

The Impact of Hurricane Harvey on the U.S. Economy

Harvey Will Be Costly

Disaster	Impacted Region	Date	Economic Loss			Economic Aid			Economic Aid as a Share of Economic Loss
			Destruction	Lost Output	Total Loss	Insurance	Government Aid	Total Aid	
Hurricane Harvey	Gulf of Mexico	August 2017	97.0	11.0	108.0				
Hurricane Matthew	South Atlantic Coast	October 2016	11.4	4.1	15.5	3.8	0.6	4.4	28.6
Super Storm Sandy	Northeast U.S.	October 2012	46.8	26.2	73.0	21.7	61.1	82.8	113.4
Hurricane Irene	Northeast U.S.	August 2011	10.7	2.6	13.3	5.2	1.8	7.0	52.8
Hurricane Katrina	Gulf of Mexico	August 2005	143.6	30.9	174.5	50.0	135.7	185.7	106.4
Hurricane Ivan	Gulf of Mexico	September 2004	9.0	8.1	17.1	9.1	7.8	17.0	99.3
9/11	Entire Nation	September 2001	32.2	77.3	109.5	25.2	84.1	109.3	99.9
Los Angeles Northridge Quake	Los Angeles	January 1994	29.5	15.7	45.2	20.2	19.3	39.5	87.5
Midwest Floods	MN to MO	Summer 1993	7.6	11.8	19.4	1.7	8.8	10.5	53.9
Hurricane Andrew	Miami, FL	August 1992	45.9	14.6	60.5	26.6	13.5	40.1	66.3
Loma Prieta Quake	Bay Area, CA	October 1989	13.2	6.8	20.0	1.9	9.5	11.5	57.3
Hurricane Hugo	Charleston, SC	September 1989	18.2	5.9	24.1	8.2	3.9	12.1	50.4

Notes:

Hurricane Harvey estimates are preliminary and shown in the table at the high end of the estimated range.

Lost output associated with the Midwest floods includes \$5 billion in crop losses

The Bay Area includes the metro areas of San Francisco, Oakland, San Jose and Santa Cruz

9/11 insurance includes only property coverage

Lost output due to Katrina and Harvey does not include the impact of higher energy prices

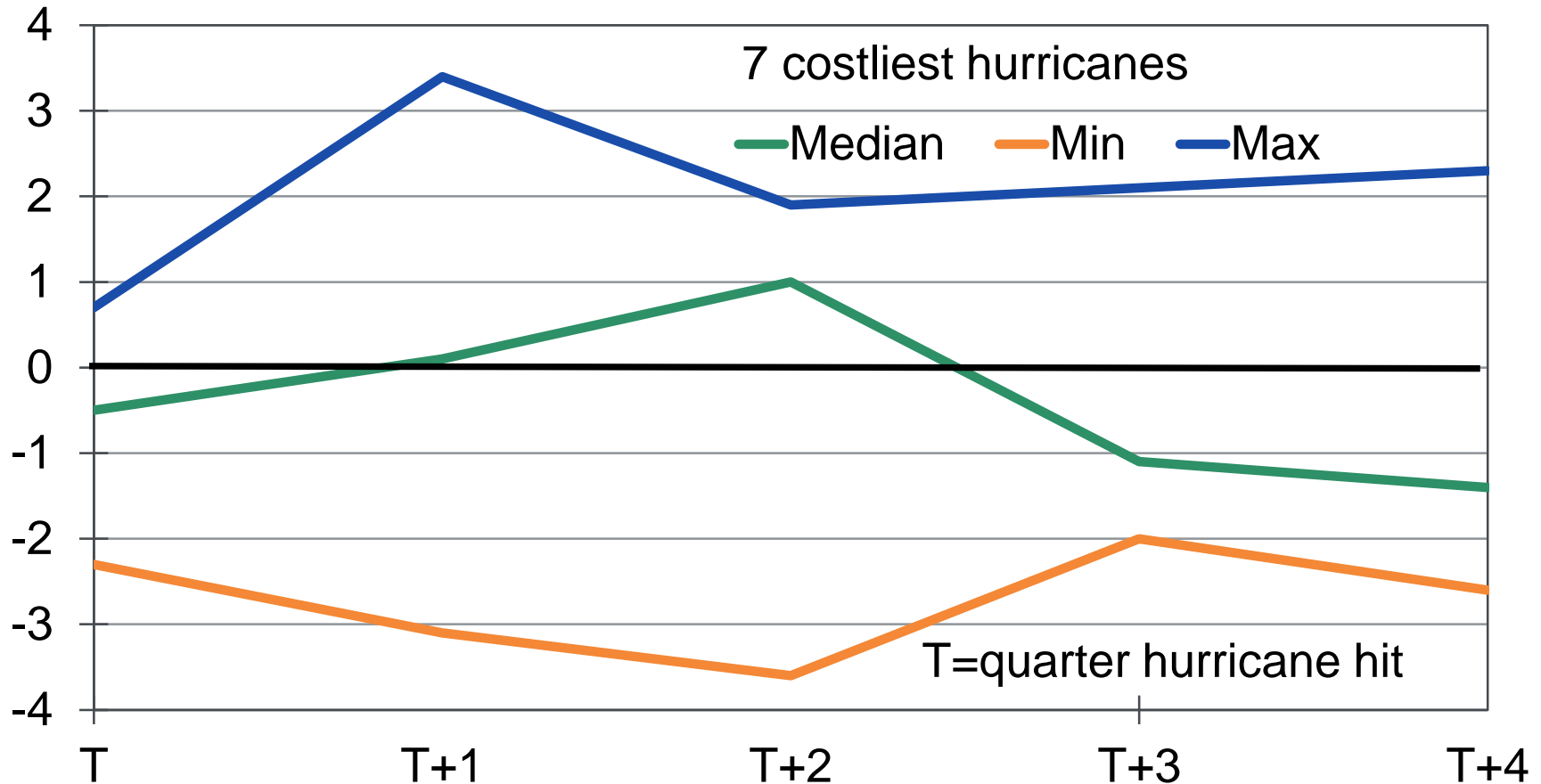
Sources: ISO, Insurance Information Institute, Moody's Analytics

