

When Benchmarks Fail: The Day that WTI Died

Eric Gilje[†]

Rob Ready[‡]

Nikolai Roussanov[§]

Abstract

On April 20, 2020 the flagship North American benchmark for crude oil, West Texas Intermediate (WTI) price for delivery in Cushing, OK, turned negative for the first time in history. We explore the causes and consequences of this event. Using a simple theoretical model, we argue that negative prices were the result of constraints on physical storage, but that these constraints were precipitated by positions of financial traders unable to take physical delivery prior to the expiration of the May 2020 future. We then provide evidence that this event impacted the decisions of oil producers, including those not directly impacted by the storage constraints at Cushing, through their exposure to the WTI benchmark in their purchasing contracts. Our evidence suggests that asset price dislocations can have real effects due to their importance as contracting benchmarks.

[†] Wharton School, University of Pennsylvania. E-mail: gilje@wharton.upenn.edu

[‡] Lundquist College of Business, University of Oregon. E-mail: rready@uoregon.edu

[§] Wharton School, University of Pennsylvania. E-mail: nroussan@wharton.upenn.edu