

Social Epistemology >

A Journal of Knowledge, Culture and Policy

Volume 26, 2012 - Issue 3-4: Special Issue: The 25th Anniversary of Social Epistemology

1,080 17

Views

CrossRef citations to date

3

Altmetric

22nd ANNUAL NICHOLAS MULLINS LECTURE

The Modern Commercialization of Science is a Passel of Ponzi Schemes¹


Philip Mirowski

Pages 285-310 | Published online: 10 Sep 2012

Cite this article <https://doi.org/10.1080/02691728.2012.697210>

Sample our Humanities Journals

>> [Sign in here](#) to start your access to the latest two volumes for 14 days



Full Article

Figures & data

References

Citations

Metrics

Reprints & Permissions

[Read this article](#)

Abstract

A wide array of phenomena lumped together under the rubric of the “commercialization

of science... “ideas” are

both figur... experience of

working... forces

behind t... it dawned

upon me... worldwide

econ... explores

the pa... r offices at

major ur... apers in

major sc...

Keyword... [Bibliometrics](#)

We Care About Your Privacy

We and our 848 partners store and/or access information on a device, such as unique IDs in cookies to process personal data. You may accept or manage your choices by clicking below, including your right to object where legitimate interest is used, or at any time in the privacy policy page. These choices will be signaled to our partners and will not affect browsing data. [Privacy Policy](#)

We and our partners process data to provide:

Use precise geolocation data. Actively scan device characteristics for identification. Store and/or access information on a device. Personalised advertising and content, advertising and content measurement, audience research and services development.

[List of Partners \(vendors\)](#)

I Accept

Essential Only

Show Purpose



Acknowledgements

Thanks to Rebecca Lave for helpful comments.

Notes

[1] Editor's note: Professor Mirowski gave the 22nd Annual Nicholas Mullins Lecture at Virginia Tech on 25 March 2011. The first person style of his lecture is retained for this article.

[2] See Zuckoff ([2005](#)), Chancellor ([2007](#)), Ferguson ([2012](#)) and the work of Hyman Minsky ([2008](#)).

[3] I had originally wanted the title to be ScienceMart™, but repeated rounds of interventions by lawyers at the Press made me remove the trademark, and much else as well.

[4] See, for instance, Shapin ([2008](#), [2011](#)), Woolgar ([2004](#)) and Berman ([2008](#), [2011](#)). I pass by the entire "Triple helix" and "Mode 3" literatures as well. For a more jaundiced assessment, see Tyfield ([2012](#)).

[5] This estimate comes from the Federal Reserve disclosures released in December 2010. See Chan and McGinty (2010).

[6] See, and Ferguson

[7] See T (0).

[8] The c sky ([2008](#)); for fu

[9] The p ml. A similar sort of a

[10] Kais financial See also Kaiser ([2002](#)).



[11] It is clear from my correspondence with David Kaiser that he might not wish to endorse this particular gloss upon his work. Nevertheless, one can anticipate that this interpretation could easily be developed from the trends already found in science studies indicated in note 4 above.

[12] An attempt to portray the many-sided nature of the new regime can be found in the special issue of *Social Studies of Science* devoted to “Neoliberal Science” (October 2010, vol. 40, no. 5).

[13] In one estimate provided by the trade group Biotechnology Industry Organization: of the 370 publicly traded American biotechs, 125 had less than six months cash on hand (Pollack [2008](#)). Since this organization exists to present the model in its most flattering light, the situation was probably more extreme than that.

[14] For evidence of money loss, see Pisano ([2006](#), 115) and Coriat et al. ([2003](#), 238).

[15] Much of the data quoted herein were derived from a study of biotech rates of return by Ian Cockburn and Josh Lerner ([2009](#)) paid for by the venture capital industry; there is some reason to suspect their reported 44% failure rate in biotech firms is on the low side.

[16] The main sources on this worrying trend are Nightingale and Martin ([2004](#)), Hopkins et al. ([2007](#)), Angell ([2004](#)) and Aggarwal ([2007](#)).

[17] The implications of the failure of the biotech model are so inflammatory, and so opposed to the interests of so many “new knowledge economy” actors, that the

neoliberal... urgency to
argue th... and Adelman
and DeA...

[18] This... n, in Powell,
Owen-Sr... , and
New... t accrue
from the... n their
pursuit o...

[19] This... has done
nothing



[20] Patent grants have exploded after Dudas left office, leaving some to wonder whether the Obama administration has permitted the situation to degenerate even further. See: <http://inventivestep.net/2011/01/17/uspto-issues-record-number-of-patents/>.

[21] See, for instance, the Thomson Reuters-driven World University Rankings: <http://www.timeshighereducation.co.uk/world-university-rankings/2010-2011/physical-sciences.html>.

[22] The rival services of Elsevier's Scopus and Google Scholar are discussed in ScienceMart, mainly to point out the ways in which they have not been put to the uses that we identify as important for Thomson ISI.

[23] See ScienceMart (Mirowski [2011](#), 18–20, 123–5, 263–4 and 280).

[24] See, for instance, Mervis (2007), National Science Board (2008a, 5–36) and Guess (2007). One example of how the Companion (National Science Board [2008b](#)) broke ranks with this consensus was its willingness to discuss “declines” in article output.

[25] It started out with the hostility of neoliberals like Milton Friedman and George Stigler to the state provision of higher education. Friedman devoted much of his accumulated fortune to the privatization of state-supported education, which he regarded as the largest residual sector of state socialism in the West. Hayek famously disparaged academics as “second-hand purveyors” of ideas.



Relat

Gent

Sourc

The F

S

The r

Sourc

Innov

to Pu

Sourc

Comm



Rights

Source: American Association for the Advancement of Science (AAAS)

Finance, Assetization, and the Management of Value

Source: SAGE Publications

U.S. Output Flattens, and NSF Wonders Why

Source: American Association for the Advancement of Science (AAAS)

What's fueling the biotech engine?

Source: Springer Science and Business Media LLC

The mid-century biophysics bubble: Hiroshima and the biological revolution in America, revisited.

Source: SAGE Publications

The Making of the Neoliberal Thought Collective

Source: Harvard University Press

The myth of the biotech revolution: an assessment of technological, clinical and organisational change

Source: Elsevier BV

Research and data-sharing policy in Sweden – neoliberal courses, forces and discourses

Source: Linköpings universitet, Avdelningen för migration, etnicitet och samhälle (REMESO)

Eight Centuries of Financial Folly

Source: Princeton University Press

Marketing ideas

Source: Informa UK Limited

Inherent Vice: Minsky, Markomata, and the tendency of markets to undermine themselves

Source: Cambridge University Press (CUP)

A Mo

Source

Techn

Source

Strate

Source

R

So

Privat

Source

A Tid

Indus

Source

Toward a new economics of science



Related research

People also read

Recommended articles

Cited by
17

Information for

Authors

R&D professionals

Editors

Librarians

Societies

Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

Help and information

Help and contact

Newsroom

All journals

Books

Keep up

Register to receive updates by email

 Sign up

Copyright

Accessibility

Registered
5 Howick Pl

