Using natural resource shocks to study economic behavior

Natural resource shocks can help studying how low-skilled men respond to changes in labor market conditions

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ELEVATOR PITCH

In the context of growing worldwide inequality, it is important to know what happens when the demand for low-skilled workers changes. Because natural resource shocks are global in nature, but have highly localized impacts on labor prospects in resource extraction areas, they offer a unique opportunity to evaluate low-skilled men’s behavior when faced with extreme variations in local labor market conditions. This situation can be utilized to evaluate a broad range of outcomes, from education and income, to marital and fertility status, to voting behavior.

KEY FINDINGS

Pros

- Changes in the market for natural resources produce large shocks that have highly localized labor impacts, creating ideal experimental research conditions.
- Changes in natural resource prices are most likely unrelated to local issues, which allows for the identification of causal impacts.
- Natural resource shocks provide more precise variation than many other types of instruments because the exact source of the expansion (or contraction) can be identified and the shocks are much larger in magnitude.

Cons

- Resource shocks may induce so-called “Dutch disease,” in which natural resources retard (or accelerate) development in other sectors within the economy.
- Natural resource extraction work is heavily concentrated among low-skilled men, presenting a unique set of challenges.
- The presence of natural resources may generate long-term distortions in local labor markets, which may compromise the external validity of the experiment.
- While important, the study of natural resource shocks does little to identify policies that facilitate the re-employment of low-skilled workers.

AUTHOR’S MAIN MESSAGE

Shocks in natural resource markets induce large changes in demand that can be exploited to test how demand shocks affect local markets. Natural resource shocks have been used to study how local labor markets influence a wide range of behaviors including education, fertility, public assistance use, marriage rates, voting behavior, the local provision of public goods, and health care use. Though existing research using natural resource shocks has not yet put forth specific policy recommendations, it is clear that low-skilled men would benefit from policies that support their transition into alternative labor opportunities after resource booms expire.