

Research Pioneers

MARK CASSON: THE ENTREPRENEUR AT 30—CONTINUED RELEVANCE?SHARON ALVAREZ¹, ANDREW GODLEY^{2*}, and MIKE WRIGHT^{3,4}¹Daniels College of Business, University of Denver, Denver, Colorado, U.S.A.²Henley Centre for Entrepreneurship, Henley Business School, University of Reading, Reading, U.K.³Center for Management Buyout Research, Imperial College Business School, London, U.K.⁴University of Ghent, Ghent, Belgium

*Mark Casson's *The Entrepreneur: An Economic Theory* (1982) has become one of the most influential books in the field of entrepreneurship. For the first time, this article outlines its origins and summarizes its main themes. The article goes on to show how Casson's subsequent research has closely followed the research agenda he set for himself in *The Entrepreneur* and illustrates the continuing challenge his work presents to entrepreneurship scholars. The article is based on an interview the authors conducted with Mark Casson on the thirtieth anniversary of the book's publication. Copyright © 2014 Strategic Management Society.*

INTRODUCTION

In 1982, Mark Casson's book, *The Entrepreneur: An Economic Theory*, was published. It has become one of the most highly cited works in the domain of entrepreneurship, making a contribution to the subject area by developing concepts of entrepreneurial coordination of resources, judgment, market making, and intermediation (Landström, Harirchi, and Åström, 2012). As of the end of December 2012, it had received 2,070 Google Scholar citations. For the first time, this article describes the book's origins and summarizes its most significant and distinctive features. The article goes on to examine Casson's subsequent work in the field, which has developed several of the key principles first outlined in *The Entrepreneur: An Economic Theory*, and outlines

Keywords: Mark Casson; history of entrepreneurship; *The Entrepreneur*; economics of entrepreneurship

*Correspondence to: Andrew Godley, Henley Centre for Entrepreneurship, University of Reading, Whiteknights, Reading, RG6 6UD, U.K. E-mail: a.c.godley@henley.ac.uk

where the logical consequences of Casson's view of entrepreneurship might lead the field in the years to come. The authors interviewed Mark Casson at Henley Business School, University of Reading, on December 15, 2012. Extensive excerpts from that interview are reproduced throughout the article.

ORIGINS

Born in 1945, Mark Casson arrived at the University of Reading in 1969, after an undergraduate degree in economics at Bristol University and doctoral training at Cambridge. He was an econometrician (Casson 1973 and 1974, for example). But at Reading, he was influenced by John Dunning (now widely regarded as the doyen of the field of international business), who was developing his broad theory of multinational enterprise (MNE). Dunning's then research assistant, Peter Buckley,¹ shared Mark's desire for a systematic

¹ Buckley is now professor of international business at Leeds University.

approach to theorizing foreign direct investment (FDI), and in 1976, they published a framework for understanding FDI as a rational response by firms to the failure to capture the returns to their knowledge in overseas markets (Dunning, 2009). The main assumption of this work is that firm-specific knowledge can often be imitated at low cost and, so, is vulnerable to rivals in these foreign markets. It argues that firms, therefore, have a strong incentive to internalize export markets. With this insight, the modern theory of the MNE was born. Buckley and Casson's *The Future of the Multinational Enterprise*, published in 1976, has gone on to become one of the all-time most cited contributions in international business (at the end of December 2012, it had more than 4,000 Google Scholar citations).

While Buckley has continued to focus on the economics of international business, Casson's real interest was not with the firm, but with market behavior. The fascination with markets brought him to the entrepreneur:

'I've been interested . . . in systems . . . The general equilibrium theory [is] a closed system with thermodynamical analogies, as suggested by Samuelson, the sort of harmony of Walrasian equilibrium theory; all of this fascinated me. It all seemed highly idealized. So essentially, when I got into entrepreneurship, it was very much on the view that there are an awful lot of practical things that went on, and that particularly the process of market adjustment seemed extraordinarily messy in practice. All I wanted to do was to clarify this issue of how, within this sort of broad view of the system, is the messiness of the market accommodated. I suppose out of that, I decided that some sort of theory development was needed. When I read Baumol's (1968) paper in the *AER Papers and Proceedings*, it was like 'here's somebody who seems to feel the same way that I do.' But he is a great, established figure in industrial economics. He says the profession doesn't have all the answers. So that gave me a kind of focus because it suggested to me there was a kind of contribution that I might be able to make in this area. So in a sense, I was quite inspired by this notion of a gap in the economic theory. It was very much in the context of understanding the economic system. It wasn't that I knew people who were entrepreneurs and wanted to understand what drove and motivated them. It was simply because I wanted to get rid of this kind of messiness of the fact that you got idealized markets in the models, and we've got what happens in reality. And the two don't seem to gel!'

