



Humans Innovate Their Way Out of Scarcity

Decline in commodities prices since the 1960s illustrates the enduring wisdom of Julian Simon

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Last week, the World Bank updated its commodity database, which tracks the price of commodities going back to 1960. Over the last 55 years, the world's population has increased by 143 percent. Over the same time period, real average annual per capita income in the world rose by 163 percent. What happened to the price of commodities?

Out of the 15 indexes measured by the World Bank, 10 *fell* below their 1960 levels. The indexes that experienced absolute decline included the entire non-energy commodity group (-20 percent), agricultural index (-26 percent), beverages (-32 percent), food (-22 percent), oils and minerals (-32 percent), grains or cereals (-32 percent), raw materials (-32 percent), "other" raw materials (-56 percent), metals and minerals (-4 percent) and base metals (-3 percent).

Five indexes rose in price between 1960 and 2015. However, only two indexes, energy and precious metals, increased more than income, appreciating 451 percent and 402 percent respectively. Three indexes increased less than income. They included "other" food (7 percent), timber (7 percent) and fertilizers (38 percent).

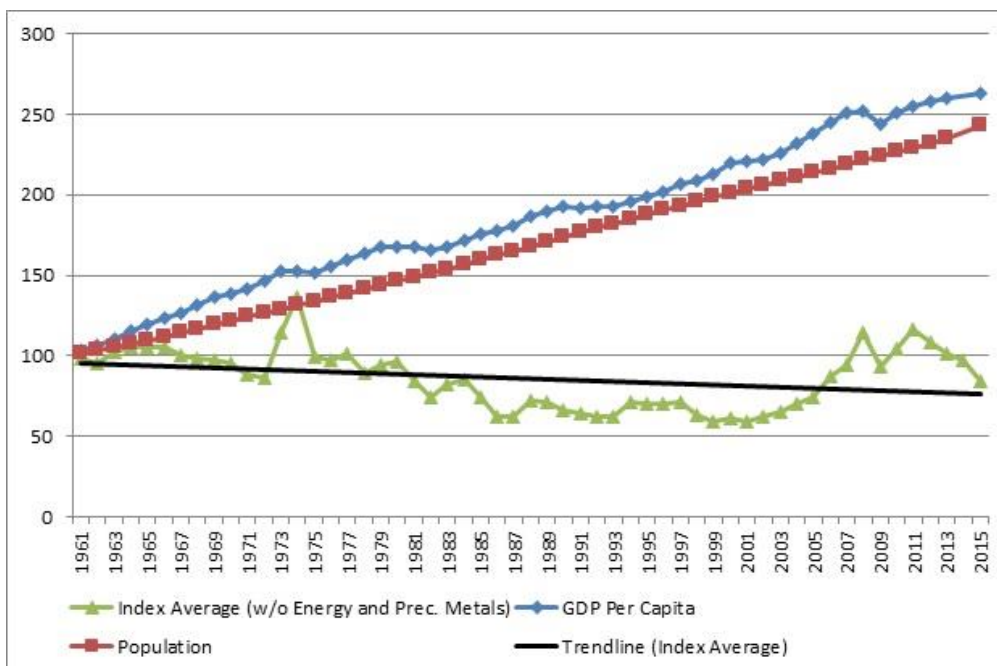
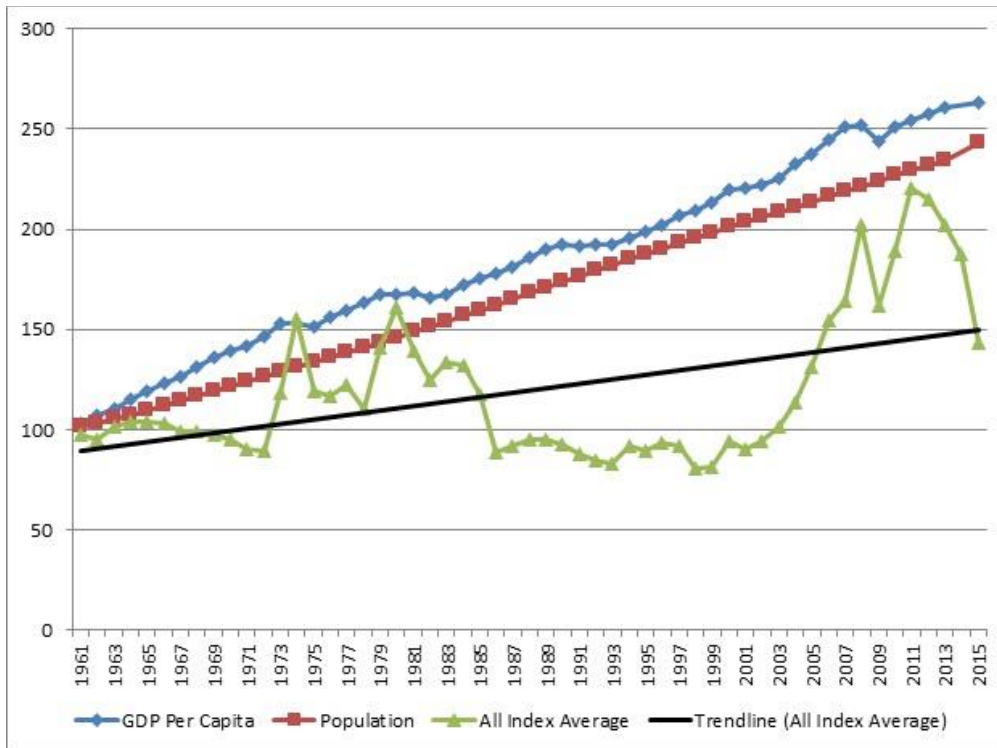
Taken together, commodities rose by 43 percent. If energy and precious metals are excluded, they declined by 16 percent. Assuming that an average inhabitant of the world spent exactly the same fraction of her income on the World Bank's list of commodities in 1960 and in 2015, she would be better off under either scenario, since her income rose by 163 percent over the same time period.

This course of events was predicted by the contrarian economist Julian Simon some 35 years ago. In *The Ultimate Resource*, Simon noted that humans are *intelligent* animals, who innovate their way out of scarcity. In some cases, we have become more parsimonious in using natural resources. An aluminum can, for example, weighed about 3 ounces in 1959. Today, it weighs

less than half an ounce. In other cases, we have replaced scarce resources with others. Instead of killing whales for lamp oil, for instance, we burn coal, oil and gas.

I will have a paper on this subject soon. In the meantime, please visit www.humanprogress.org.

(P.S.: I have used the World Bank's original terminology, but changed the Bank's base year from 2010 to 1960.)



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