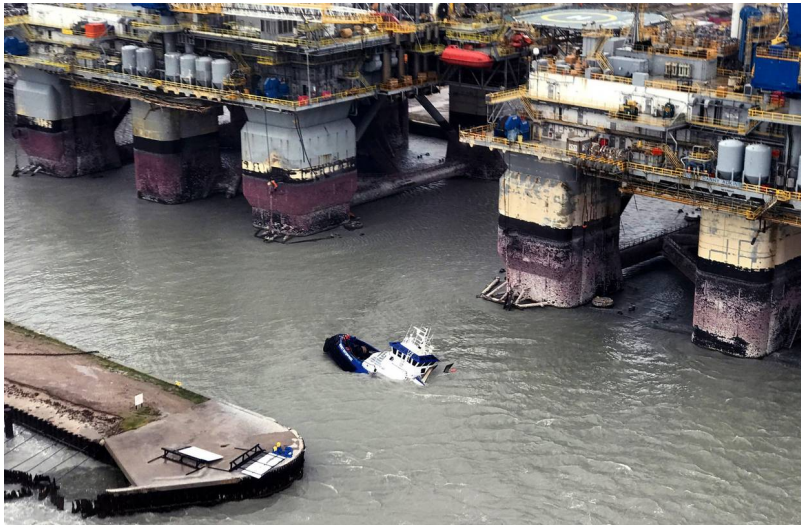


U.S. ECONOMY

# Tropical Storm Harvey Will Cost Tens of Billions of Dollars

Extent of national economic toll depends on how much flooding ensues in the coming days



This photo provided by the U.S. Coast Guard shows the Signet Enterprise sinking as helicopter aircrews are launched to assist people in distress near Port Aransas, Texas. PHOTO: U.S. COAST GUARD /GETTY IMAGES

*By Josh Zumbrun*

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Tropical Storm Harvey will take a financial toll on the nation's economy, but how much of one depends on the extent of flooding in the coming days.

Even after the immediate threat from Harvey has passed and the floodwaters receded, the Texas Gulf Coast faces tens of billions of dollars in property damage, bottlenecks at some of the nation's largest oil refineries, and work disruptions possibly for millions of workers.

"The damage will likely be much higher than most recent hurricanes have been," said Adam Kamins, senior economist at Moody's Analytics. There are "very high levels of housing density where some of the most severe flooding is taking place. Because of that you have very high expected property and vehicle damage."

Moreover, the storm could impact the economy nationwide due to the large oil refining presence in the Gulf Coast. Refiners in Corpus Christi, Lake Charles and Houston have about 30% of the nation's oil refining capacity.

About 2 million barrels a day of refining capacity—about 10% of the nation's overall refining capacity—is now offline, according to Moody's. How soon refiners reopen will depend on whether the plants and the ports sustain major damage from the flood. But refiners outside the region may be able to step up production to offset some of the effects.

Gasoline futures rose 7 cents to \$1.74 a gallon on the New York Mercantile Exchange on Monday. That rise hurts consumer purchasing power, but is likely to be temporary.

Gasoline prices have typically peaked within two weeks of major storms, rising by 20 to 80 cents a gallon, said Rick Joswick, managing director of global oil for PIRA Energy, an analytics unit of S&P Global Platts. Prices typically return to their pre-storm levels, or somewhat lower, with two to four weeks.

The "outlook is for gasoline prices to spike by a similar degree for the next week or so," Mr. Joswick said.

The biggest hit from any storm is to insurers and property owners. Moody's preliminary estimate is that the storm will cause between \$30 billion and \$40 billion of property damage. Mr. Kamins cautions these are initial estimates and could change significantly depending on how the storm evolves.

By contrast, the National Oceanic and Atmospheric Administration estimates that Hurricane Ike, which hit Texas and Louisiana in 2008, caused about \$29 billion of damage, while Hurricane Rita in 2005 cost about \$12 billion. If the Moody's estimate proves correct, it would be considerably less damage than 2005's Hurricane Katrina which caused over \$100 billion in damage. Superstorm Sandy of 2012 is estimated to have caused \$71 billion in damage.

Most of Hurricane Harvey's economic impact will be concentrated. The Houston area is the nation's fourth largest metropolitan economy, with about 3.1 million workers who generate over \$500 billion of economic activity a year.

It remains unclear how long Houstonians and other Texans will be dealing with closed stores or idled and unreachable workplaces, but Moody's estimates thus far that there will be \$6 billion to \$8 billion in lost output in the weeks ahead. That is barely perceptible in a U.S. economy that produces more than \$19 trillion worth of goods and services annually.

Even the largest storms have typically not permanently damaged the U.S. economy. This is in part because storm often spark construction booms that employ tens of thousands of people to clean up and rebuild.

Gross domestic product, the main yardstick of economic growth, doesn't account for property damage but it does account for rebuilding, so the measure can climb after storms due to activity involved in rebuilding.

Other economic measures could be skewed in the weeks ahead. The initial weeks after similarly large storms have sometimes produced rising claims by waylaid workers for unemployment insurance. After Hurricane Katrina, for example, jobless claims climbed by over 100,000 per week, although the high-level of claims didn't persist.

Michael Feroli and Daniel Silver, economists at J.P. Morgan Chase & Co., said in a note that other signs of the storm's impact could be seen in industrial production data, which will show the effect of power outages on utilities, and in personal spending data.

For hourly workers, the loss of income can be significant. According to Labor Department data, Texas counties that were declared disaster areas employ nearly four million people with about \$58 billion in quarterly wages—or about \$4.5 billion per week.

While some workplaces can simply do catch-up work after the storm, others like restaurants or factories won't be able to replace much of the lost output for however long the storm leaves them closed.

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