Already familiar with the seminal works of Coase, Richardson, and Penrose, from 1979 to

1981, the process of reading, thinking, and writing followed:

'So I guess by 1979, I'd sort of read quite a bit of background stuff. But in 1979, I started saying, 'I've got to read Schumpeter, I've got to read Kirzner, Knight, Cantillon, those sort of greats.' And when I read them, I began to realize there was some very, very powerful thinkers who had already made reputations for themselves in other things, who'd written about entrepreneurship.

That coupled with the Baumol [article] made me think, 'well, we're really onto something here.' Because it turns out that although there is very little literature on the subject in the 1970s, actually it has attracted attention from a lot of heavyweight thinkers in the past. So there must be something in it. It can't just be me being too stupid to understand supply and demand analysis. There must be more to it; there must be something to be written here.

So that was really why I got engaged in the entrepreneur book. That was 1979, when I really decided that it was time to get into it in a sort of systematic way . . . So I think my aim in *The Entrepreneur* was really more to say, 'Here is a slightly different take on it and it actually makes some of the messiness disappear because it gives you an analytical structure.'

I suppose what you could say [about this analytical structure] is that it focuses on the generation of opportunities through volatility in the environment, creating opportunities to reallocate resources.

But nobody's sure whether the proposed allocation of resources is actually what's required or not, because we don't have definitive totally convincing information. Some people see it one way, some see it another way. So we encourage those who are really sure that the changes are needed to put their own effort and their own money, or to get it from other people, but to finance the proposed change and to reward them through the profit mechanism, if it turns out they are right.

Essentially, the idea was that if we can model volatility [and] if we can model opportunity seeking and look at the strategic issues that arise in opportunity seeking, [then] we can actually use techniques in economics, but we can apply them in a different context. That, in a way, is what *The Entrepreneur* book does.'

By making three important alternative assumptions to mainstream economics, Casson's model introduced a world not of perfect and costless information with

rational agents, but one where problems were pervasive, decision makers were often ignorant or incompetent, and mistakes were frequently made. It was a model of the world that many scholars recognized; and entrepreneurs in this model were simply less incompetent and more willing to make decisions than the norm. We next elaborate on these themes.

MAIN THEMES IN *THE ENTREPRENEUR: AN ECONOMIC THEORY*

In *The Entrepreneur: An Economic Theory* the principal outlines of the modern domain of entrepreneurship are all to be found. In an economy subject to volatility and shocks, there is a continual need for market adjustment. The frictionless world of mainstream economics simply assumes away any associated costs. But absent perfect information and rationality, volatility also presents the notion of opportunities, which has been the catalyst for scholarly research on entrepreneurial opportunities over the past 15 years (Alvarez and Barney, 2005, 2007; Shane and Venkataraman 2000; Shane 2003; Eckhardt and Shane 2003).

The key themes in the book can be summarized as follows: Casson's entrepreneur is no Zarathustra-type figure striding down from the hills. The Schumpeterian hero-entrepreneur is certainly included, but in a world of unevenly distributed information and competence, what is more important in Casson's view is that the entrepreneur substitutes for the Walrasian auctioneer of mainstream macroeconomics. Yet in a continuously volatile world of costly information, the entrepreneur's function is more than the Kirznerian search for equilibrium-asserting arbitrage opportunities. The distinctive feature of Casson's entrepreneur is that he/she possesses superior abilities to respond to uncertain situations. This is entrepreneurial judgment. We return to this later, using Casson's own words to elaborate on what is meant by entrepreneurial judgment.

This leads to three important implications for the future of entrepreneurship research. First, while opportunities are central in Casson's view, he is agnostic about where they come from or what form they take. Second, entrepreneurship is fundamentally significant because of its role in generating economic growth. And third, entrepreneurs are cognitively different.

IMPLICATIONS FOR THE FUTURE OF ENTREPRENEURSHIP RESEARCH

Opportunities

Much of the focus of recent scholarly work has centered on a better understanding of opportunities, and their formation and exploitation (Short *et al.*, 2010; Alvarez and Barney, 2013, for good recent reviews; Dimov, 2011; Foss and Klein, 2012, for critiques). But in Casson's world, additional conceptualization of opportunities is largely irrelevant:

'[I do get frustrated with] people who, say, are going to write a whole book about 'What is an opportunity,' and 'Is it subjective or objective?' To me these terms 'entrepreneur,' 'opportunity,' 'profit,' 'uncertainty,' these are just ordinary words. If you want to know what they mean, go to the *Oxford English Dictionary*, which will tell you how they have been used. What you will learn there is they have different meanings in different contexts . . . the entrepreneur to be successful needs his quality of judgment. Not everybody has this quality of judgment. Those who have it will gain a competitive quasi-rent, which will be reflected in higher rates of profit for their businesses than other people earn. It all hangs together for me. So uncertainty is something that relates to the fact that we all have limited knowledge, because [knowledge is] so distributed, but the important thing about uncertainty to me is that different people perceive different levels of uncertainty. So an entrepreneur, who is possessed of what they believe [to be] a particular insight, may regard it as almost certain the customers will want this product when it's produced. Whereas other people, who don't have that information, will be saying, 'What on earth are you doing producing a product like that for?' Because they don't see what the entrepreneur sees.

