The European Journal of the History of Economic Thought
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/rejh20

The Entrepreneurial State: Debunking Public vs. Private Myths

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Published online: 21 Jan 2014.

and the mutual intellectual contributions that took place between Hayek and Popper from the time they first met at the LSE in 1935.

The title of the book is very promising. However, the chapters themselves are not sufficiently focused on the life and works of Hayek, as evidenced by the fact that many of Hayek's own publications and a number of notable scholars who studied his work are not even mentioned or cited. The contents of each chapter and the references they provide give the impression that each contributor is more of an expert on the specific influences themselves than on Hayek. Another significant problem with the content is that, in most instances, the nature of the influences that each of the thinkers supposedly had over the development of Hayek's ideas are not clearly defined or adequately explained. Nevertheless, despite some of its flaws, this book does provide many details about a number of theorists and writers who had some relationship to Hayek and may have exerted some kind of an influence on his work, which makes it a unique contribution to the existing literature on Hayek.

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http://dx.doi.org/10.1080/09672567.2013.870295

Mariana Mazzucato, *The Entrepreneurial State: Debunking Public vs. Private Myths*. London, New York and Delhi: Anthem Press, 2013, xxv + 237 pp., €15.70 (paperback), ISBN 978-0-85728-252-1

Mariana Mazzucato's book sets out to demonstrate the important, and often dominant, role of the state in the innovation process, demonstrating this empirically and consequently providing evidence of the often subordinate role of private investment and venture capital. She demonstrates the extent to which "private" initiatives depend heavily upon a public framework of funding and research activity; breaking with the mythology surrounding Steve Jobs and Apple, she shows in Chapter 5 the degree to which Apple's iOS devices – iPhone, iPod and iPad – depended on the active support of the American federal government. A similar story is told for Green technology (Chapters 6 and 7), pharmacy and biotech (in passing). Some widely accepted truths are challenged, such as the idea that small enterprises are more innovative, that patents are a measure for knowledge creation or that venture capital is risk-loving.

The observed evidence is related to several strands of economic thinking. Central to the argument is the concept of *systems of innovations* introduced by B.A. Lundvall and C. Freeman, emphasising the innovative role of the state as opposed to received doctrine, according to which state intervention is the result of market failure:

> Economists willing to admit the State has an important role have often argued so using a specific framework called 'market failure'. From this perspective the fact that markets are 'imperfect' is seen as the exception, which means that the State has a role to play [. . .]. [. . . But t]he State has been behind most technological revolutions and periods of long-run growth. (pp. 22–3)

That the state is an active player in the innovation system is explained against the background of the theoretical insights of Frank Knight, Joseph Schumpeter and John Maynard Keynes. It is Knightian "fundamental" uncertainty, as opposed to calculable "risk", which makes it necessary for the state to advance basic research. This leads to an expansion of the knowledge base of the respective sector, which in turn facilitates the entry of venture capitalists at a later stage, once the prime innovatory risk has been minimised. This observation is also based on the planning horizon of venture capital companies:

> [V]enture capital funds [. . .] have a bias towards investing in projects where the commercial viability is established within a 3-to-5-year period [. . .]. In the case of an emerging sector like biotech or green tech today, where the underlying knowledge base is still in its exploratory phase, such a short-term bias is damaging to the scientific exploration process which requires longer time horizons and tolerance of failure. (pp. 48–9)

Uncertainty and the short-term bias of private investment go hand in hand, since investors rely on some kind of measurable uncertainty ("risk"; Knight 1971 [1921], p. 233). Since basic research includes unquantifiable uncertainty, the venture capital of the specific investor would be endangered. In this situation Knight (1971 [1921], p. 239) suggests the "'diffusion' of consequences", since it is a "gain to have an event cause a loss of a thousand dollars each to a hundred persons rather than a hundred thousand to one person". This is not only an explanation of why private investors do not engage in basic research (as revealed by the data), but also why it proves a role for the state (an inference not made explicit by Mazzucato). Even if this conclusion is not conceded, the data demonstrates significantly that private investment is of minor importance in the field of capital intensive basic research. In this context, Keynes stated that "[t]he important thing for Government is not to do things which individuals are doing already [...]; but to do those things which at present are not done at all".

Drawing lessons from the history of economic thought, it is therefore neither astonishing nor objectionable, but intelligible and desirable, that the state provides basic research to foster sustainable long-run economic growth. Since this implication is far from being common sense truth, Mazzucato aims to reconciling data and theory to correct the perception of the role played by the state within the ecosystem of innovations. To give an example, she examines the dichotomy between free market ideology and actual state intervention, analysed in Chapter 4, where the entrepreneurial role of the US government is disclosed:

> Contrary to conventional wisdom regarding the domination of free market ideology during the Reagan Administration, the US government in the 1980s, in fact, acted to build on the successes of [the Defense Advanced Research Project Agency]'s decentralized industrial policy [inter alia by] the signing of the Small Business Innovation Development Act by Reagan in 1982[.]" (p. 79)

The state itself is therefore characterised as a Schumpeterian entrepreneur, since "it is the State that has been engaged on a massive scale in entrepreneurial risk taking to spur innovation" (p. 73). Hence the title of the book.

