

## THE BET: PAUL EHRLICH, JULIAN SIMON, AND OUR GAMBLE OVER EARTH'S FUTURE

By Paul Sabin, Yale University Press 2013

Reviewed by Richard B. Miller\*

It seems a matter of common sense that infinite resources do not exist, and we should, therefore, use our resources carefully. But it is a mistake to understate the impact of human ingenuity and market economics on the demand for resources we are inclined to think of as essential. This more complex truth was well understood by the Saudi Arabian oil minister, Sheikh Zaki Yamani, who famously stated that “[the] Stone Age did not end for lack of stone, and the Oil Age will end long before the world runs out of oil.”<sup>1</sup> The story of this more complex truth about resource scarcity and its relationship to the modern environmental movement is well told by Paul Sabin in *The Bet*.<sup>2</sup> *The Bet* has lessons for today’s debate over climate change and should serve as a cautionary tale for activists on either side.

*The Bet* recounts the rivalry between Paul Ehrlich, the biologist who wrote *The Population Bomb*<sup>3</sup> in 1968, and Julian Simon, an economist who wrote *The Ultimate Resource*<sup>4</sup> in 1981. Ehrlich warned of the dangers of overpopulation and the destruction of the planet while Simon celebrated population growth and the ingenuity that enables humans to adapt to changing circumstances. Ehrlich relied on the simple logic that resources are finite, claiming that increased population would lead to mass starvation. Notwithstanding his doomsday message, he was immensely popular and appeared on *The Tonight Show* with Johnny Carson more than twenty times during the 1970s.<sup>5</sup> Tempering that image, Sabin points out that early in his career Ehrlich and his allies called for the United States to refuse to send food to certain famine stricken countries because they had failed to adopt population control policies.<sup>6</sup> Further, Ehrlich struggled to completely disassociate his group, Zero Population Growth, from the groups that promoted eugenics.<sup>7</sup> Nonetheless, while Ehrlich’s popularity soared, Simon liked to joke he would be lucky if five people showed up to hear his ideas about how human beings and their innovative abilities are our ultimate resource.<sup>8</sup>

---

\* Mr. Miller is Director of the Energy Markets Policy Group at Consolidated Edison Company of New York. He is a former Chief Energy Policy Advisor to the City of New York and a graduate of Amherst College and New York University Law School.

1. Peter Maass, *The Breaking Point*, N.Y. TIMES (Aug. 21, 2005), [http://www.nytimes.com/2005/08/21/magazine/21OIL.html?\\_r=0&pagewanted=all](http://www.nytimes.com/2005/08/21/magazine/21OIL.html?_r=0&pagewanted=all).

2. PAUL SABIN, *THE BET: PAUL EHRLICH, JULIAN SIMON, AND OUR GAMBLE OVER EARTH’S FUTURE* (2013).

3. DR. PAUL EHRLICH, *THE POPULATION BOMB* (1968).

4. JULIAN L. SIMON, *THE ULTIMATE RESOURCE* (1981).

5. SABIN, *supra* note 2, at 3.

6. *Id.* at 25-26.

7. *Id.* at 57.

8. *Id.* at 3.

But Simon persisted, and in 1981 wrote an article in *Social Science Quarterly* that, referring to Ehrlich, began with the question: “How often does a prophet have to be wrong before we no longer believe that he or she is a true prophet?”<sup>9</sup> He then challenged Ehrlich to a bet: Ehrlich could choose any five metals and Simon would bet him that those metals would be less expensive in ten years than they were at that time.<sup>10</sup> “Ehrlich took the bait,” saying that he would accept Simon’s “astonishing offer before other greedy people jump in.”<sup>11</sup> Ehrlich consulted with two of his scientist friends and chose five: chromium, copper, nickel, tin, and tungsten.<sup>12</sup> They seemed like good choices as each had a critical role and its price had increased significantly during the 1970s.<sup>13</sup>