So the subjectivity of uncertainty, the nature of profit, entrepreneurial activity to me—these words all have specific meanings within a specific context. So I get, in a way, frustrated when I see yet another paper written about the concept of opportunity and what do we really mean by it? Because I think we can go on like this forever. I mean, if you just abstract any word from its context, then it loses a lot of its meaning, because meaning is understood in terms of the context. So I think one of the advantages of my introspective modeling is I know what the words mean, because they are always referred to this context. I'm perfectly happy with the idea that they can mean different things in different contexts.'

The economic role of entrepreneurs

Second, according to Casson, if the entrepreneurial function is, in fact, the coordination of scarce resources under uncertainty and market intermediation, then entrepreneurs have a very significant economic role. This includes the conventional focus on technological innovation, but in a volatile world where markets are liable to fail because of costly and poorly distributed information, market making also becomes a truly valuable economic activity (Godley, 2013; Casson and Godley, forthcoming). Despite this, entrepreneurship has been rejected by mainstream economics, largely because of the difficulties of incorporating uncertainty within models that assume parties to transactions are rational and informed (Foss and Klein, 2012; Becker and Hvide, 2013). Moreover, until very recently, entrepreneurship scholars among the broader management studies discipline have overwhelmingly preferred to focus on the narrower concerns of innovation and strategic performance and, therefore, have largely neglected to place the entrepreneur explicitly as a central actor in economic growth (see Bjørnskov and Foss, 2013, for a recent exception).

Entrepreneurial judgment

Third, entrepreneurs in Casson's view are clearly cognitively different (Busenitz and Barney, 1997; Hmieleski, Corbett, and Baron, 2013; Mitchell and Shepherd, 2012). This may be, in part, because they have privileged access to information, because they are more competent, or both. But the critical difference, according to Casson, is that entrepreneurs are willing to make decisions under uncertainty because their perceptions of that uncertainty are different from non-entrepreneurs' perceptions (Knight 1921; Alvarez and Barney, 2005): 'Not everybody has this capacity of judgment.'

Casson's incorporation of Knightian judgment into a broader economic framework is probably the area where the book has had its greatest impact (albeit mostly among management scholars and not economists) and, so, is worth developing here. A judgmental decision is one 'where different individuals, sharing similar objectives and acting under similar circumstances, would make different decisions. The difference arises because they have different perceptions of the situation arising from different access to information, or different interpretations of it' (Casson 1982: 21).

It follows that each entrepreneurial judgment is potentially unique. It is successful or not only within the very specific context of the unique opportunity within which the decision emerged. This has led critics to suggest that it remains a 'black box,' an unexplained residual with little analytical value (Dew *et al.*, 2009). But there are surely sufficient similarities across the various contexts and set of opportunities in which entrepreneurial decisions are made, to allow for some generalizations (Casson and Godley, forthcoming). Casson's highlighting of the role of context chimes with growing recognition of the heterogeneous nature of context in entrepreneurship research (Zahra and Wright, 2011; Li *et al.*, 2012; Fuller and Rothaermel, 2012). This research is at a relatively early stage in terms of understanding of the way in which particular contexts are associated with different opportunities and different challenges to exploiting those opportunities. Casson's work would seem to suggest the need to focus more on understanding how the nature of uncertainty and lack of information vary across different contexts and how this influences the entrepreneurial process.

Casson's subsequent development of entrepreneurship research

The degree of idiosyncrasy associated with entrepreneurial decision making makes it extremely difficult to incorporate judgment into standard mainstream economics models. But judgment was the central unit of analysis for Casson in *The Entrepreneur* and has remained so since. Attempts to overcome this measurement problem led Casson in his subsequent research first to focus on how entrepreneurs solicit information. If entrepreneurial rents emerge from access to superior information, in a world where information is costly and unevenly distributed, entrepreneurs would rationally devote considerable effort into searching for it. The second half of the 1990s, therefore, saw a growing focus on information costs and the importance of entrepreneurial networks (Casson, 1997).

