Why Do People Believe in a Zero-Sum Economy?

Samuel G. B. Johnson

Division of Marketing, Business, & Society
University of Bath School of Management

Address: Building 8 West
Quarry Road
Bath BA2 7AY
United Kingdom

Phone: +44 (0) 1225 38 6024

Email: sgbjohnson@gmail.com

Website: http://www.sgbjohnson.com/

Note. This is a pre-print of a commentary to appear in *Behavioral & Brain Sciences* on Pascal Boyer's and Michael Bang Petersen's target article, "Folk-economic beliefs: An evolutionary cognitive model." The content does not reflect the input of peer review or copyediting.

Abstract

Zero-sum thinking and aversion to trade pervade our society, yet fly in the face of everyday experience and the consensus of economists. Boyer and Petersen's evolutionary model invokes coalitional psychology to explain these puzzling intuitions. I raise several empirical challenges to this explanation, proposing two alternative mechanisms—intuitive mercantilism (assigning value to money rather than goods) and errors in perspective-taking.

Commentary

In *The Wealth of Nations*, Adam Smith (1999/1776) overturned a dogma that had long dominated economic thinking—the mercantilist theory of trade. Mercantilism held that exporting nations "won" because they gained gold (while giving up goods) while importing nations "lost" because they gave up gold (while gaining goods). The notion that a trade can have winners and losers is nonsensical, according to Smith: Two people would not agree to a trade unless they both felt it was in their interest. Why else would a buyer and seller voluntarily execute the transaction? This basic insight is borne out by common sense, everyday experience, volumes of empirical and theoretical research, and the essentially universal consensus of economists.

Yet, zero-sum talk of "winners" and "losers" at trade pervade our society. Zero-sum thinking occupies the thoughts of powerful political leaders, and appears across a multiplicity of countries and political persuasions. What can explain the ubiquity of this idea—across both space and time—that flies in the face of so much evidence?

An evolutionary model of folk-economic beliefs provides an appealing solution to this puzzle and many others. Our inborn intuitions about physics and psychology (e.g., Carey, 2009) evolved in an environment with objects and minds similar to their modern counterparts. But any inborn intuitions we have about economics evolved in a world of exchange that could hardly be more different from the modern economy, global in scale and mediated by money (Fiske, 1992; Pinker, 2002). Given the mismatch in environments, it makes sense that folk-economic beliefs built atop evolved intuitions should not, in general, track modern economic realities.

To explain aversion to trade as a specific folk-economic belief, Boyer and Petersen invoke coalitional psychology—an aversion to transferring resources to rival groups. Despite my general enthusiasm for Boyer and Petersen's theory, I find other mechanisms more plausible in the case of zero-sum thinking, based on recent results from my own research program.

First, Boyer and Petersen make the specific prediction that aversion to trade, being rooted in coalitional psychology, should "invariably occur in the context of, precisely, debates about trade between *countries*." As it happens, I have tested the idea that trade imbalances would be viewed as problematic even in the context of trade among U.S. states. Indeed, Arizona is seen as "losing" to Iowa when Arizonans import shoes from Iowa, albeit not to the same extent as when they import shoes from Thailand (Johnson, Zhang, & Keil, 2018a). At the very least, some other factors must be explaining some of the aversion to trade.

Second, an explanation based on coalitional psychology predicts that zero-sum thinking should exist at the level of international trade, but not of exchanges among individuals, particularly within the same country. Yet, in my own work, people evaluating simple monetary exchanges (e.g., Sally buying a shirt from Tony's store for $30) frequently believed that sellers were made better off at the expense of buyers (Johnson, Zhang, & Keil, 2018b), espousing a zero-sum belief. These beliefs are no stronger when the seller comes from a different country than the buyer, and only modestly stronger when describing trade in aggregate across countries (Johnson et al., 2018a). These results are all difficult to square with the idea that coalitional psychology is an important driver of zero-sum thinking.

Third, let us consider the fact that our evolutionary ancestors exchanged goods in a world without currency. The most straightforward prediction would be that we should have difficulty intuitively assigning value to useless bits of paper. This predicts an aversion to trade imbalances—in the opposite direction. Trade imbalances should be seen as favoring the country that is *importing* (intrinsically valuable) goods in exchange for (intrinsically worthless) currency. Yet, our intuitions are the opposite: The U.S. "loses" to China because the U.S. imports more than it exports. If coalitional psychology accounted for these intuitions, it would presuppose the intuition that money is worth *more*, not less, than the goods and services it can purchase—that is, mercantilist thinking of the type Smith debunked.

Fourth, if people have special difficulty thinking about money, then one would expect currency-mediated exchanges (e.g., Sally purchasing a shirt from Tony's store) to be seen as zero-sum but barters (e.g., neighbors swapping soy sauce for vinegar) as positive-sum. In fact, people often see both types of exchanges as zero-sum, but for different reasons (Johnson et al., 2018b). For currency-mediated exchanges, buyers are seen as worse-off while sellers are seen as better-off, consistent with the mercantilist intuition that money is worth more than the goods it can purchase. But for like-kind barters, *both parties* are seen as neither gaining nor losing from the exchange. Once again, this is consistent with mercantilist thinking that equates wealth with money, since no money changes hands. But it is precisely the opposite of what an evolutionary account would seem to predict, since goods (but not currency) have intrinsic value and existed in our evolutionary environment.

I am therefore forced to conclude that coalitional psychology has a limited role in explaining our basic aversion to trade. (That said, it may well aggravate this basic anti-trade bias, causing a special aversion to trade with rival countries). Instead, I propose two alternative mechanisms. First, as suggested above, people are intuitive mercantilists, imputing to money value over-and-above the goods it can purchase. Intuitive mercantilism is encouraged by several features of money (e.g., fungibility, permanence, and communicative role for conveying relative prices). If mercantilist thinking emerges late in development, this would undercut claims of its innateness. Second, when contemplating exchanges in the abstract, people often fail to take the perspective of the parties. When encouraged to do so, they recognize that people have self-interested reasons for exchange and that both parties are thus made better off (Johnson et al., 2018b).

Adam Smith wrote: "Give me that which I want, and you shall have this which you want, is the meaning of every [exchange]" (Smith, 1999/1776, p. 118–119). Few truths in modern life appear to be so obvious, yet so elusive.

References

Carey, S. (2009). *The origin of concepts*. Oxford, UK: Oxford University Press.

Fiske, A. P. (1992). The four elementary forms of sociality: Framework for a unified theory of social relations. *Psychological Review*, *99*, 689–723.

Pinker, S. (2002). *The blank slate: The modern denial of human nature*. New York, NY: Viking.

Smith, A. (1999). *An inquiry into the nature and causes of the wealth of nations*. London, UK: Penguin. (Original work published 1776.)

Johnson, S. G. B., Zhang, J., & Keil, F. C. (2018a). Cognitive biases underpin resistance to international trade. Working paper.

Johnson, S. G. B., Zhang, J., & Keil, F. C. (2018b). The psychological underpinnings of zero-sum thinking. Working paper.