Ten years later the world’s population had increased by 800 million people, and the price of each of the metals had decreased.<sup>14</sup> Simon had won the bet.<sup>15</sup> Ehrlich sent a check to Simon with no accompanying letter but continued to be dismissive toward Simon.<sup>16</sup> Simon, he went on to say, “is like the guy who jumps off the Empire State Building and says how great things are going so far as he passes the 10th floor.”<sup>17</sup> As Sabin explains, Ehrlich had good reason for believing himself the unlucky victim of bad timing. Recessions during the 1980s had depressed commodity prices and when economists “ran simulations for every ten-year period between 1900 and 2008, they found that Ehrlich would have won the bet 63[%] of the time.”<sup>18</sup>

But having said that, Sabin argues that Ehrlich missed a fundamental point regarding “how economic systems could work to manage scarcity, drive investment and innovation, and avert shortages.”<sup>19</sup> Taking just one metal as an example, there was a “copper fever” in the 1970s as copper prices surged as a consequence of political and labor strife in the primary producing countries at that time—Chile, Zaire, and Zambia.<sup>20</sup> The price increases stimulated both substitution and new production. But by 1985, Chilean producers described the copper industry’s problem as one of how to create new demand, while U.S. producers cut their production by a third.<sup>21</sup> Copper prices at the end of the 1980s were 20% less than at the start of the decade.<sup>22</sup> As Simon had predicted, it is “everyday market forces” that govern the price of commodities and not population growth.<sup>23</sup>

---

9. *Id.* at 134.

10. *Id.* at 4, 134-35.

11. *Id.* at 135.

12. *Id.*

13. *Id.*

14. *Id.* at 181.

15. *Id.*

16. *Id.*

17. *Id.* at 184 (internal quotation marks omitted).

18. *Id.* at 188.

19. *Id.* at 28.

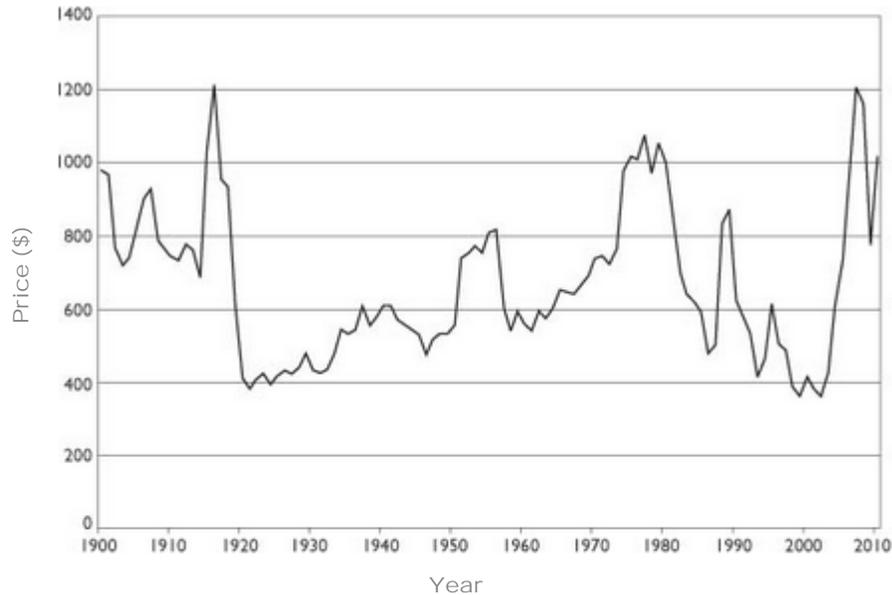
20. *Id.* 187-88.

21. *Id.* at 188.

22. *Id.*

23. *Id.* at 185-86.

More broadly, Sabin's chart of the combined adjusted prices of these five metals shows that prices have essentially stayed the same between 1900 and 2010.<sup>24</sup>



**Figure 1:** Combined Index of *The Bet's* Five Metals

And now the shale revolution has changed the debate over fossil-fuel scarcity. The outcome of their bet notwithstanding, Sabin underscores that the high-profile competition of ideas contributed to the debate over environmental issues.<sup>25</sup> Ehrlich helped people to understand the interrelationship between humans and the environment, and his projection of resource scarcity was a powerful motivator for improving our environment.<sup>26</sup> It was Ehrlich and one of his students, Denis Hayes, who helped organize the first Earth Day.<sup>27</sup> So Ehrlich's grossly inaccurate claims about world famine helped to promote the new environmental consciousness that led to the passage of many important laws to protect the environment, which have significantly improved the air we breathe and the water we drink. As Sabin ably demonstrates, while Ehrlich was wrong, he deserves credit for helping to improve our environment.