This, in turn, also led to the development of the concept of entrepreneurial projects as the collective noun for sufficiently similar entrepreneurial opportunities and judgments (Casson and Wadeson, 2007a). This search for a more developed understanding of how individual actions aggregate mirrors recent developments elsewhere, with the growing recognition of the significance of aggregation from microfoundations (Barney and Felin, 2013). This is a

tall challenge indeed, as it would require models that guide action under uncertainty and perhaps fundamentally alter current theories of the firm (Alvarez and Barney, 2005; Foss and Klein, 2012; Felin *et al.*, 2012). However, Casson joins many scholars in this request. Even though this is a challenge, the field of entrepreneurship would improve in its pursuit.

Casson's focus on entrepreneurial judgment as the key unit of analysis is also significant for scholars interested in the entrepreneurial firm (Casson, 2010; Ricketts, 2006). For, if any single exercise of entrepreneurial judgment is potentially unique to that particular context, then judgment is the ultimate decision. Judgment is nontradeable and uninsurable, similar to the residual rights of control (Alvarez and Barney, 2005; Alvarez and Parker, 2009; Foss and Klein, 2012). If entrepreneurs seek to profit from their judgment, then they will need to acquire complementary assets to engage with the market. When the coordination of these assets is required to form and exploit an opportunity, a firm will be required. This insight was touched on in *The Entrepreneur* (also see Casson, 1994, 1996), but it became the focus of his subsequent research in the late 1980s and early 1990s in developing a theory of entrepreneurship and business culture (Casson, 1990, 1991). But—as with his earlier work on the multinational enterprise—Casson's interest was not primarily the firm.

For Casson, the distinctive contribution of the entrepreneur is how he/she is able to overcome the natural tendency of volatile markets to fail because of high information costs and incumbent incompetence. Once an individual entrepreneur has spotted an opportunity, the second stage of constructing an organization (or contracting with an existing organization) and organizing the venture's financing will necessarily follow. But these second-order activities of creating an organization are not central to his understanding of entrepreneurship, which focuses on the specialized skill of entrepreneurial judgment in responding to new opportunities:

'A lot of this creative thinking about opportunities goes on outside of the firm. It seems to me that it is not brainstorming in the boardroom very often. It is actually [entrepreneurs getting their] ideas out there. Perhaps even going into a shop and just thinking 'I can't find what I'm looking for. Maybe other people feel the same?' So I think that what we need in business history is more the stuff about the biography of the entrepreneur and their background and where they got their idea from. Because the idea probably

came before the firm was actually incorporated. And as the firm changed direction, it possibly did so not through internalized learning (where the sales manager said to the board, 'I think we should do this'), but possibly because the CEO went on holiday with his family and saw something anomalous out there and thought, 'Actually, this is the kind of thing that our firm could possibly do.' So I think a lot of the action is actually social, rather than institutionalized within the firm. So I think that mixing the entrepreneur up too much with the firm and talking about the entrepreneur as the resource-based-theory sometimes does, as if the entrepreneur and the firm are very, very tightly coupled, can be a mistake. Undoubtedly [they are] coupled, but I see firms more as implementation than about opportunity recognition. The individual is more about opportunity recognition. They set up the firm to implement the idea.'

There are two further themes signaled in *The Entrepreneur: An Economic Theory* (and continued in Casson's subsequent research) that may be challenging to those scholars who have cited the book so frequently.

Modeling entrepreneurship

The first is that Casson considers modeling entrepreneurship as essential for future research, and he has continued to apply modeling techniques (Casson and Wadson, 2007b; Casson and Godley, forthcoming, for example). This represents a significant departure for most entrepreneurship scholars, even among those wanting to integrate entrepreneurial judgment more centrally into explanations of economic growth. Casson, by contrast, is explicit about the importance of following a modeling agenda. Consider, for example, his interpretation of the financial crisis and the challenge it presents to entrepreneurship scholars:

'The financial crisis came about because the banks were uncritically financing bad projects. So essentially it wasn't the liquidity crisis to begin with. It was effectively the banks weakening their balance sheets by lending money to dodgy projects, whether they were poor people buying expensive houses, or building yet another shopping mall where we had already enough, or all these things. But basically banks ruined their balance sheets by stopping the prudential view of acting as a check on the entrepreneur. So the view is that the decisions as to which projects get undertaken is an interaction between a rather overoptimistic entrepreneur, who sees an

opportunity, and the financier or banker, who looks for the snags. Between them, they negotiate a project that is both imaginative but viable. But if banks start just lending just to anybody who has an idea, the quality of the lending will deteriorate. The bank runs a risk of becoming insolvent . . . So that's, in a way, a story of entrepreneurial failure in judgment in the period leading up to 2008.²

