

Oil vs. Critical Minerals:

Not All Energy-Related Price Shocks Should Be Treated the Same

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Relevant For:

Federal, state, and local policymakers; energy and industrial policy officials; central banks and international financial institutions; firms investing in energy and capital-intensive technologies

Policy Question

How do critical mineral and oil price shocks differ in their economic effects, and what does this imply for policy design?

Key Evidence

[This MIT CEEPR paper](#) finds that when oil prices rise, the things we rely on like cars, trucks, and machinery get more expensive to use. This quickly slows down the economy, reducing spending and overall welfare.

In contrast, when the price of critical minerals (like lithium and copper) rise, the impact on the economy is slower because critical minerals are mainly used to build new technologies, such as electric vehicles and clean energy systems. Higher mineral prices make it more expensive to invest in new infrastructure and equipment over time. The study finds that while both types of price increases hurt the economy in the long run, oil shocks cause sharper short-term damage. Mineral price increases hurt the economy less, but curtail investment and may even cause a slight increase in employment, as firms rely more on workers instead of expensive equipment.

Policy Implications:

These findings suggest that not all energy-related price shocks should be treated the same. Oil price increases mainly affect the economy right away, so short-term responses (like boosting demand) can help. However, the impact of mineral price increases is smaller, raising the cost of building new systems. To support the transition towards clean energy, which depends more on minerals, policy focus should shift from short-term price spikes to long-term investment challenges and supply chain risks.

Policy Actions:

1. **Strengthen financial stability measures** to help manage fluctuations in investment and reduce stress on businesses when input costs rise.
2. **Invest in alternatives and new technologies** by supporting R&D into alternative materials and “swap-ready” technologies (e.g., sodium-ion batteries) to reduce dependence on any single critical mineral supply chain.

What to Watch

Volatility in global critical mineral markets (especially lithium, copper, and rare earths) and policy efforts to build domestic supply chains.