THE JUDGMENT-BASED APPROACH TO ENTREPRENEURSHIP: ACCOMPLISHMENTS, CHALLENGES, NEW DIRECTIONS

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31 March 2015

Journal of Institutional Economics, forthcoming

ABSTRACT

Over the last three decades entrepreneurship has become a hot topic in economics and management. Much of the entrepreneurship research literature has built upon insights of economists such as Schumpeter, Knight, and Kirzner, each of whom has inspired a distinct strand of entrepreneurship theory and application. Schumpeterian innovation and Kirznerian alertness are the best-known concepts of entrepreneurship, but a newer research stream is building on Knight's idea of entrepreneurship as judgmental decision-making under uncertainty. What we call the judgment-based view models entrepreneurs as owning, controlling, and combining heterogeneous assets, which differ in their attributes, and deploying these assets within a firm to produce goods and services in anticipation of economic profit. This Forum presents three papers that develop, extend, and challenge the judgment-based view of entrepreneurship, focusing on the foundations of judgment, the processes of entrepreneurial resource assembly, and the relationship between the judgment-based view and other theories of economic organization.

Much recent progress in economics has come from rediscovering long-neglected, but once-prominent, phenomena such as institutions, culture, and psychology. In the recent literatures on economic growth, innovation, industry dynamics, and the theory of the firm, economists have begun looking toward the entrepreneur as an agent who establishes new firms and industries, brings forth new products and services, and generates local and national (and sustainable) economic growth (e.g., Aghion and Howitt, 1992; Baumol, 1993).

At the same time, economics continues to have an uneasy relationship with the entrepreneur (Baumol, 1968; Loasby, 1982; Mathews, 1996; Bianchi and Henrekson, 2005; Foss & Klein, 2012). Some of the most important contributions to economic theory from writers as diverse as Richard Cantillon (1755), J. B. Say (1803), Carl Menger (1871), Joseph Schumpeter (1911), Frank Knight (1921), and Ludwig von Mises (1949) placed the decision-making, uncertainty-bearing, firm-creating, innovating entrepreneur at the center of their explanations for economic phenomena. However, the gradual "hardening" of economic theory in the twentieth century, with the gradual emphasis on the mathematical modeling of equilibrium states, and the centrality of the perfectly competitive model as the primary analytical tool and welfare benchmark, left little room for the entrepreneur. In Baumol's (1993, p. 17) famous quip, the entrepreneur became "the specter which haunts economic models."

More recently, economists have begun to look again toward entrepreneurship as an important driver of innovation and economic growth (Acs and Audretsch, 2003). But the entrepreneur plays a limited role in modern economic theory, associated narrowly with self-employment (Kihlstrom and Laffont, 1979; Hamilton, 2000: Lazear, 2004; Parker, 2004), new and small firms (Acs and Audretsch, 1990; Gompers and Lerner, 2001; Glaeser, Kerr, and Kerr, 2012), and technological innovation (Acs and Audretsch, 2003; Baumol, 2010). In "normal" markets, with mature companies, stable demand, and modest economic change, there is no need to invoke the entrepreneur.

The field of management research has also seen a revival of interest in entrepreneurship, often also defined narrowly as startups and self-employment. When entrepreneurship emerged as a subfield of management research in the 1970s and 1980s, the literature was mostly descriptive, focused on the study of small-business management, and the emergence of new companies. As the field matured, several scholars sought legitimization by invoking the authority of major non-

mainstream economists, such as Israel Kirzner, Knight, Mises, F. A. Hayek, Schumpeter, and Herbert Simon. Measured in terms of impact on contemporary entrepreneurship research, the most important of these authorities is Kirzner (Klein and Bylund, 2014), whose concept of entrepreneurial discovery, first outlined in his landmark *Competition and Entrepreneurship* (1973), became the basis of the "opportunity discovery" approach (Shane and Venkataraman, 2000; Shane, 2003). In this conception, the study of entrepreneurship is seen as centering around three research questions, namely 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 and Venkataraman, 2000: 218). This is an ambitious and sweeping research program; yet, in practice, research within it mainly considers the antecedents of opportunity discovery associated with start-ups.