While this may seem a relatively uncontroversial interpretation,² it remains un-influential because mainstream macroeconomic models do not include entrepreneurship, so they are unable to correctly diagnose the problems or provide the solutions. But if entrepreneurship scholars pursued a modeling agenda, that would be of enormous benefit, according to Casson:

'Why? Because we need competition between models. Outside [the academic subject of entrepreneurship], the great wide world is not going to listen to entrepreneurship scholars until they equip themselves with a decent model. Then they can come along and say, 'This is our model, that's your model, choose between these models.' If we have no model, then the people with 2 percent growth model, when you challenge them, they just say, 'Well, we've got a model, you've got no model, no contest.' So actually we need competition between models and so, for that purpose, entrepreneurship scholars should have a model. Then they will be in business.

So we can model entrepreneurship as this idea that entrepreneurship takes place in the context of an economic system that is undergoing continuous structural change. [This] is, I think, extremely useful. So my idea of context is that within the macro economy, whether we are thinking of a national macro economy, a regional one, or a global one, there is constant volatility. Some of this volatility is short-term volatility, like famines and gluts from the weather, some of it is long term volatility, population growth, climate change, whatever you like. And some of it is spillover effects, for example innovations in one sector create opportunities in other sectors. In particular, investments in infrastructure alter relative costs in all the industries that potentially use that infrastructure. So essentially, [we should model] volatility, both purely exogenous to the system and also some internally generated volatility. [We can then show how this volatility is] creating a constant flow of new opportunities, which

are opportunities to reallocate resources to take advantage of the changes and to respond to the threats.

So we can then think of opportunities, if you like, as being a stock of unexploited potentially profitable projects. This stock is constantly being turned over, because entrepreneurs are recognizing a certain proportion of these opportunities and they are implementing them. But as they do so, new opportunities are being created by this external volatility. So the stock of unexploited projects or opportunities is constantly being replenished. Essentially, the more efficient the economy, the quicker the response is and, therefore, the smaller the stock of unexploited profitable opportunities and, hence, the higher the welfare of the economy. One of the problems with the interwar economies would seem to be that financial dislocation was impairing the ability to finance [those] projects needed to effect the structural changes that would get things to a better allocation of resources.

So my context is one where volatility is a driver of creating new opportunities. Entrepreneurs are there with their systems, trying to identify how to appropriate profit from these opportunities, how to recognize them, how to preempt them. It's a job of society to create, as Baumol says, the right sort of incentives to encourage the right sort of entrepreneurship, not parasitic entrepreneurship that just redistributes income from one person to another, but rather entrepreneurship focused on getting these unexploited, profitable projects exploited as quickly as possible . . . And that's why I think the current crisis is quite useful, because quite a lot of economists are more convinced than they were that what they've been doing up to now actually just will not do. (But many of them are just tinkering with [their model] in the hope that they can fix it and patch it without doing anything very radical.) I think that entrepreneurship can provide the answer in the sense of saying, 'This is how markets really work. And if we don't understand entrepreneurship, competition through innovation as well as competition through pricing and so forth, we'll never really get a satisfactory model.' But we must have a model to put up against their model. Because they are not just going to say, 'I see we've been wrong to use mathematics and to use all these models.'

Casson's call to model entrepreneurship is ambitious, not only for scholars in the field of entrepreneurship. Economics has long struggled with the distinction between risk and uncertainty. Knight

² It is consistent with Admati and Hellwig's (2013) authoritative account from the perspective of the economics of finance, for instance.

(1921) and Keynes (1936) emphasized the distinction between risk, where probabilities and distribution are knowable, and uncertainty, where information may not yet be available and thus can't be summarized by probabilities (Alvarez and Barney, 2005), and suggested that uncertainty was more common in economic decision making (Epstein and Wang, 1994).

Keynes famous reference to 'animal spirits,' for instance, refers to decision making by individuals where the probabilities are unknown and potentially unknowable in the short run and calculations of expected values are unfounded. Rather than incorporate these animal spirits into their models, economists have, instead, preferred to assume them away, at least since Savage's (1954) model of decision making in modern asset pricing theory. This assumes that agents' beliefs about the likelihoods of future states of the world may be represented by a probability measure (Epstein and Wang, 1994) and, hence, suggests that there is no meaningful distinction between risk and uncertainty. Strong assumptions about agent's beliefs in economic models, like Savage's, have led to limitations in these models about future behavior. In this sense, any model that would be beneficial to entrepreneurship research would have to simultaneously overcome the limitations that economic models typically suffer from while capturing the future that is entrepreneurship.

The role of history

The natural consequence of competition between models is that it will lead to a search for appropriate empirical data. Modeling something as complex and context specific as opportunity discovery and entrepreneurial judgment would require specific empirical sources. Casson's solution is to use history as the laboratory for entrepreneurship studies.

