, 2007, only 75 checks had been issued. After federal politicians (the source of the grant funding to the state) investigated, the rate of issuance went up dramatically. Little more than two months later (November 17, 2006) more than 5,700 checks had been issued. However, this was more than 14 months after Hurricane Katrina damaged or destroyed many of these homes.

Local communities also delayed residential rebuilding by delaying adoption of flood elevation for reconstruction. In the case of the city of Gulfport, it took the city more than a year to adopted elevations for construction. In some areas near the coast, buildings were required to be elevated to 18 and one half feet above sea level. The additional construction cost to elevate the structure will limit redevelopment.

Returning to the non-FEMA trailer in Plate 3. The reason that residents must live in their own private trailers is that FEMA regulations prohibit the placement of one of its more than 135,000 trailers in an existing flood zone. This unbending regulation does not recognize the fact that homes were destroyed and that people still need a place to live.

Lessons from the process

More than one year after Hurricane Katrina destroyed much of the housing stock on the Gulf Coast, many homes are not rebuilt. A combination of delays, increased reconstruction cost and bureaucratic barriers have slowed the redevelopment process to a crawl for some. The destruction was provided by Hurricane Katrina. In mere hours it accomplished one the biggest feats of urban renewal. However the *process* of creative destruction, the regeneration that was expected, has not occurred for a number of reasons. Examining this response is informative in two respects. First, it indicates what will happen following future natural and man-made disasters. Whether an earthquake, hurricane or dirty bomb, the same agents of delay will be involved. Apparently, their own economic and political interests are at odds with rapid recovery and full compensation.

The second insight is how the community must now change. This process is marked by an attitude of out with the old (i.e., low-value) and in with the new (read high value). Such redevelopment will come at the expense and exclusion of low-income residents. Redevelopment along the coast will be more expensive. The only industry that has fully recovered are the casinos, a major source of state revenue and jobs in the area. Vacant land will be redeveloped with a higher density and cost, large apartment buildings and condominiums will make economic sense. This higher cost will force locals to move away from the Gulf Coast, while the vacuum will be filled by vacationers, retirees and others able to afford the suddenly higher cost of living in the area.

¹ Federal Emergency Management Agency. (2006). *Park model & Mississippi cottage: Hurricane Katrina housing statistics in Mississippi*. Available at: http://www.governorbarbour.com/recovery/alternativehousing.htm

² Schumpeter, Joseph. (1942) Capitalism, socialism and democracy. Harper: New York, NY.

³ Page, Max. (1999) *The creative destruction of Manhattan*, 1900-1940. University of Chicago Press: Chicago, IL.

⁴ Employee Benefit Research Institute. (2006). Home equity as a percentage of family net worth. Fast Facts from EBRI. Available: http://www.ebri.org/pdf/publications/facts/fastfact091906.pdf

⁵ Michael Hodges. (2006). Inadequate financial cushions. Available: http://mwhodges.home.att.net/family a.htm#Savings

⁶ Brian Kern. (2007). State farm settles Mississippi Katrina lawsuits; Agrees to reopen other Mississippi claims. Insurance News. January 24, 2007. Available at: http://www.insurancejournal.com/news/southeast/2007/01/24/76254.htm

⁷ Lora Hines. (2006). Mississippi elevation levels checked. Clarion Ledger newspaper, August 20, 2006, pp. 1B, 4B.

⁸ State Farm. (2007). State farm announces it will suspend writing new homeowners and commercial policies in Mississippi; Uncertainty in state legal and business environments cited as reason. PR Newswire. February 15, 2007. Available at: http://sev.prnewswire.com/insurance/20070214/CGW04514022007-1.html

⁹ Michael Kunzelman. (2007). State farm: No new policies in Mississippi. BusinessWeek.com February 15, 2007. Available at: http://www.businessweek.com/ap/financialnews/D8N9T5080.htm

Mississippi Business Journal. (2007). Barbour signs wind pool bill. Mississippi Business Journal, March 22, 2007. Available at: http://www.msbusiness.com/article.cfm?ID=4439.

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¹² Reuben Mees. (2006). NAACP: Low-income residents overlooked. Hattiesburg American newspaper. August 24, 2006. Available at:

http://www.hattiesburgamerican.com/apps/pbcs.dll/article?AID=/20060824/NEWS01/608

¹³ Clarion Ledger. (2006). Katrina: Affordable coastal housing is crucial. Clarion Ledger newspaper editorial, February 20, 2006. Available at:

http://www.clarionledger.com/apps/pbcs.dll/article?AID=/20060222/OPINION01/602200