During the last decade, however, the opportunity-discovery approach has been challenged on ontological, epistemic, and methodological grounds. First, Alvarez and Barney (2007) argue that opportunities do not always exist objectively "out there," but must be created by entrepreneurial action. "Discovery entrepreneurs" focus on predicting systematic risks, formulating complete and stable strategies, and procuring capital from external sources. In contrast, "creation entrepreneurs" apply iterative, inductive, incremental decision making, are comfortable with emergent and flexible strategies, and tend to rely on internal finance. Second, the "effectuation approach," building on cognitive science (e.g., Newell and Simon, 1972), and associated in particular with the work of Saras 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" (Garud and Karnøe, 2003; Baker and Nelson, 2005). Effectuation is an incremental and flexible approach, in which goals are often adjusted under the impact of learning about what can be done with available resources and feedback from the nascent entrepreneur's network.

A third challenge to the opportunity-discovery view, building on Cantillon (1755), Knight (1921), Mises (1949), and Casson (1982), challenges the very notion of opportunities, finding the opportunity metaphor redundant at best, misleading at worse. Our recent book, *Organizing Entrepreneurial Judgment: A New Theory of the Firm* (Foss and Klein, 2012), is dedicated to reconstructing, elaborating, and extending what we call, following Knight and Mises, the

"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.[1]

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 (McMullen and Shepherd, 2006; Klein, 2008; McMullen and Dimov, 2013; Holcombe et al., 2014). Unlike other approaches to entrepreneurship, the judgment-based view closely links entrepreneurship to ownership and economic organization, giving it an inherently "institutional" dimension. It asserts that entrepreneurship is strictly unthinkable absent ownership of assets, and it asserts that entrepreneurship is tied to firm formation. 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." Both the arguments that entrepreneurs must own assets, and that entrepreneurial action is manifest in firm formation and maintenance, have been sharply contested in the entrepreneurship literature. We describe and respond to some of these critiques below.

In our view judgment is a superior basis for furthering research on entrepreneurship. However, although the judgment view has a prehistory that reaches back further in time than Adam Smith (Cantillon, 1755), it is still very much a developing perspective. We are encouraged by the papers in this forum, as well as other recent papers exploring, expanding, and challenging the judgment-based view (Casson, 1992; Langlois and Cosgel, 1993; Hülsmann, 1997;

[1] Similar critiques of the opportunity construct are offered in Dimov (2011), Davidsson and Tonelli (2013), and Klein and Bylund (2014). Shane (2012) attempts to rescue the opportunity construct by distinguishing between objective, exogenous opportunities and subjective, endogenous "business plans," seemingly unaware that this distinction renders the opportunity construct redundant. Lewin (2015) also redefines opportunities as expected gains, rather than actual gains, which also seems to us like a rejection of the opportunity construct itself.

McMullen and Shepherd, 2006; Foss et al., 2007a, 2007b; Klein, 2008; Salerno, 2008; Foss and Klein, 2012; Holcombe et al, 2014; McCaffrey, 2015; Packard, Clark, and Klein, 2015; McCaffrey and Salerno, forthcoming).

The Increasing Importance of Entrepreneurship

Entrepreneurship is one of the fastest-growing subfields in management research, and is increasingly appearing in economics, sociology, anthropology, finance, and even law. Although the popularity of entrepreneurship in management research is not completely matched by a corresponding popularity in economics, at least the subject field has its own code (L26) in the *Journal of Economic Literature* classification scheme. Research and policy organizations (e.g., the OECD, the World Bank, the U.S. Federal Reserve System, the European Commission, the United Nation's FAO, etc)., and others show a growing interest studying and encouraging entrepreneurship. The Kauffman Foundation has substantially increased its funding for data collection, academic research, and education on entrepreneurship.

Why the increased interest in entrepreneurship? One source is the fact that the economy often appears more "entrepreneurial" than before. Phenomena associated with entrepreneurship such as startups, angel and venture capital, intellectual property, IPOs, and the like are popularly described as the main drivers of technological progress and economic growth. In terms of industry dynamics, the "churn" caused by new firm formation was a phenomenon of huge empirical importance in the mid-1970s, which is also when the entrepreneurship field was slowly getting established in management research and economics. Following Schumpeter (1911) much management research points to the inherently temporary nature of competitive advantages (e.g., D'Aveni, 1994). Empirical work broadly suggests that firm-specific returns that can be linked to specific competitive advantages regress to the industry mean, and that, moreover, the pace of regression has accelerated over the last few decades (Pacheco-de-Almeida, 2010).