The focus on historical data was only alluded to in *The Entrepreneur*, notably through the literary device of the fictional Jack Brash. But much of Casson's work in the last 20 years has sought to apply his models to historical data (notably Casson, 2009; Casson and Godley, 2005, 2007, 2010; Godley and Casson, 2010):

'For an economist, history is just part of the evidence base. So basically, what's wrong with a database that goes back and back and back? The longer the run of data, the better. So what that tells us is that history is

useful and long runs of data are particularly useful because that enables us to test long-run theories. And if we're interested in innovation, structural change, how changing patterns of infrastructure have impacted on economic organization, the longer the period, the better. If we're going to do long-run historical research on entrepreneurship, then how we define the entrepreneur becomes really crucial. That's because when we go back in time, the context changes. Before the formation of modern company law in the nineteenth century, you don't have firms so much as business partnerships, and so defining the entrepreneur as the owner-manager of a firm loses relevance. Before the Industrial Revolution you didn't have 'manufacturing' so much as craft production. Using manufacturing as a paradigm for business activity, as we tend to do today, is pretty hopeless. We need to define entrepreneurship in terms that resonate with the fourteenth and fifteenth centuries as well as the twenty-first. The application of judgment fits this requirement well because it focuses on the economic function of the entrepreneur rather than their legal status; by contrast, concepts based on owner-management aren't that useful. We also need to generalize our notion of business activity to include arts and crafts, trade and transport, because these are things that really matter, whether we have modern production technologies or not.'

The last part of this comment emphasizes the relevance of the judgment perspective to a whole range of emerging entrepreneurship phenomena, including social entrepreneurship. With respect to the first part, for most entrepreneurship scholars devoted to micro-analyzing the very recent past, the conventional view of the value of historical data for research purposes would be far closer to Henry Ford's quip. But following Casson, perhaps entrepreneurship scholars might benefit from taking a broader perspective of the potential contribution of their field—developing models to compete with macroeconomists and utilizing historical datasets. Casson has been leading the call for business historians to develop new datasets that explicitly focus on entrepreneurial judgment, indeed calling for a new subdiscipline of entrepreneurship history to deliver the evidence base necessary for testing the models (Casson and Casson, 2013a, 2013b). Furr, Cavarretta, and Garg (2012), for example, provide an interesting step in this direction in their study of how the background of CEOs affects their cognitive flexibility in the context of the population of U.S. solar photovoltaic manufacturing ventures over the period 1992–2007.

CONCLUSION—CONTINUED RELEVANCE?

Mark Casson's *The Entrepreneur: An Economic Theory* has become one of the canonical references in entrepreneurship research. Despite its great influence to date, this short summary of the book and description of his subsequent development of its main themes suggests that the Casson research agenda first outlined 30 years ago remains remarkably prescient for entrepreneurship scholars today.

If entrepreneurship is as important to the world as its scholars believe, then incorporating a more explicit economics framework in their approach might permit scholarly research in the field to have greater impact on economic policy.³ This might be significantly augmented by modeling entrepreneurship.

Modeling volatility would allow scholars to model both how entrepreneurs respond to and create opportunities, depending on whether the volatility is exogenous or not (Alvarez and Barney, 2007, 2013; Sarasvathy, 2001). The benefit of a modeling agenda would first be that entrepreneurship research would first have a bigger impact and, second, it would contribute to a better understanding of the entrepreneurial actions that form the microfoundations of strategic management. For both contributions to become significant, the historians of entrepreneurship also have to engage in a research agenda to generate the relevant historical data. Such a combined research agenda represents a significant intellectual investment, one that would last several years, but the potential future returns to society would be very significant (Winter, 2013).

Finally, exploration of the contexts in which entrepreneurial judgment takes place also opens up future research agendas. Contexts are multifaceted and have implications for the nature of uncertainty and the information available to entrepreneurs, yet the links between them have been little explored. For example, institutional contexts can be distinguished into developed, emerging, and midrange economies (Hoskisson *et al.*, 2013). Further, institutional contexts are not static, but evolving over time, with implications for the nature of information available,

³ Casson speaks here as one of the U.K. government's longest-serving economic advisors on market support policy for SMEs, working especially with the former Department of Trade and Industry and its successor, the Department for Business, Innovation, and Skills.

conditions of uncertainty, and the need for cognitive adaptation by entrepreneurs regarding the process of entrepreneurial judgment.

