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Rare Earth Market Fine Without Government Interference

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It may have seemed as if the prices of rare earth elements could only rise, but they have recently dropped quite a bit. The drop—and what is behind it—is an excellent reminder of why government should not use price fluctuations as an excuse to interfere in markets.

In rare earths, the government's current role should be to provide information that private actors cannot gather on the location of reserves, foreign trade behavior, and potential defense needs.

More Rare Earths. Rare earth elements (REEs) are a group of 17 elements (actually relatively abundant, despite their name) that have valuable uses in energy and military equipment. REEs gained global attention when prices began to rise in 2009, a trend that continued into 2011. During this two-year period, a debate began between those calling for the U.S. government to try to curb the prices' rise by ensuring supply and those arguing that market supply and demand should be allowed to work unimpeded.

Higher prices encourage the entry of new suppliers and encourage existing suppliers to expand. Both of these results have occurred in rare earths in the U.S. and elsewhere. Existing firms have mushroomed in size along with REE prices, new firms have been created, and new deposits have been discovered, as to be expected with the greater incentive to explore.¹

The inevitable result of this supply expansion is a change in the price trend. In July, prices began

a decline that has lasted four months and counting, intensified in October, and brought REE costs down about 40 percent (from the peak).² This is less a function of new supply physically becoming available than it is the prospect of more new supply than expected becoming available. REE prices had skyrocketed on the anticipation of long-term shortages, but the market is now correcting, as anticipated shortages no longer seem as acute.

There is a notable asterisk to the change in market conditions. In the second half of October, leading Chinese suppliers announced suspensions of production. Their unpredictable behavior may reintroduce the fear of chronic or acute shortages that drove the market higher. Indeed, this seemed to be the explicit goal of the initial announcement by Baotou.³

Are REEs Different? So REEs may very well rise again. There are, of course, those who believe the government should act whenever the price of something is deemed objectionable. Homes, health care, stocks, foreign currency—you name it. The result is the same: Most consumers get hurt.

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However, there are also claims that the situation is different for REEs. Most importantly, some REEs are used in military equipment. This is true, but unhelpful. Some REEs are important to the U.S. military, but most are not. Within the group that is important, some materials have long life cycles.⁴ It is dangerously misleading to discuss REEs as important to national security without discussing projections for any unmet military demand of particular elements.

The other feature of REEs that is often cited to justify government action is China's supply dominance. The PRC is said to supply more than 90 percent of REEs as a whole, though this figure may now be declining. One reason for a decline is that, even before the temporary halt in October, Beijing had been seeking to restrict the output of various Chinese producers.⁵ This naturally engendered widespread suspicion that the PRC is trying to use its near-monopoly position to prey on buyers.

Chinese production dominance of REEs is unfortunate, but it is also unstable. While the viability of deposits varies with price, the PRC controls no more than 50 percent of world REE reserves, and as exploration continues, that number is likely to fall.⁶

China's extreme production dominance can only last as long as it is willing to offer REEs at below-market prices.

This occurred for most of the past decade, which is why China now has the leading position. As soon as Beijing stopped undercutting market prices, prices rose and the global hunt for alternatives began—which has started to bring prices down. As long as suppliers can freely enter, the REE market will work properly, regardless of China's role.

U.S. Should Get Ready. REEs are prominent in part because there are multiple dimensions for possible government action. Some of these actions should be taken; others should not.

In Congress, there are many pieces of legislation concerning REEs, advocating everything from research to recycling to retread industrial policy. Active government intervention in the REE market is unjustified—a classic example of firms calling on the rest of the nation to subsidize them for the sake of a nonexistent national interest. The market is working on its own.

It is certainly dynamic, though, which indicates a role for the federal government to provide informa-

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2. Yu Xi, "Prices of Rare-earth Metals Drop in July," *Global Times*, July 7, 2011, at <http://www.globaltimes.cn/NEWS/tabid/99/ID/665156/Prices-of-rare-earth-metals-drop-in-july.aspx> (October 31, 2011).
3. Shivom Seth, "More Rare Earth Companies in China Suspending Production as Prices Slide," *Mineweb.com*, October 27, 2011, at <http://www.mineweb.com/mineweb/view/mineweb/en/page72102?oid=138362&sn=Detail&pid=102055> (October 31, 2011), and "Baotou Rare Earth Shares Plunge After Decision to Halt Production," *Xinhuanet*, October 19, 2011, at http://news.xinhuanet.com/english2010/china/2011-10/19/c_131200285.htm (October 31, 2011).
4. B. R. Arvidson, "The Many Uses of Rare-Earth Magnetic Separators for Heavy Mineral Sands Processing," *International Heavy Minerals Conference*, June 2001, at <http://www.outokumputechnology.com/files/Technology/Documents/Physical%20Separation/Technical%20Papers/ManyusesofREBA.pdf> (October 31, 2011), and Jack Lifton, "Heavy Rare Earths In America, Crystal Balls & Brass Balls," *Technology Metals Research*, August 4, 2011, at <http://www.techmetalsresearch.com/2011/08/heavy-rare-earth-in-america-crystal-balls-brass-balls/> (October 31, 2011).
5. Press release, "GTSO: New Chinese Rare Earth Production Quotas Could Lead to Shortages," *Business Wire*, April 26, 2011, at <http://www.businesswire.com/news/home/20110426005921/en/GTSO-Chinese-Rare-Earth-Production-Quotas-Lead> (October 31, 2011).
6. U.S. Geological Survey, "Mineral Commodity Summaries," January 2011, at http://minerals.usgs.gov/minerals/pubs/commodity/rare_earths/mcs-2011-raree.pdf (October 31, 2011).

tion. For example, higher REE prices have encouraged exploration and are in the process of altering estimates of American and world REE reserves. This information would be very difficult for a private actor to compile and update, making it a valuable government responsibility to do so. Externally, Chinese behavior is distorting the global market and runs counter to World Trade Organization (WTO) principles—another area for legitimate government action.

Potentially the most important area is defense. Changing use and availability of REEs for military applications must be tracked over time so the U.S. is not surprised by shortages. The U.S. should thus take several steps to stay prepared:

1. Congress should not subsidize REE mining, production, or refinement in any way.
2. Congress should consider the value of devoting resources to gathering more information on

REEs, as market conditions have changed and can change rapidly.

3. The United States Trade Representative should ask China for a clarification of recent actions and statements concerning REEs, as a first step toward a WTO case if necessary.
4. The Department of Defense should provide regular reports, classified or unclassified, concerning demand and supply of those REEs needed by the military.

A rare earths crisis has not occurred and will not occur. Because prices may go up as well as down, the U.S. government should gather information on possible market shifts.

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