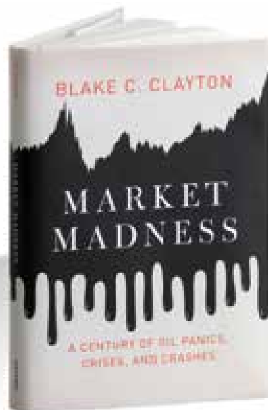
Rock and Roil



Blake C. Clayton

Market Madness

A Century of Oil Panics, Crises, and Crashes

Oxford University Press, New York, 2015, 248 pp., $27.95 (cloth).

Ever since Thomas Malthus's *Essay on the Principle of Population* was published in 1798, people have worried that limited availability of natural resources could constrain economic growth and human welfare. For nonrenewable natural resources (for example, fossil fuels such as oil, natural gas, and coal), Malthusian concerns center around depletion.

So far, such fears have not materialized. Growing and substantial evidence suggests a downward trend in real commodity prices, despite exponential growth in the production of nonrenewable commodities. Nevertheless, fears about resource shortages—including of crude oil—tend to surface regularly when prices increase above trend.

We may be witnessing the end of yet another episode of widespread fear of oil depletion. Predictions that global oil production would peak attracted broad attention when oil prices reached new highs in the early 2000s, but have since subsided thanks to the shale revolution in North America and the halving of oil prices in late 2014.

In *Market Madness*, Blake Clayton, now an economist with Citibank and formerly a fellow on energy at the Council on Foreign Relations, analyzes four episodes of growing fear about oil depletion through the lens of "irrational anxiety"—an allusion to *Irrational Exuberance,* Robert Shiller's famous book on equity and housing markets. Clayton's premise is that some of the social, cultural, and psychological factors behind irrational exuberance also apply to irrational anxiety.

Clayton focuses on one of Shiller's arguments—that speculative market expansions in equity and housing often accompany popular perceptions that the future is brighter or less uncertain than it used to be. In oil markets, steadily rising prices have triggered fears of shortages, based on variations of the argument that there is limited oil still in the ground and that prices must rise forever to balance demand and supply.

The specifics vary across the four episodes Clayton examines, spanning the 20th and early 21st centuries, but there are common elements. For example, in the first, 1909–27, oil demand increased rapidly with the dominance of the internal combustion engine in transportation and the development of the petrochemical industry. World War I reinforced the increase in demand. A 1909 study of the total volume of crude oil reserves in the United States by the U.S. Geological Survey concluded that these reserves would be exhausted by 1935. The study acknowledged the possibility of new oil field discoveries but considered them unlikely. This would not be the last time that both the economically variable amount of oil in known fields and the scope for new discoveries and technological advances were grossly underestimated.

During the first episode, predicted structural shifts in the market did not materialize. Peak-oil theorists, for example, argued that about half of all below-ground oil resources had already been used and that decline in production was inevitable. But the likely oil resource base continued to increase. The second episode brought predictions of forever-increasing prices due to actual structural shifts. During the third episode—the era of the Organization of the Petroleum Exporting Countries (OPEC) in the 1970s and 1980s—it was widely assumed that OPEC's market power was such that oil prices would continue to increase. But that market power has varied over time with the entry of other producers and shifts in demand.

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Remarkably, Clayton does not follow Shiller's journey to the end. He does not consider the possible link between irrational anxiety and price increases or the possibility of oil price bubbles. Neglecting this link for the early episodes might not be a problem, given prevailing price-setting mechanisms and government intervention (for example, during wartime). Instead, Clayton argues that oil anxiety perpetuators sometimes had political motives, seeking to influence government policies affecting the oil market. But in the final episode, between 1998 and 2013, oil price formation took place in spot markets, and the market for oil derivatives expanded rapidly. Since oil is storable, it is a real asset, and the link between irrational anxiety and price formation during these episodes merits more discussion.

The first two episodes are mostly U.S. specific, which is understandable because markets were then less internationally integrated. Still, readers interested in oil issues will find the account of these episodes intriguing—especially the first, which examines the rise of the conservation movement in the United States and elsewhere.

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