Economics of Harvey

- » Reduce Q3 U.S. GDP growth between 0.1 to 0.5 of a percentage point. Modest boost GDP growth in Q4 and early 2018
- » Net impact on Q3 Real GDP:
 - » Consumption ↓
 - » Investment
 - » Residential ↓
 - » Nonresidential ↓
 - » Net exports
 - » Imports ↔
 - » Exports ↓
- » The cost of damage and destroyed property **will not** be captured in GDP; therefore it will underestimate the economic costs of the storm.
- » Corporate profits in Q3 will be reduced because of the net benefits paid by domestic insurance companies.

Wide Range of Possible Outcomes

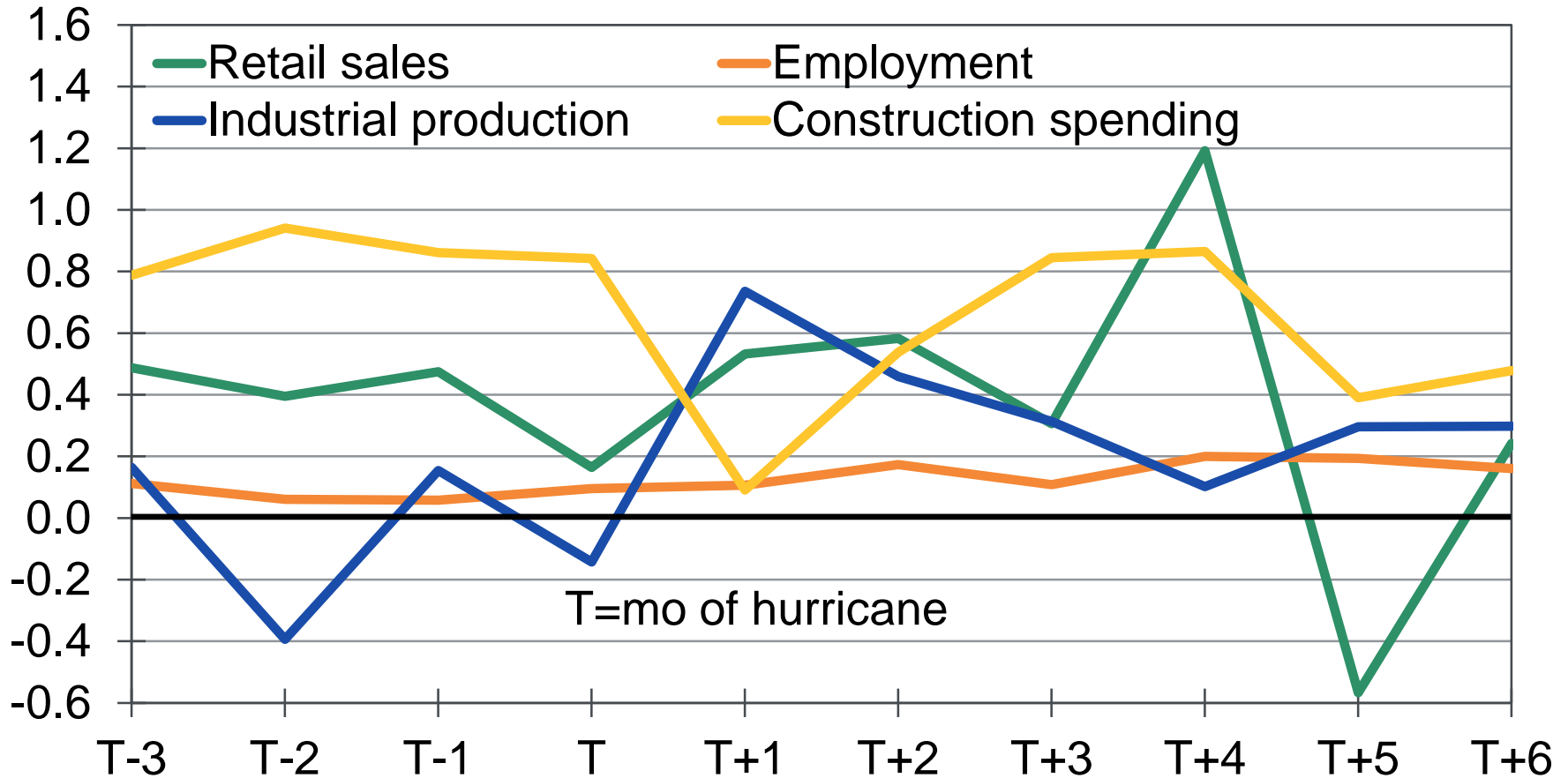
U.S. GDP, annualized % change, deviation from prior 4qtr MA, ppt