In his conclusion, Sabin criticizes both Ehrlich and Simon for having contributed to polarization on environmental issues, "the most pernicious current reflection" of which "is the ongoing political impasse over climate change."<sup>28</sup> Sabin appears to believe that we would have been better off if the bet had never happened. That seems unfair and nostalgic. The American political system has

24. *Id.* at 186 (showing Sabin's "Index of the five metals from the Ehrlich-Simon Bet, with 1980 price of \$1,000 (\$200 of each metal)").

25. *Id.* at 217.

26. *Id.* at 217-18.

27. *Id.* at 47.

28. *Id.* at 224.

always been more than capable of ginning up polarizing fights with or without the kind of color that Ehrlich and Simon provided. Americans have moved back and forth between consensus and polarization on many issues—the environment is only one example. While there was consensus on certain environmental issues in the 1970s, Ehrlich's claims about imminent world famine were polarizing when they were made. And we need these kinds of debates—even at their most hyperbolic—to continue because they can help to enlighten us in their own way. As Sabin explains, the bet helped to expose Ehrlich's inaccurate claims.<sup>29</sup> Moreover, while it became a cause celebre for those who opposed the environmental agenda, it appears to have helped Sabin and probably others (including this author) to learn that resource scarcity is a problem that can be handled well by markets. Indeed, going forward, it would almost always be better if environmentalists focused their efforts on the damage that can result from resource use and not the potential danger from exhausting those resources.

If there is a lesson in *The Bet* for activists on either side of the question, it might lie in avoiding exaggerated claims notwithstanding the temporary fame they can provide. Former NASA scientist and environmental activist Jim Hansen's claim that the Keystone Pipeline means “game over” for the climate has certainly generated significant healthy discussion over climate change notwithstanding its dubious factual underpinnings.<sup>30</sup> But one wonders whether Sabin's cautionary tale of Ehrlich's humbling might provide a lesson for Hansen.

Should Bjorn Lomborg, the climate change skeptic,<sup>31</sup> bet Jim Hansen? Notably, Sabin states that Bjorn Lomborg started on his path by trying to disprove Simon's theories.<sup>32</sup> After Lomborg decided that Simon was right, Lomborg turned his attention to other environmental issues, including climate change. While many might disagree, we are better off that Lomborg is there questioning the climate change consensus. The Intergovernmental Panel on Climate Change (IPCC) has been appropriately criticized (in this author's opinion) as a flawed organization because it operates on consensus and does not allow for the issuance of minority or dissenting reports.<sup>33</sup> Society needs Lomborg and others to provoke thought and debate on any consensus. Concededly, a bet between Lomborg and Hansen over the Keystone pipeline, or any other aspect of climate change, would be difficult to devise, but at a minimum the discussion should continue.

So while Sabin may regret that the bet occurred and lives on, the debate over environmental issues will continue. And sometimes even a flashy bet can deepen a public policy debate.

---

29. *Id.*

30. Elizabeth McGowan, *NASA's Hansen Explains Decision to Join Keystone Pipeline Protests*, INSIDE CLIMATE NEWS (Aug. 29, 2011), <http://insideclimatenews.org/news/20110826/james-hansen-nasa-climate-change-scientist-keystone-xl-oil-sands-pipeline-protests-mckibben-white-house>.

31. *See generally* BJORN LOMBORG, <http://www.lomborg.com/> (last visited Apr. 14, 2014).

32. SABIN, *supra* note 3, at 210-11.

33. Michael Oppenheimer et al., *Climate Change, The Limits of Consensus*, 317 SCI. MAG. 1505 (2007).