Available online at www.sciencedirect.com

Revista de Administração

RAUSP Management Journal

Revista de Administração 51 (2016) 323–326

http://rausp.usp.br/

ThinkBox

Why entrepreneurs need firms, and the theory of the firm needs entrepreneurship theory

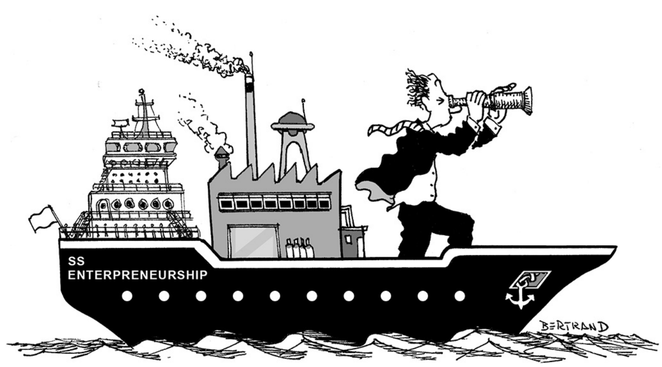
Peter G. Klein [a,b]

[a] *Department of Entrepreneurship, Baylor University, Waco, United States*
[b] *Department of Strategy and Management, Norwegian School of Economics, Bergen, Norway*

Abstract

Firms are established by entrepreneurs, and entrepreneurship is typically embodied within a firm. And yet, the research literatures on entrepreneurship and the theory of the firm developed mostly independently. I suggest some reasons why these literatures have struggled to connect, and offer a potential path forward, one that describes the entrepreneurial act as the acquisition, combination, and recombination of heterogeneous resources under conditions of uncertainty.

Keywords: Entrepreneurship; Theory of the firm; Uncertainty; Judgment



Introduction

The research literature on the economic theory of the firm has been around since the 1930s (Coase, 1937), blossoming fully into a distinct research program during the 1970s with the seminal works of Williamson (1971, 1975, 1979), Alchian and Demsetz (1972), Jensen and Meckling (1976), Holmström (1979), and many others. This story has been told many times (e.g., Foss & Klein, 2012, chapter 6) and chapters on the "theory of the firm" appear in the leading textbooks and survey volumes. These theories focus on the benefits and costs of organizing, managing, and governing transactions [sometimes to the neglect of production costs (Langlois & Foss, 1999)] under various conditions. These perspectives have spawned a large set of theoretical and empirical applications, extensions, and refinements, and increasingly use the language and style of contemporary formal economics (e.g., Aghion, Dewatripont, Legros, & Zingales, 2016).

And yet, there is much less work in this tradition explaining the *emergence* of the firm.[1] Where do firms come from? Most are established by entrepreneurs, and indeed, the most common definition of "entrepreneur" for academics and practitioners is "one who forms a new business organization." One would then think that entrepreneurship theory would be part of the theory of the firm. Put differently, entrepreneurs are individuals who establish, operate, reconfigure, dissolve, and otherwise work through firms; hence economic theories of the firm – as well as theories of the firm drawn from psychology, sociology, operations research, and so on – might be considered applications of entrepreneurship theory. Alas, neither is true; for the entrepreneurship field has its own research literature, largely divorced from the literatures on firm organization and firm strategy. The entrepreneurship

E-mail: Peter_Klein@baylor.edu
Peer Review under the responsibility of Departamento de Administração, Faculdade de Economia, Administração e Contabilidade da Universidade de São Paulo – FEA/USP.

[1] A recent exception is Bylund (2015).

http://dx.doi.org/10.1016/j.rausp.2016.06.007

literature focuses mostly on individuals, not organizations, and on firm creation, not firm operation.[2]

Much of my own recent work on entrepreneurship (see Klein, 2017) can be understood as a call to bring entrepreneurship into the theory of the firm, and the theory of the firm into entrepreneurship. Contemporary entrepreneurship research revolves around the concept of the "opportunity" (largely based on the work of economist Israel Kirzner).[3] In this approach, entrepreneurship research asks why, when and how (1) entrepreneurial opportunities arise, (2) certain individuals and firms and not others discover and exploit opportunities, and (3) different modes of action are used to exploit those opportunities (Shane & Venkataraman, 2000: 218). The opportunity-discovery approach has spawned an ambitious and sweeping research program on the nature and implications of opportunities and their relationship to individual and market characteristics.