Given the importance of entrepreneurship in the economy, one would expect its incorporation into economics to be a main priority of the profession. And yet, modern economics maintains an ambivalent relationship with entrepreneurship. While it is acknowledged that entrepreneurial phenomena such as self-employment, startups, and innovation are important, there is little consensus about how the entrepreneurial role should be conceptualized, modeled

and incorporated into economic theory (Bianchi & Henreksson, 2005; Foss & Klein, 2005). Indeed, the historical "classics" in the economic literature on entrepreneurship—Schumpeter's account of innovation, Knight's theory of profit, and Kirzner's analysis of entrepreneurial discovery—are typically viewed as interesting, but idiosyncratic insights that do not easily generalize to other contexts and problems and are difficult, and perhaps impossible to formally model.

More generally, mainstream economists have tended to conceptualize entrepreneurship as an outcome or empirical phenomenon, one that can be measured, compared, and analyzed using conventional empirical methods. Thus an "entrepreneurial" society is one with a high percentage of self-employed to employed-individuals, a large number of new firms and small firms, and healthy rates of R&D expenditures and patenting. The problem with the outcome-based view of entrepreneurship is that it does not relate in an obvious way to the classic contributions in the economics of entrepreneurship from Schumpter, Knight, Kirzner, and so on. As Klein (2008) argues, entrepreneurship was traditionally understood by economists as a generalized function such as ownership and responsibility, uncertainty-bearing, alertness, and innovation. Obviously, those functions are not the exclusive domain of startup companies, proprietorships, or venture-funded technology firms, but are performed by a variety of agents in a variety of circumstances.

Entrepreneurship and Economic Organization

Entrepreneurship researchers generally recognize that entrepreneurship (i.e., the exercise of judgment in a commercial context) is embedded in firms and that firms don't spring into existence by themselves, but are created and operated by entrepreneurs (Foss and Klein, 2005).[2] At the same time, the literature often describes the "entrepreneurial firm" as a special class of firm—one that is new, small, venture-funded, rapidly growing, technology oriented, or otherwise distinct from established enterprises in mature industries (Alvarez and Barney, 2004; Langlois, 2007). In this perspective, firms may begin as entrepreneurial, and run by entrepreneurs, but at some point they become established firms, run by managers.

We find such distinctions conceptually elusive, and empirically arbitrary. At what point in the firm, industry, or technology life-cycle does this transformation take place? How many employees

[2] A unique exception is Kirzner's (1973, 1997) notion of the "pure entrepreneur," who engages in costless arbitrage without owning any resources (Klein and Bylund, 2014).

can the entrepreneur direct before she becomes a manager? When does the founder or supervisor cease exercising judgment, being alert to opportunities, or introducing novelty? To some extent, the management and economics literatures recognize the artificiality of such distinctions—obviously, both large and small firms can innovate, and much research has gone into investigating Schumpeter's famous claim that small firms face an innovation deficit (Acs and Audretsch, 2003; Baumol, 2010). However, management scholars have tended to label large-firm innovation, experimentation, and new-business-unit creation "intrapreneurship," to distinguish it from the same activities in smaller and younger firms (De Clercq, Castañer, and Belausteguigoitia, 2007).

In the judgment-based view, judgment is exercised by resource owners, who combine and combine productive assets under conditions of uncertainty (Foss et al., 2015). 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." Entrepreneurship is thus not merely a perceptive behavior such as idea generation or creative thinking, but the act of taking responsibility for real assets, investing them in anticipation of uncertain future rewards. As Knight (1921) famously argued, to exercise such responsibility, the actor must put resources in play—i.e., must establish and operate a business firm. Hence the theory of entrepreneurship and the theory of the firm are two sides of the same coin.

