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Foundations and Trends $^{\circledR}$ in Entrepreneurship

Context Matters: Institutions and Entrepreneurship

By Peter J. Boettke and Christopher J. Coyne

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Context Matters: Institutions and Entrepreneurship*

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Abstract

This survey explores the important connection between institutions and entrepreneurship. Institutions consist of the formal and informal "rules of the game." Entrepreneurs act within a context determined by these rules. The rules of the game create payoffs that make certain entrepreneurial opportunities more attractive than others. We explore the relevant literature from institutional economics and entrepreneurial studies, focusing on the important link between the two. Particular emphasis is placed on entrepreneurship within several different institutional settings — private for-profit, private nonprofit, and political — as well as the impact of entrepreneurship on institutions. We conclude by discussing the implications for future research on the topic.

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1

Introduction

This survey aims to analyze the connection between entrepreneurship and institutions. Our goal is to provide a discussion of the literature on institutions in economics, develop the argument on the relationship between institutions and entrepreneurship and to apply this logic to a variety of entrepreneurial settings — private for-profit, private non-profit, and political. In addition to exploring entrepreneurship within several institutional settings, we also consider entrepreneurship on institutional arrangements. We end with a discussion of the implications for future research.

Entrepreneurship manifests itself in a variety of ways (see Parker (2005)). Buying low and selling high, the discovery and diffusion of lower cost technologies in production, the introduction of new products, learning how to better deliver goods and services to customers at lower cost, and the creation of new opportunities to alert potential buyers to the availability and desirability of new products are all entrepreneurial acts in the marketplace. There are numerous other examples of productive and wealth-enhancing arbitrage and innovation. For our purposes, the defining characteristic of entrepreneurship is that the entrepreneur seeks to better his own situation by engaging in beneficial exchange with others.

Entrepreneurial opportunities and activities differ significantly across societies. These differences are one important factor in the varying levels of wealth and prosperity across societies and nations (see van Praag and Versloot (2007)). One explanation for these differences is purely cultural (see Harrison (2006)). Specifically, it might be argued that some cultures are lacking in "entrepreneurial spirit." From an economist's standpoint, this explanation is incomplete and unsatisfactory. Focusing on purely cultural explanations neglects the alternative, that individuals act purposefully to better their position. Of course, what individuals perceive as bettering themselves varies from place to place, but this does not neglect the fact that people act in a purposeful manner to achieve their desired ends. A key aspect of acting purposefully is responding to changes in relative costs and benefits. Given this, an alternative to the purely cultural explanation for differences in entrepreneurship focuses on the institutional context in which individuals act. The institutional alternative takes a broader approach and includes not only culture, or "informal institutions," but also formal institutions as well (see Shirley (2005, 2008)).

For the purposes of this survey, we define institutions as both the formal and informal rules governing human behavior (see North (1990, 1991)). Because of the role of institutions as the "rules of the game," a detailed examination of the institutional context is one important element of understanding the role of entrepreneurship in economic life. Institutional explanations for differences in entrepreneurship are more complete than cultural explanations because they recognize the importance of culture, which is considered one type of informal institution, while also recognizing the role of other informal and formal institutions.

We focus on the importance of productive entrepreneurship as a central catalyst of economic development and growth. Further, we take as given that entrepreneurs are present in all societies across time and space (see Baumol (2002) and Koppl (2007)). Individuals will be entrepreneurial in the sense they will employ their ingenuity to improve their position in life. Indeed, innovation has been a strong driving force in the survival and success of the human race over the course of its evolution and consequently that disposition is arguably present in all societies (see Seabright (2005) and Field (2007)). An African

tribesman, a European peasant, or an American farmer are all acting entrepreneurially when they pursue opportunities to better their personal circumstances through beneficial exchange and interaction. It is a human trait to be alert to those things that are in our interest to be alert to. Given this, differences in economic outcomes across societies are not due purely to differences in entrepreneurial spirit, but instead are due to differences in institutions. The institutional environment in which entrepreneurs act, shapes and constrains the opportunities available at any point in time.