During the last decade, however, the opportunity-discovery approach has been challenged on ontological, epistemic, and methodological grounds. Alvarez and Barney (2007) argued that opportunities do not always exist objectively "out there," but must be created by entrepreneurial action. The "effectuation approach," building on cognitive science and associated in particular with the work of Sarasvathy (2008), sees entrepreneurs not as discovering (or creating) profit opportunities, then taking actions to exploit those opportunities, but as acting experimentally, incrementally, and with limited foresight, taking advantage of resources currently at hand – what is often described as "bricolage" (Baker & Nelson, 2005; Garud & Karnøe, 2003).

A third challenge to the opportunity-discovery view, building on Cantillon (1755), Knight (1921), Mises (1949), and Casson (1982), questions the very notion of opportunities, finding the opportunity metaphor redundant at best, misleading at worse. My recent book, *Organizing Entrepreneurial Judgment: A New Theory of the Firm* (Foss & Klein, 2012), is dedicated to reconstructing, elaborating, and extending this "judgment-based view." In this approach, entrepreneurship is conceptualized as judgmental decision-making which takes place in a market setting under uncertainty. Entrepreneurs combine heterogeneous assets, which differ in their attributes, and deploy these assets within a firm to the production of new offerings that may satisfy customer wants at a profit. Rather than pursuing metaphorical opportunities – which are only realized ex post, after profits and losses are realized – entrepreneurs pursue profits, and try to avoid losses, by anticipating future market conditions. And they do so by establishing, organizing, and reorganizing business firms.

Entrepreneurial judgment

The judgment-based view is part of a larger stream of research seeking to make action, not opportunities, the unit of analysis for entrepreneurship research (Holcombe, Michael Holmes, Klein, & Duane Ireland, 2014; Klein, 2008; McMullen & Shepherd, 2006). The term *judgment* comes from Knight (1921), who described judgment as decision-making under un-certainty that cannot be modeled or parameterized as a set of formal decision rules. Judgment is midway between the "rational decision-making" of neoclassical economics models and blind luck or random guessing. We sometimes call it intuition, gut feeling, or understanding. In a world of Knightian uncertainty, and heterogeneous capital resources with attributes that are subjectively perceived and unknowable ex ante, some agency must bear the responsibility of owning, controlling, deploying, and redeploying these resources in the service of consumer wants. That, in the judgment-based perspective, is the role of the entrepreneur. The entrepreneur's job is to combine and recombine heterogeneous capital resources in pursuit of profit (and the avoidance of loss). When the entrepreneur is successful in acquiring resources at prices below their realized marginal revenue products – i.e., when the entrepreneur exercises good judgment – she earns an economic profit. When her judgments are poor, she earns an economic loss. Competition among entrepreneurs (and those who provide financial capital to entrepreneurs) tends to steer ownership and control of productive resources toward those entrepreneurs with better judgment.

Unlike other approaches to entrepreneurship, the judgment-based view closely links entrepreneurship to ownership and economic organization. Knight (1921, p. 271) argued that judgmental decision-making is inseparable from responsibility and control, that is, ownership and direction of a business venture. "The essence of enterprise is the specialization of the function of responsible direction of economic life. . .Any degree of effective exercise of judgment, or making decisions, is in a free society coupled with a corresponding degree of uncertainty-bearing, of taking the responsibility for those decisions." Hence entrepreneurs own assets, and entrepreneurial action is manifest in firms.

Foss and Klein (2015) offer a summary of the judgment-based view and respond to some criticisms and concerns. One problem is that the theory is largely agnostic about the exact cognitive and psychological mechanisms underlying entrepreneurial judgment. For explaining firm existence, boundaries, and internal structure, a general, abstract conception of judgment may suffice. But there may be gains to a more systematic treatment of decision-making under uncertainty, following thinkers such as Shackle (Packard, Clark, & Klein, 2016) or Bayesian decision models (Bewley, 1986, 1989). Another issue as that "judgment," as the act of making decisions under uncertainty, is often confused with the ordinary-language meaning of judgment, which connotes wisdom, discernment, or discretion. Judgment per se, as we use the term, is different from "good judgment." Of course, given market competition, entrepreneurs who systematically make good judgments will tend to prosper at the expense of those who tend to make poor judgments, so there is a link between judgment per se and good judgment. But the potentially ambiguous nature of the term "judgment" has led to some unnecessary confusion (e.g., Foss & Klein, 2012: 95–96; Sarasvathy & Dew, 2013).

[2] Recent work on "strategic entrepreneurship" (Klein, Barney, & Foss, 2013) has begun to apply entrepreneurial concepts, tools, and methods to established firms, but adds little to conventional (transaction cost, agency theoretic, or property rights) explanations of firm existence, boundaries, and internal organization.

[3] See Klein and Bylund (2014) for a discussion of Kirzner's influence on the field.