Judgment: Unpacking the Black Box

The judgment-based view starts with the fact of judgment—the need for individuals to make decisions about the future without access to a formal model of decision rule, as would apply to situations of "rational" behavior under probabilistic risk. Without access to such a model, the decision-maker uses intuition or gut feeling (Huang, 2012), what Mises called *Verstehen*, or "understanding." For Mises, and to a lesser extent for Knight, the exact mechanisms of judgment, the behavioral and cognitive processes by which entrepreneurs form their beliefs about future conditions, are a black box. Mises (1949: 582) says the entrepreneur relies on a "specific anticipative understanding of the future," one that "defies any rules and systematization." As Casson (1982: 14) notes, "[t]he entrepreneur believes he is right, while everyone else is wrong. Thus, the essence of entrepreneurship is being different—being different because one has a different perception of the situation."

For explaining firm existence, boundaries, and internal structure, such a general, abstract conception of judgment may suffice. But we may also wish to understand the microfoundations of judgment in more detail. First, the judgment-based approach assumes some distinction between uncertainty and probabilistic risk, such as Knight's concept of genuine uncertainty, Mises's frequentist notion of case probability, or Shackle's (1972) idea of genuine surprise. In our book (Foss and Klein, 2012, ch. 4) we discuss some modern attempts to analyze uncertainty, such as Bewley (1986, 1989)'s formal Bayesian analysis. A related literature in management focuses on "judgments and decisions," focusing on behavioral biases that deviate from the neoclassical economics notion of rationality (e.g., Hastie, 2001; Holcombe et al., 2014). Some of this literature uses the term "intuition" for something close to Knightian judgment; for example, Dane and Pratt (2007) define intuition as "the nonconscious use of heuristics and internalized patterns of information." By contrast, "rational" decision making

> involves the use of systematic procedures designed to thoroughly assess all pertinent information, evaluate costs and benefits, and ultimately make a decision based on conscious deliberation. . . . In short, it is highly analytic and relies on logical connections. Moreover . . . rational decision making involves a completely different type of information processing system than the experiential system used in intuition. In brief, intuition differs from more rational models of decision making in that it is (1) nonconscious, (2) holistic, (3) associative, and (4) faster.

McMullen's (2013) notion of judgment as empathic accuracy and Casson and Godley's (2014)'s picture of entrepreneurial diagnosis, discussed below, suggest additional approaches to dimensionalizing judgment.

Judgment versus Good Judgment

Another confusion about the judgment-based view arises from the term "judgment" itself. The *Oxford English Dictionary* defines judgment as "The ability to make considered decisions or to arrive at reasonable conclusions or opinions on the basis of the available information; the critical faculty; discernment, discrimination." This is similar to Knight's and Mises's general usage, although technically, they refer to any sort or purposeful action under uncertainty as judgment, regardless of the skill of the decision-maker. The *OED* also gives a second definition: "The fact of possessing this ability to a high degree or in a sophisticated form; discretion, good

sense, wisdom." This is the sense in which people use "judgment" in ordinary language. Hence, describing entrepreneurs as exercising judgment sounds like a compliment: they must have extraordinary skill in anticipating the future! But in the judgment-based entrepreneurship literature, even those making poor decisions about resource deployment under uncertainty are acting entrepreneurially—although those who consistently make poor decisions will find their capital consumed, credit markets closed, and the option of further entrepreneurial activity unavailable to them. Bhidé (2010), building on Hayek (1945: 33), defines judgment as "[e]ffective adaptation to unpredictable but repeated patterns of change," which we take as close to the *OED*'s second definition. He argues for a more decentralized financial system to make better use of good judgment—an argument we support, while not directly related to judgment in our sense.

Likewise, Sarasvathy and Dew (2009) criticize our approach by arguing that entrepreneurs suffer from limited knowledge, systematic bias, and ill-specified objectives. We agree that entrepreneurs (may) suffer from these problems, but this is not to deny that they exercise judgment in our sense. Sarasvathy and Dew (2009) associate "judgment" with prudence, wisdom, and rationality, not with the general function of allocating productive resources under uncertainty. We think the difference between our approach and the effectuation approach is largely semantic, not substantive (Foss and Klein, 2012: 95-96). Indeed, exercising judgment in the functional sense typically means taking chances, experimenting, and learning from mistakes, the core aspects of effectual reasoning.