Where institutions produce a net benefit to productive opportunities (e.g., arbitrage and innovation) entrepreneurs will exploit those opportunities resulting in the creation of wealth. Likewise, when there is a relatively high benefit to engaging in unproductive activities (e.g., rent-seeking and crime), entrepreneurs will take advantage of those opportunities. Unlike productive activities, unproductive activities result in economic stagnation or decline. In general, institutions shape entrepreneurial opportunities which have real effects on the ability of the economic system to realize the gains from social cooperation under the division of labor.

In the next section, we develop the notion of institutions and provide insight into what this concept entails. We then (Section 3) seek to understand how institutions matter for entrepreneurship and economic development. This is followed by a consideration of "social entrepreneurship" (Section 4) and "political entrepreneurship" (Section 5). In each case, we focus on how institutions influence entrepreneurial behavior in these alternative settings. We then turn to a consideration of the role of "institutional entrepreneurs" (Section 6) and their impact on the formation and evolution of institutions. The conclusion (Section 7) presents some areas for future research.

What Are Institutions?

2.1 Institutions Defined

The purpose of this section is to clarify the concept of "institutions." Institutions are the formal and informal rules governing human behavior (see North (1990, 1991)). Examples of formal rules include codified legal and political structures, as well as written rules such as constitutions. Written contracts, which reduce risk and uncertainty, are yet another example of a formal institution. A final example would be codified standards or rules that are known to all members of a group or industry. These standards may be established by the members of the group or by some external authority. In either case, the rules are formally written and binding to all members of the group.

Informal rules include culture, norms, conventions, and mores not backed by formal law, but by social custom. Religious organizations may have formal rules, but the impact of religious thought in Western societies is mainly felt through the informal imprint growing up in the Church leaves on its members. Other examples of informal institutions

¹Obviously in a society where the church is also the dominant political actor, the formal rules governing religious organization would also be binding in social interaction.

are organizational structures — e.g., associations, families, etc. — which are emergent in nature. It is the norms, customs and mores that enable us to cooperate with strangers in the marketplace that provides the foundation for modern economic life. Central to the sustainability of informal institutions are norms and values of trust and reciprocity (see Keefer and Knack (2005)). Informal institutions largely function because of the existence of reciprocity, and a central element of reciprocity is trust. Informal interaction requires that people respond in kind and deliver on their responsibilities and agreements.

Informal rules are often codified in practice to become formal law. For example, the informal norm of promise keeping underlies the formal law of contract. David Hume (2000, p. 526) argued that human society depends on the institutions of property, contract and consent, and that the rules of a good society are written on the hearts and minds of its citizens well before they are written down on parchment. This reiterates the importance of informal institutions as a foundation for formal rules. The enforcement of the formal and informal institutions determines how binding the rules are in any given society. Where formal rules are not grounded in informal institutions, they will not be self-enforcing and will need to be enforced through some external enforcement (e.g., government agencies, police, and courts).

Williamson (2000, pp. 596–600) offers clarity regarding the various "levels" of institutions by providing a hierarchy of institutions and institutional analysis. This hierarchy is summarized in Table 2.1.

The higher the institutional level the more permanent (i.e., the slower the rate of change) are the institutions. Level 1 institutions take

Table 2.1 V	Williamson's	institutional	hierarchy.
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		How long it
Level	Type of institution	takes to change
1	Embeddedness: informal institutions, customs, traditions,	100 to 1000 years
	norms, religion	
2	Institutional environment: formal rules of the game — esp.	10 to 100 years
	property (polity, judiciary, bureaucracy)	
3	Governance: play of the game — esp. contract (aligning	1 to 10 years
	governance structure with transactions)	
4	Resource allocation and employment (prices and quantities;	Continuous
	incentive alignment)	

longer to change than Level 2 institutions, which take longer to change than Level 3 institutions and so on. Further, the higher institutional levels constrain the lower levels. For example, a society's embedded informal institutions (Level 1) will constrain the nature of the formal rules of the game (Level 2). The formal rules in turn constrain the interactions that take place within those institutions (Level 3), which ultimately impact the allocation of resources (Level 4). Williamson's hierarchy is critical for a precise understanding of institutions.

