Economic Impacts of Hurricane Harvey

Our thoughts go out to the victims, family, friends and colleagues in the path of Hurricane Harvey, a storm that has, so far, left at least 20 dead and thousands displaced by flooding due to relentless rain. Texas State Climatologist John Nielsen-Gammon said that Harvey has already become the most extreme rain event in U.S. history. While acknowledging the enormous toll of loss and suffering, we do need to consider the investment implications when disasters occur. This regional weather storm disaster has both national and global implications across numerous sectors and industries which, in turn, impact commodity prices and their final finished goods and services, eventually spurring changes in corporate earnings.

Some of the direct impacts, which are often seen immediately, will be to the prices of gasoline and crude oil. Counterintuitive to many people's initial thought, a hurricane in the Gulf of Mexico can cause the price of oil to fall and the price of gasoline to rise. This stems from the differential between the price of crude oil and the petroleum products that refineries extract from it. The differential, known as the crack spread, is the profit margin the refiner can expect to make by breaking down, or "cracking," the hydrocarbon chain into various by-products. This spread can be impacted by supply and demand when Mother Nature forces refineries and supply pipelines to shut down in the anticipation of high winds and flooding. This decrease in gasoline production causes the supply of gasoline to fall, which causes gasoline prices to then rise. This is fairly straightforward.

Oil prices, on the other hand, are more complicated and are driven more by global supply and demand, so there are more variables inherent in its price. In addition, with the rise in U.S. shale production, the impact from shutting down oil rigs in the gulf is lessened. Holding other factors constant though, shutting down U.S. refineries causes less demand for oil, as oil is used in the production of gasoline. Oil supply goes up and thus prices fall. Although the fall in oil prices affects gasoline prices, as it is an input in the process of producing gasoline, it is not enough to offset the supply and demand impacts by shutting down refineries.

Early Estimates of Economic Loss Remain Wide-Ranging

While Harvey continues to deluge southeast Texas and Louisiana regions, its full economic impact remains unclear. Estimates of total damages are currently wide ranging, between $30 billion to $100 billion. Natural disasters produce two types of damages: direct damages to physical structures and the personal or business property within them, and indirect damages such as income loss and temporary homelessness. The total loss may take months or years to accurately tally. Whatever the final figure is, disaster forecasters are predicting a far lower insured payout rate than for past hurricanes. Researchers estimate that only one of every four homeowners affected by Harvey carry flood insurance. In 2008, when Hurricane Katrina hit New Orleans, almost half the homeowners had insurance.

Even though the damage estimates are still preliminary, Harvey could rank among the top five costliest storms in U.S. history, according to CFRA S&P Research. Chart 1 lists the fifteen costliest hurricanes and the corresponding changes in the S&P 500 over the ensuing one-, three- and six-month periods after the event. There are other factors besides the hurricanes that impact stock prices; Hurricane Ike coincided with the 2008 financial crisis and Hurricane Allison hit at the same time as the tech crash of 2001.

Stock Market Reaction to the 15 Costliest U.S. Hurricanes

Rank	Name	Date Formed	Cost ($ Bil.)	S&P 500 % Change 1 Mo	3 Mos	6 Mos
1	Katrina	08/23/05	125.0	(0.2)	3.9	5.8
2	Sandy	10/22/12	75.0	(3.0)	4.1	9.0
3	Ike	09/01/08	37.5	(9.5)	(36.4)	(42.7)
4	Wilma	10/16/05	29.3		(see Katrina)	
5	Andrew	08/16/92	26.5	0.0	0.2	3.3
6	Ivan	09/02/04	23.3	1.5	6.5	8.2
7	Irene	08/21/11	16.6	3.8	6.2	21.2
8	Charley	08/09/04	15.1		(see Ivan)	
9	Rita	09/18/05	12.0		(see Katrina)	
10	Frances	08/24/04	9.9		(see Ivan)	
11	Georges	09/15/98	9.7	0.9	12.1	26.0
12	Allison	06/04/01	9.0	(2.6)	(10.6)	(9.7)
13	Hugo	09/10/89	8.5	3.0	(0.0)	(3.1)
14	Floyd	09/07/99	6.9	(2.4)	4.3	0.4
15	Jeanne	09/13/04	6.7		(see Ivan)	
			Medians:	(0.1)	4.0	4.5

Source: Wikipedia, S&P DJ Indices. Past performance is no guarantee of future results.

Summary and Investment Implications

As seen in the median data in Chart 1, disaster history shows hurricanes do not typically trigger sustained market declines. Rather, on average, the S&P 500 increased by 4.5% in the subsequent six months of a major hurricane. However, there is no guarantee that history will repeat itself. Furthermore, with the month of August drawing to a close, we observe that increased uncertainty during the month has accounted for nearly 50% of this year's changes in volatility. Catalysts for this not only include Hurricane Harvey, but also geopolitical upheavals associated with North Korea's threatened missile attacks to Guam and over Japan's northern islands. While natural disasters such as Hurricane Harvey can cause much loss and suffering, the impact economically can be more muted. It is important for investors to stick with their long-term investment objectives from both a risk and return perspective. These objectives may change for those impacted directly by the storm. However, for those fortunate enough to not be directly impacted by the storm, these objectives are likely to remain unchanged.

This report is created by Tower Square Investment Management LLC

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Glossary

The ***S&P 500*** *is an index of 500 stocks chosen for market size, liquidity and industry grouping (among other factors) designed to be a leading indicator of U.S. equities and is meant to reflect the risk/return characteristics of the large cap universe.*