Judgment and firm existence, boundaries, and internal organization

How does the judgment-based approach help us deal with the "classic" Coasean questions about firm emergence, boundaries, and internal organization? First, as Knight (1921) pointed out, entrepreneurial judgment is non-contractible. In other words, if judgment represents residual decision authority about the use of productive assets, then judgment cannot be delegated without selling the asset. An entrepreneur-owner can seek advice, of course, but bears the ultimate responsibility for soliciting advice, following or rejecting advice, and making final decisions. To exercise judgment, then, the entrepreneur must be an owner – i.e., must start and/or operate a firm. Put differently, a prospective entrepreneur (or team of entrepreneurs) may be unable to communicate expectations about a project or business plan – a specific way of combining heterogeneous capital assets to serve future consumer wants – in such a way that other agents can assess its economic implications. Organizing a firm may also be a low-cost means of experimentation with different asset combinations and employment contracts, under the coordination of the entrepreneur (Foss, 2001). The existence of the firm can thus be explained by a specific category of transaction costs, namely, those that close the market for entrepreneurial judgment.

In this approach, a firm is an entrepreneur plus the alienable assets she owns and controls. The multi-person firm includes multiple owners and/or employees who may exercise "derived judgment" on the part of the entrepreneur-owner or owners, who exercise judgment in selecting, monitoring, and delegating decision authority to these employees. Organizational characteristics (size, vertical boundaries, diversification, ownership structure, internal organization, etc.) evolve over time as entrepreneurs experiment with different combinations of heterogeneous assets and different strategies and business models. As Lachmann (1956: 16) put it, "We are living in a world of unexpected change; hence capital combinations. . .will be ever changing, will be dissolved and reformed. In this activity, we find the real function of the entrepreneur."

Advancing the theory

Ongoing and future research on entrepreneurship and the theory of the firm fits into several categories. First, several papers seek to operationalize entrepreneurial judgment more specifically in the context of economic organization and firm strategy (Foss et al., 2016; Godley & Casson, 2015; Halberg, 2015; McCaffrey, 2015; McMullen, 2015; Packard et al., 2016). Another stream look at applications of the judgment-based perspective to innovation, public policy, corporate governance, non-market action, and more (Klein, McGahan, Pitelis, & Mahoney, 2010; Kolympiris & Klein, 2016; McCaffrey & Salerno, 2011). Economists and other social scientists tend to apply entrepreneurial metaphors too loosely, referring to creative and innovative persons as "entrepreneurs" without fully considering the differences in institutional context (for example, government bureaucrats are investing other people's resources under conditions of uncertainty, not their own resources). But we may be able to gain some insight on the behavior of non-market actors, and the emergence and growth of public organizations, by thinking about entrepreneurial processes of resource assembly and recombination.

The theory of the firm, in turn, can benefit further by thinking more systematically about firm emergence, how firms adapt and respond to economic change, and how established firms can be more entrepreneurial and innovative. Doing so requires going beyond the production-function approach to the firm, and even beyond the transaction cost, property-rights, and agency-theoretic perspectives that dominate the modern theory of the firm. This will help the scholarly community exploit more fully the potential gains from trade between these two fields.

Conflicts of interest

The authors declare no conflicts of interest.

References

Aghion, P., Dewatripont, M., Legros, P., & Zingales, L. (Eds.). (2016). *The impact of incomplete contracts on economics*. New York: Oxford University Press.

Alchian, A. A., & Demsetz, H. (1972). Production, information costs, and economic organization. *American Economic Review*, *62*(5), 777–795.

Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, *1*(1–2), 11–26.

Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, *50*, 329–366.

Bewley, T. F. (1986). *Knightian decision theory: Part I* Cowles Foundation Discussion Paper No. 807.

Bewley, T. F. (1989). *Market innovation and entrepreneurship: A Knightian view* Cowles Foundation Discussion Paper No. 905.

Bylund, P. L. (2015). Explaining firm emergence: Specialization, transaction costs, and the integration process. *Managerial and Decision Economics*, *36*(4), 221–238.

Cantillon, R. (1755). In H. Higgs (Ed.), *Essai sur la nature du commerce en général* (p. 1931). London: Macmillan.

Casson, M. C. (1982). *The entrepreneur: An economic theory* (2nd ed., pp. 1999). Aldershot, UK: Edward Elgar.

Coase, R. H. (1937). The nature of the firm. *Economica*, *4*, 386–405.

Foss, N. J., & Klein, P. G. (2012). *Organizing entrepreneurial judgment: A new approach to the firm*. Cambridge: Cambridge University Press.