Temporal dimensions of context also relate to the evolution of the experience of the entrepreneur over time. While there is growing interest in understanding how experience influences opportunity recognition behavior among serial entrepreneurs (Ucbasaran *et al.*, 2009), there has been little attention to how learning from prior experience influences entrepreneurial judgment. The organizational and ownership form in which entrepreneurial judgment takes place also represents a different context. As noted earlier, entrepreneurial judgment takes place currently in a heterogeneity of organizational forms rather than being restricted to new start-ups. Future research might usefully examine variations in uncertainty and information availability under these different organizational forms that influence the nature of entrepreneurial judgment.

REFERENCES

- Admati A, Hellwig M. 2013. *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It*. Princeton University Press: Princeton, NJ.
- Alvarez S, Barney J. 2005. How do entrepreneurs organize firms under conditions of uncertainty? *Journal of Management* **31**: 776–793.
- Alvarez S, Barney J. 2007. Discovery and creation: alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal* **1**(1/2): 11–26.
- Alvarez S, Barney J. 2013. Forming and exploiting opportunities: the implications of discovery and creation processes for entrepreneurial and organizational research. *Organization Science* **24**(1): 301–317.
- Alvarez S, Parker S. 2009. Emerging firms and the allocation of control rights: a Bayesian approach. *Academy of Management Review* **34**(2): 209–227.
- Barney J, Felin T. 2013. What are microfoundations? *Academy of Management Perspectives* **27**(2): 138–155.
- Baumol WJ. 1968. Entrepreneurship in economic theory. *American Economic Review* **58**(2): 64–71.
- Becker S, Hvide HK. 2013. Do entrepreneurs matter? Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2199645 (accessed 9 March 2014).
- Bjørnskov C, Foss N. 2013. How strategic entrepreneurship and the institutional context drive economic growth. *Strategic Entrepreneurship Journal* **7**(1): 50–69.
- Buckley PJ, Casson MC. 1976. *The Future of the Multinational Enterprise*. Macmillan: London, U.K.
- Busenitz LW, Barney JB. 1997. Differences between entrepreneurs and managers in large organizations: biases