Sources: BEA, Moody's Analytics

Harvey Will Add Volatility

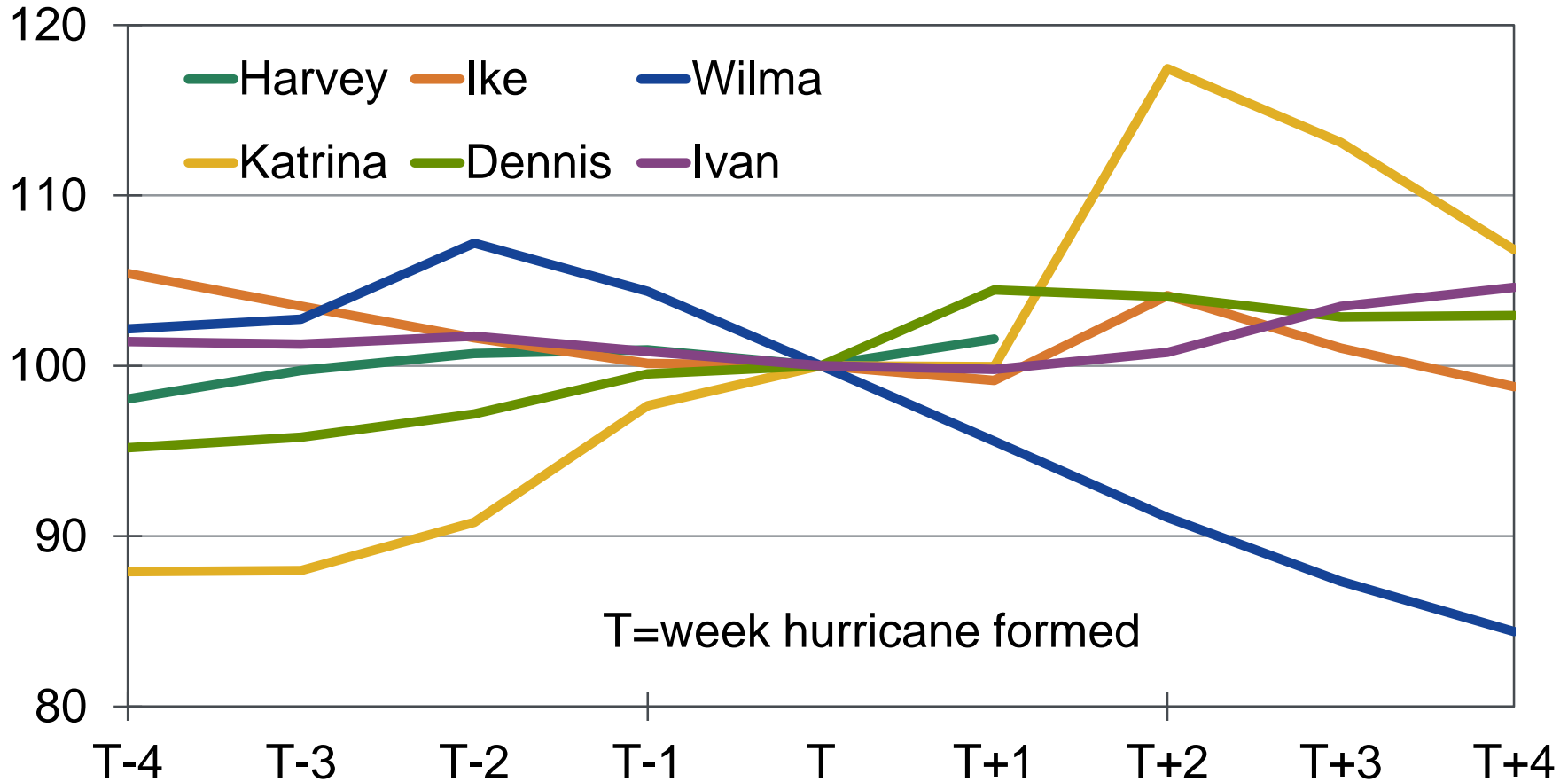
Costliest 8 U.S. Hurricanes, median % change



Sources: BLS, Census Bureau, Fed, Moody's Analytics

Some Pain at the Pump Ahead

U.S. retail gasoline prices, week hurricane formed=100



Source: Moody's Analytics

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