Foss, N. J., & Klein, P. G. (2015). The judgment-based approach to entrepreneurship: Accomplishments, challenges, new directions. *Journal of Institutional Economics*, *11*(3), 585–599.

Foss, K. (2001). Organizing technological interdependencies: A coordination perspective on the firm. *Industrial and Corporate Change*, *10*(1), 151–178.

Foss, N. J., Klein, P. G., Lien, L. B., & Zenger, T. R. (2016). *The buck stops here: ownership and judgment as complements in strategy research* Working paper. Copenhagen Business School.

Garud, R., & Karnøe, P. (2003). Bricolage versus breakthrough: Distributed and embedded agency in technology entrepreneurship. *Research Policy*, *32*, 277–300.

Godley, A. C., & Casson, M. C. (2015). 'Doctor, Doctor. . .' entrepreneurial diagnosis and market making. *Journal of Institutional Economics*.

Halberg, N. L. (2015). Uncertainty, judgment, and the theory of the firm. *Journal of Institutional Economics*, *11*(3), 623–650.

Holcombe, T. R., Michael Holmes, R., Klein, P. G., & Duane Ireland, R. (2014). *Motivated reasoning in judgmental decision-making and entrepreneurial action: Toward a behavioral model* Working Paper. Farmer School of Business, Miami University.

Holmström, B. (1979). Moral hazard and observability. *Bell Journal of Economics*, *10*(1), 74–91.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and capital structure. *Journal of Financial Economics*, *3*(4), 305–360.

Klein, P. G. (2008). Opportunity discovery, entrepreneurial action, and economic organization. *Strategic Entrepreneurship Journal*, *2*(3), 175–190.

Klein, P. G. (2017). My contributions to entrepreneurship theory. In D. B. Audretsch, & E. E. Lehmann (Eds.), *The Routledge companion to the makers of modern entrepreneurship*. Routledge (in press).

Klein, P. G., Barney, J. B., & Foss, N. J. (2013). Strategic entrepreneurship. In E. Kessler (Ed.), *Encyclopedia of management theory* (pp. 778–782). New York: Sage.

Klein, P. G., & Bylund, P. L. (2014). The place of Austrian economics in contemporary entrepreneurship research. *Review of Austrian Economics*, *27*(3), 259–279.

Klein, P. G., McGahan, A. M., Pitelis, C. N., & Mahoney, J. T. (2010). Toward a theory of public entrepreneurship. *European Management Review*, *7*, 1–15.

Knight, F. H. (1921). *Risk, uncertainty, and profit*. New York: August M. Kelley.

Kolympiris, C., & Klein, P. G. (2016). *Universities as innovators: The effect of academic innovators on patent quality* Working paper. University of Bath and Baylor University.

Lachmann, L. M. (1956). *Capital and its structure*. pp. 1978. Kansas City: Sheed Andrews and McMeel.

Langlois, R. N., & Foss, N. J. (1999). *Capability and governance: The rebirth of production in the theory of economic organization*. KYKLOS.

McCaffrey, M. (2015). Economic policy and entrepreneurship: alertness or judgment? In P. L. Bylund, & M. McCaffrey (Eds.), *The Next Generation of Austrian Economics: Essays in Honor of Joseph T. Salerno* (pp. 183–199).

McCaffrey, M., & Salerno, J. T. (2011). A theory of political entrepreneurship. *Modern Economy*, *2*(4), 552–560.

McMullen, J. S. (2015). Entrepreneurial judgment as empathic accuracy: A sequential decision-making approach to entrepreneurial action. *Journal of Institutional Economics*, *11*(3), 651–681.

McMullen, J., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, *31*(1), 132–152.

Mises, L. v. (1949). *Human action: A treatise on economics*. pp. 1998. New Haven/Auburn, Ala: Yale University Press/Scholars Edition.

Packard, M. C., Clark, B. R., & Klein, P. G. (2016). *Recursive judgment, transitional uncertainty, and the entrepreneurial process* Working paper. Trulaske College of Business, University of Missouri.

Sarasvathy, S. D. (2008). *Effectuation: Elements of entrepreneurial expertise*. Northampton: Edward Elgar Publishing.

Sarasvathy, S. D., & Dew, N. (2013). Without judgment: An empirically-based entrepreneurial theory of the firm. *Review of Austrian Economics*, *26*(3), 277–296.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, *25*, 217–226.

Williamson, O. E. (1971). The vertical integration of production: Market failure considerations. *American Economic Review*, *61*, 112–123.

Williamson, O. E. (1975). *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.

Williamson, O. E. (1979). Transaction cost economics: The governance of contractual relations. *Journal of Law and Economics*, *22*, 233–261.