- and heuristics in strategic decision-making. *Journal of Business Venturing* **12**(1): 9–30.
- Casson MC. 1973. Linear regression with error in the deflating variable. *Econometrica* **41**: 751–759.
- Casson MC. 1974. Generalized errors in variables regression. *Review of Economic Studies* **41**: 347–352.
- Casson MC. 1982. *The Entrepreneur: An Economic Theory*. Martin Robertson: Oxford, U.K. [Casson MC. 2003. *The Entrepreneur: An Economic Theory* (2nd edn). Edward Elgar: Cheltenham, U.K.].
- Casson MC. 1990. *Enterprise and Competitiveness*. Clarendon Press: Oxford, U.K.
- Casson MC. 1991. *Economics of Business Culture: Game Theory, Transaction Costs and Economic Performance*. Clarendon Press: Oxford, U.K.
- Casson MC. 1994. Why are firms hierarchical? *International Journal of the Economics of Business* **1**(1): 47–76.
- Casson MC. 1996. The nature of the firm reconsidered: information synthesis and entrepreneurial organization. *Management International Review* **36**(1): 55–94.
- Casson MC. 1997. *Information and Organization: A New Perspective on the Theory of the Firm*. Oxford University Press: Oxford, U.K.
- Casson MC. 2009. *The World's First Railway System: Enterprise, Competition and Regulation on the Railway Network in Victorian Britain*. Oxford University Press: Oxford, U.K.
- Casson MC. 2010. *Entrepreneurship: Theory, Networks, History*. Edward Elgar: Cheltenham, U.K.
- Casson MC, Casson CM. 2013a. *The Entrepreneur in History: From Medieval Merchant to Modern Business Leader*. Palgrave Macmillan: Basingstoke, U.K.
- Casson MC, Casson CM (eds). 2013b. *The History of Entrepreneurship: Innovation and Risk-taking, 1200–2000*. Edward Elgar: Cheltenham, U.K.
- Casson MC, Godley AC. 2005. Entrepreneurship and historical explanation. In *Entrepreneurship in Theory and History*, Cassis Y, Minoglou I (eds). Palgrave: Basingstoke, U.K.
- Casson MC, Godley AC. 2007. Revisiting the emergence of the modern business enterprise: entrepreneurship and the Singer global distribution system. *Journal of Management Studies* **44**(7): 1064–1077.
- Casson MC, Godley AC. 2010. Entrepreneurship in Britain, 1830–1900. In *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times*, Landes DS, Mokyr J, Baumol WJ (eds). Princeton University Press: Princeton, NJ; 211–242.
- Casson MC, Godley AC. 'Doctor, doctor . . .' entrepreneurial diagnosis and market making. *Journal of Institutional Economics*. Forthcoming.
- Casson MC, Wadeson N. 2007a. The discovery of opportunities: extending the economic theory of the entrepreneur. *Small Business Economics* **28**(4): 285–300.
- Casson MC, Wadeson N. 2007b. Entrepreneurship and macroeconomic performance. *Strategic Entrepreneurship Journal* **1**(3/4): 239–262.
- Dew N, Reed S, Sarasvathy S, Wiltbank R. 2009. Effective versus predictive logic in entrepreneurial decision making: differences between experts and novices. *Journal of Business Venturing* **24**(4): 287–309.
- Dimov D. 2011. Grappling with the unbearable elusiveness of entrepreneurial opportunities. *Entrepreneurship Theory and Practice* **35**(1): 57–81.
- Dunning JH. 2009. *Seasons of a Scholar: Some Personal Reflections of an International Business Economist*. Edward Elgar: Cheltenham, U.K.
- Eckhardt J, Shane S. 2003. Entrepreneurial opportunities. *Journal of Management* **29**(3): 333–349.
- Epstein LG, Wang T. 1994. Intertemporal asset pricing under Knightian uncertainty. *Econometrica* **62**(3): 283–322.
- Felin T, Foss N, Heimeriks K, Madsen T. 2012. Microfoundations of routines and capabilities: individuals, processes, and structure. *Journal of Management Studies* **49**(8): 1351–1374.
- Foss N, Klein P. 2012. *Organizing Entrepreneurial Judgment: A New Approach to the Firm*. Cambridge University Press: Cambridge, U.K.
- Fuller A, Rothaermel F. 2012. When stars shine: the effects of faculty founders on new technology ventures. *Strategic Entrepreneurship Journal* **6**(3): 220–235.
- Furr N, Cavarretta, Garg S. 2012. Who changes course? The role of domain and novel framing in making technology changes. *Strategic Entrepreneurship Journal* **6**(3): 236–256.
- Godley AC. 2013. Entrepreneurial opportunities, implicit contracts, and market making for consumer goods. *Strategic Entrepreneurship Journal* **7**(4): 273–287.
- Godley AC, Casson MC. 2010. History of entrepreneurship: Britain, 1900–2000. In *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times*, Landes DS, Mokyr J, Baumol WJ (eds). Princeton University Press: Princeton, NJ; 243–272.
- Hmieleski K, Corbett A, Baron R. 2013. Entrepreneurs' improvisational behavior and firm performance: a study of dispositional and environmental moderators. *Strategic Entrepreneurship Journal* **7**(2): 138–150.
- Hoskisson R, Wright M, Filatotchev I, Peng M. 2013. Emerging multinationals from mid-range economies: the influence of institutions and factor markets. *Journal of Management Studies* **50**(7): 1295–1321.
- Keynes JM. 1936. *The General Theory of Employment, Interest and Money*. Macmillan: London, U.K.
- Knight F. 1921. *Risk, Uncertainty and Profit*. August M. Kelley: New York.
- Landström H, Harirchi G, Åström F. 2012. Entrepreneurship: exploring the knowledge base. *Research Policy* **41**(7): 1154–1181.

- Li H, Zhang Y, Li Y, Zhou L-A, Zhang W. 2012. Returnees versus locals: who performs better in China's technology entrepreneurship? *Strategic Entrepreneurship Journal* **6**(3): 257–272.
- Mitchell R, Shepherd D. 2012. Capability development and decision incongruence in strategic opportunity pursuit. *Strategic Entrepreneurship Journal* **6**(4): 355–381.
- Ricketts M. 2006. Theories of entrepreneurship: historical development and critical assessment. In *Oxford Handbook of Entrepreneurship*, Casson MC, Yeung B, Basu A, Wadeson N (eds). Oxford University Press: Oxford, U.K.; 33–58.
- Sarasvathy S. 2001. Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review* **26**(2): 243–263.
- Savage LJ. 1954. *The Foundations of Statistics*. John Wiley & Sons: New York.
- Shane S. 2003. *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Edward Elgar: Cheltenham, U.K.
- Shane S, Venkataraman S. 2000. The promise of entrepreneurship as a field of research. *Academy of Management Review* **26**(1): 217–226.
- Short J, Ketchen D, Shook C, Ireland R. 2010. The concept of 'opportunity' in entrepreneurship research: past accomplishments and future challenges. *Journal of Management* **36**: 40–65.
- Ucbasaran D, Westhead P, Wright M. 2009. The extent and nature of opportunity identification by experienced entrepreneurs. *Journal of Business Venturing* **24**: 99–115.
- Winter SG. 2013. An evolutionary program for business history? *Enterprise & Society* **14**(3): 498–506.
- Zahra S, Wright M. 2011. Entrepreneurship's next act. *Academy of Management Perspectives* **25**: 67–83.