This is where some qualification concerning the theoretical background, which serves as a framework to explain the provided empirical data, has to be put forth. Throughout the book engagement in basic research by the state is labelled as entrepreneurial activity. Reading Schumpeter, this might lead to some confusion, since he is very clear that it is one thing to invent, and it is another thing to innovate, which means the commercialisation of the invention:

> Innovation is possible without anything we should identify as invention and invention does not necessarily induce innovation, but produces of itself no economically relevant effect at all. The economic phenomena which we observe in the special case in which innovation and invention coincide do not differ from those we observe in cases in which pre-existing knowledge is made use of. (Schumpeter 1964 [1939], p. 80)

It is therefore (not only, but largely) the government which provides the knowledge base and basic research, leading to inventions. Some of those inventions get implemented in consumption goods, this latter step being the entrepreneurial one in the sense of Schumpeter. Indeed, the entrepreneur is a "man of action [who] does not simply respond to some given or expected demand. He forces his product upon the market" (Schumpeter 2006 [1912], p. 133; my translation). However, this is exactly what, for example, Steve Jobs did when iPod, iPhone and iPad were brought to the market, something which is extensively discussed in Chapter 5. In the book, one would have liked to hear more about the invention–innovation–diffusion trilogy and whether it is taken as a linear model (one step following the other), or if these parts of the process are intimately intertwined.

In Chapters 8 and 9, Mazzucato discusses distributive fairness, based on the line of argument that government spending for basic research provides the foundation for the huge profits of venture capital funds in subsequent stages of the innovation process. The argument that the research expenses of the state are re-financed through tax revenues is rejected, since companies like Apple, Google and Microsoft avoid paying taxes by exploiting tax loopholes as well as by lobbying to get tax cuts. The picture which is painted by Mazzucato is that the taxpayer, via government spending in basic research, provides the foundation of entrepreneurial success and huge profits, which then ought to be (but are not or are only to an insufficient degree) used to pay back those initial investments. The last two chapters and the Appendix – including policy recommendations – tell the story of distributive imbalances between taxpayers and employees (labourers) on the one side, and shareholders (capitalists) on the other: not only do successful enterprises benefit from government expenditures, but also within these companies distributive imbalances are revealed:

> Apple has recently announced a 3-year dividend and share repurchase plan that would divert slightly less than half of the company's current cash stock [...] to its shareholders [...]. To date, no additional benefit package has been designed to benefit the company's employee base[.] (p. 171)

The discussion of social aspects of technical change and the consequences for the actors involved, including appeals for corrections within the innovation systems, serve as a supplement to the main message of the book. Mazzucato provides an important contribution to the discussion of the role of the state in cases of innovative entrepreneurship. Her book demonstrates the extent of government spending in basic research, and the way in which these expenses foster the profitability of innovative enterprises. In this respect it qualifies the role of private investment in promoting technical progress, challenging also the theoretical approaches of endogenous growth theories built on some sort of cost–benefit analysis of R&D expenditures.

References

Knight, F.H. (1971 [1921]). *Risk, Uncertainty and Profit.* Chicago, IL: The University of Chicago Press.

Schumpeter, J.A. (1964 [1939]). *Business Cycles. A Theoretical, Historical and Statistical Analysis of the Capitalist Process. Abridged, with an Introduction by Rendigs Fels.* New York, NY: McGraw-Hill.

Schumpeter, J.A. (2006 [1912]). *Theorie der wirtschaftlichen Entwicklung.* Leipzig: Duncker & Humblot.

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http://dx.doi.org/10.1080/09672567.2013.870299

Malcolm Rutherford, *The Institutional Movement in American Economics, 1918–1947.* Cambridge: Cambridge University Press, 2013, 424 pp., £25.99 (paperback), ISBN 978-1107626089

This book makes a significant contribution to the understanding of American institutionalism and American economics in the interwar period. The richness and breadth of the book do not come as a surprise for those who have followed the author's long-standing commitment to the topic, though much is to be learned from this consummate effort to put together the various pieces of the puzzle that Rutherford has been crafting throughout the past 20–25 years. It is also the product of a patient and scrupulous historical reconstruction of an important and, until a few years ago, largely neglected strand of the history of economic thought. In this volume, Rutherford draws together the variety of American economics of the first half of the twentieth century by focusing on the personal, institutional and programmatic bases of the institutionalist movement in the interwar period. This intellectual journey also produces important insights about the specificity of institutionalism to American economics, and about the now widely recognised plurality and peculiarities of American economics in the interwar period (Morgan and Rutherford 1999; Yonay 1998).

Part of the challenge of addressing American institutionalism involves the identification of commonalities and nuances within that group. This complexity is reflected in the debate over how one should characterise this group of economists – either as a school of thought, a group of somewhat like-minded economists, or merely a convergence of certain interests and aspects. One of the major risks is to force an artificial emphasis upon the commonalities that may not reflect the diversity of intellectual interests, methodological approaches, academic and political networks in which they have operated. Rutherford calls them a movement, trying to