Evolution, finance, and the population genetics of relative wealth

Published: 11 September 2017

Volume 20, pages 29–48, (2018) Cite this article

Journal of Bioeconomics

References

Alchian, A. (1950). Uncertainty, evolution and economic theory. *Journal of Political Economy*, *58*, 211–221.

Article Google Scholar

Bakshi, G. S., & Chen, Z. (1996). The spirit of capitalism and stock prices. *American Economic Review*, *80*(1), 133–157.

Google Scholar

Bell, R. M., & Cover, T. M. (1980). Competitive optimality of logarithmic investment. *Mathematics of Operations Research*, *5*, 161–166.

Browne, S. (2000). Can you do better than Kelly in the short run? In O. Vancura, J. Corenlius, & W. R. Eadington (Eds.), *Finding the edge: mathematical analysis of casino games* (pp. 215–231). Reno: University of Nevada.

Google Scholar

Burnham, T. C. (2002). Altruism and spite in a selfish gene model of endogenous preferences. *Journal of Bioeconomics*, *3*, 123–148.

Article Google Scholar

Burnham, T. C., Dunlap, A., & Stephens, D. W. (2015). Experimental evolution and economics. SAGE Open. October–December 2015, 1–17.

Crow, J. F., & Kimura, M. (1970). *An introduction to population genetics theory*. New York: Harper and Row.

Google Scholar

Dempster, E. R. (1955). Maintenance of genetic heterogeneity. *Cold Spring Harbor Symposium Quantitative Biology*, *20*, 25–32.

Article Google Scholar

Evstigneev, I. V., Hens, T., & Schenk-Hoppé, K. R. (2006). Evolutionary stable stock markets. *Economic Theory*, *27*, 449–468.

Article Google Scholar

Frank, S. A. (2011). Natural selection. I. Variable environments and uncertain return on investments. *Journal of Evolutionary Biology, 24*, 2299–2309.

Article Google Scholar

Frank, S. A. (1990). When to copy or avoid an opponent's strategy. *Journal of Theoretical Biology, 145*, 41–46.

Article Google Scholar

Frank, S. A., & Slatkin, M. (1990). Evolution in a variable environment. *American Naturalist, 136*, 244–260.

Article Google Scholar

York: Academic Press.

Google Scholar

Kelly, J. L. (1956). A new interpretation of information rate. *Bell System Technical Journal, 35,* 917–926.

Article Google Scholar

Lande, R. (2007). Expected relative fitness and the adaptive topography of fluctuating selection. *Evolution, 61,* 1835–1846.

Article Google Scholar

Lensberg, T., & Schenk-Hoppe, K. R. (2006). On the evolution of investment

Robson, A. J. (1992). Status, the distribution of wealth, private and social attitudes to risk. *Econometrica*, *60*(4), 837–857.

Article Google Scholar

Schweber, S. S. (1977). The origin of the Origin revisited. *Journal of the History of Biology*, *10*, 229–316.

Article Google Scholar

Schweber, S. S. (1978). The genesis of natural selection—1838: some further insights. *Bioscience*, *28*, 321–326.

Article Google Scholar

Acknowledgements

I thank Lynne Orr for many helpful discussions of these ideas as well as comments on an early draft. I thank Terry Burnham, Steve Frank, Andrew Lo, and Daven Presgraves for helpful comments on the manuscript. This work was supported by the University of Rochester.

Author information

Authors and Affiliations

Department of Biology, University of Rochester, Rochester, NY, 14627, USA

H. Allen Orr

Evolution | Kelly criterion | Population genetics | Portfolio selection

Search

Search by keyword or author

Navigation

Find a journal

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Manage preferences