Judgment versus Luck

Harold Demsetz (1983) challenged Kirzner's notion of discovery by asking how, analytically, discovery can be distinguished from luck. Schultz (1980) asked the same question, putting it this way:

> [I]t is not sufficient to treat entrepreneurs solely as economic agents who only collect windfalls and bear losses that are unanticipated. If this is all they do, the much vaunted free enterprise system merely distributes in some unspecified manner the windfalls and losses that come as surprises. If entrepreneurship has some economic value it must perform a useful function which is constrained by scarcity, which implies that there is a supply and a demand for their services.

The key to understanding this passage is to recognize Schultz's rejection, following Friedman and Savage (1948), of the concept of Knightian uncertainty. If all uncertainty can be parametrized in terms of (subjective) probabilities, then decision-making in the absence of such probabilities must be random. Any valuable kind of decision-making must be modelable, must have a marginal revenue product, and must be determined by supply and demand. For Knight, however, decision-making in the absence of a formal decision rule or model—what Knight calls judgment—isn't random, it's simply not modelable. It doesn't have a supply curve, because it is a residual or controlling factor that is inextricably linked with resource ownership. It is a kind of understanding, or *Verstehen,* that defies formal explanation but is rare and valuable.

Without the concept of Knightian uncertainty, then, Knight's concept of entrepreneurial judgment makes little sense. Indeed, in our view the prime challenge to incorporating judgment into mainstream economics is the profession's general unease with Knightian uncertainty. Despite some useful attempt to model uncertainty formally (see Foss and Klein, 2012, ch. 4), most economists remain uncomfortable with something like judgment which lies between "rational," articulable decision-making and random behavior.

THE PAPERS IN THIS FORUM

The three papers that form the core of this forum address various facets of the judgment-based view of entrepreneurship, filling what the contributors see as gaps left by contributors such as Knight (1921), Mises (1949), Casson (1982), and Foss and Klein (2012). Such gaps include more detail on the nature of judgment, better understanding how entrepreneurial judgment is translated into concrete action in terms of mobilizing resources, actions and investments in new product launches, innovation, etc., and more fully examining what the judgment-based view can offer to other theorizing in the economics of the firm space. These overall gaps are addressed in the papers by McMullen (2013), Godley and Casson (2014), and Hallberg (2014), respectively.

McMullen (2013) helps unpack the underlying mechanisms of judgment. His starting point is Sarasvathy and Dew's (2009) argument that the judgment-based view "pushes entrepreneurship scholars into tautological corners." While he rejects this view and offers a judgment-based way of overcoming the problem of tautology, much of his article is construed as a sort of dialogue between the judgment view and the effectuation view of Sarasvathy and co-authors, concluding that ultimately judgment is "not only "consistent with the effectual view" (a position also held by

Foss and Klein, 2012: 95-96), but is actually "necessary for the effectual logic to function." Specifically, McMullen draws on the psychology literature on judgments and decisions to add meat to the skeleton of the judgment construct in the entrepreneurship literature. This lets him overcome the common tendency in the entrepreneurship literature to collapse the entrepreneurial process into a point of time, and helps him paint a more realistic picture of judgment as the "capacity to form conclusions based on social inferences that are frequently tested and updated as one progresses through the decision making of entrepreneurial action." This capacity revolves around "empathic accuracy," that is, the ability to precisely infer the content of others' beliefs and feeling. A final feature of McMullen's rich discussion is that he takes issue with Foss and Klein's (2012) argument that the unit of analysis in entrepreneurship should be investments rather than opportunities. His rescue mission on behalf of opportunities as a meaningful unit of analysis involves a subtle distinction between "opportunities to succeed" (that can only be determined ex post) and "opportunities to try" (which can in fact be identified ex ante).

Godley and Casson (2014) also offer more detail on the nature of the judgment construct, while simultaneously telling a process-oriented story of entrepreneurial activity. They rely on information economics to coin the notion of the "diagnostic entrepreneur" who steps in in markets "where consumers are unable to diagnose their own problems and, instead, rely on the entrepreneur to diagnose them." They posit that diagnostic entrepreneurship is particularly important in knowledge-intensive service industries, and is generally important in all industries whenever radical product innovation occurs. The capacity to engage in entrepreneurial diagnosis is a specific cognitive skill that entrepreneurs possess. As in Casson (1982), entrepreneurs can usually only exploit opportunities if they invest in market-making activities. This is closely related to Foss and Klein's (2012) point that the exercise of entrepreneurship involves taking control in these of ownership of productive asset, but expands on their view by pointing to the importance of reputation.

In the third forum paper, Hallberg (2014) uses the judgment-based view as inspiration for a discussion of epistemic and cognitive assumptions in the theory of the firm, in particular in transaction cost economics. Hallberg argues that idea of agents choosing efficient governance structures is fundamentally challenged in the presence of genuine uncertainty, a standard assumption in transaction cost economics (Williamson, 1985) as well as in much of the entrepreneurship literature. The problem is that standard models of choice break down in the

presence of such uncertainty. As Hallberg (2014) puts it: "Uncertain governance choices require that agents exercise judgment in the absence of other means of estimating the payoffs associated with complex combinations of transaction attributes, contractual contingencies, and governance structures." The process of forming and exercising judgment proceeds over time—a view that units all three papers in this forum—in an essentially experimental process that may be shot through with biases and which depends on agents' access to decision-supporting systems. As a result, agents end up making highly heterogeneous governance choices, and predictions of governance choices in the economics of the firm should take such heterogeneity into account.

CONCLUSION

The judgment-based view regards entrepreneurship as an active, owning, controlling agency, the function of assembling, configuring, and reconfiguring bundles of heterogeneous resources under conditions of "true" uncertainty. The view holds strong implications not only for the understanding of the dynamics of firms, markets and economics, but also for institutions and economic organization, such as the nature, emergence and boundaries of the firm. Thinking on entrepreneurial judgment has an impressive pedigree in economics, dating back earlier than Adam Smith, namely to Richard Cantillon (1755). A key message of the judgment-based view is that entrepreneurship should not be treated as a separate domain, focusing on specialized outcomes such as self-employment, business formation, new product introduction, and the like, or as a way of thinking or acting that applies only to a few individuals acting in unique situations. In the most general sense, all human behavior is entrepreneurial, as we live in a world of Knightian uncertainty, not the artificial world of neoclassical economic models.

Of course, economists will appreciate a broad conception of entrepreneurship that focuses on the businessperson who invests financial and physical capital in hopes of earning monetary profits and avoiding monetary losses, as business behavior has a larger and more direct effect on the allocation of resources, the basic *explanandum* of economics. Focusing on entrepreneurship thus understood suggests some new directions for emerging entrepreneurship research, and the contributions to this forum pursue a number of these directions. As explained above, these have to do with making the judgment construct more concrete, looking in greater detail at processes of mobilizing resources in the pursuit of entrepreneurial ideas, and examining the process of groping towards those governance structures, contracts and so on that can best assist the

formation and realization of such ideas. Overall, these contributions, as well as our own work (Foss and Klein, 2012) suggests that process perspectives of firms should be given more attention. The real problems of economic organization do not involve merely the initial deployment of fully specified, efficient governance structures, but a dynamic process of experimenting with asset combinations to find the right mix. Allocating decision rights, designing incentive and monitoring schemes, adjusting firm boundaries, and the like are part of this process. Given Knightian uncertainty, complete, contingent, Arrow-Debreu-style contracting is impossible, leaving "gaps" that must be filled in the process of experimentation. As in the work of Hart (1995), we conceive of ownership as a means of filling these gaps: Ownership conveys the rights to make decisions in situations not specified by contract—to exercise original judgment when explicit rules for delegating it have not been designed. The allocation of is not just a matter of "getting the investment incentives right"; it is also a matter of reducing the transaction costs of the experimental process, by allocating authority *via* the allocation of ownership rights. Moreover, ownership has a speculative dimension (i.e., an entrepreneur may acquire ownership over assets because he thinks they are more valuable in combination with other assets, including his own judgment) that is missing in the established theories of economic organization, but come into the forefront in an entrepreneurial perspective. Giving analytical content to these ideas in terms of more elaborate and precise verbal accounts as well as empirical testing are important challenges ahead for the judgment-based view.

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