While institutions are characterized by their durability, this does not mean that institutions cannot change. Indeed, both formal and informal rules can evolve over time. The important insight from Williamson is the speed with which different types of institutions tend to change. As Williamson indicates, it can take centuries, if not millennia, for embedded institutions (Level 1) to change. In contrast, resource allocation (Level 4) is a process of continual changes and hence the least durable of the institutions in Williamson's hierarchy.

Institutions provide the general rules of the game which facilitate economic, social, and political interactions. In doing so, they create incentives for certain courses of action. When we say that "incentives matter," we mean that people respond to changes in costs and benefits. When the cost of a behavior increases (which means the benefit decreases, ceteris paribus) people will engage in less of that behavior. Likewise, when the cost of a behavior decreases (which means the benefit increases, ceteris paribus) people will engage in more of that behavior. In providing the rules of the game, institutions establish or alter incentives by influencing the costs and benefits associated with certain types of activities.

This logic underpins the World Bank's "Doing Business" project which explores the barriers to starting a business in a variety of countries.² This project provides a measure of business regulation and enforcement to understand how a variety of rules and regulations impact various aspects of entrepreneurial activity. For example, the index includes measures of regulations associated with starting a

²World Bank Doing Business website: http://www.doingbusiness.org/. For a criticism of the Doing Business project, see Arrunada (2007) and for a response to this critique, see (Djankov, 2008).

business, obtaining construction permits, employing workers, registering property, obtaining credit, and engaging in trade across borders. The underlying premise is that where these regulations are prohibitively costly, they will have an adverse impact on productive entrepreneurship (see Djankov et al. (2002)).

As Williamson's hierarchy illustrates, formal and informal institutions are not independent and tend to interact. For example, societies simultaneously have formal political institutions and rules and also a wide array of informal institutions (mores, customs, etc.) that facilitate interaction and cooperation between individuals. The relationship between formal and informal institutions as illustrated in Figure 2.1.

Informal norms reflect the underlying belief systems, norms and traditions and are therefore self-enforcing. Where the formal institutions do not reflect the underlying informal norms, formal institutions will be costly to enforce because the formal rules governing society will be at odds with the underlying belief systems. In such instances, constant force, or the threat thereof, will be necessary to enforce formal rules. The transaction costs of enforcing formal rules that do not resonate with the population are simply too high. If every incidence of respecting private property was achieved only at the barrel of a gun, then property rights would not be secure.

As a concrete example, consider the case of illegal drug trafficking. In such cases, the formal rules of society do not resonate with

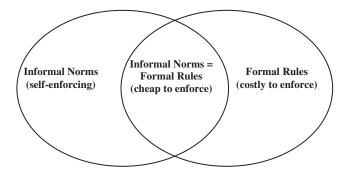


Fig. 2.1 The relationship between formal and informal institutions. (Source: Sautet (2005, p. 5.))

the informal institutions of certain sections of society. Absent official legal recourse, a complex array of informal rules governs behavior in these illegal black markets. At the same time, the constant threat of force — i.e., the "war on drugs" — is required to prevent exchange in these markets. The ongoing global efforts against illegal drugs illustrate the costs that emerge when formal and informal institutions fail to align.

In contrast, where the informal norms align with the formal rules, the cost of enforcing the formal rules will be relatively low. In such cases, because they are grounded in the underlying informal institutions, the formal rules will be largely self-enforcing. Where large numbers of people voluntarily adopt and accept formal rules, they will tend to be self-sustaining and self-extending over time (see, for example, Weingast (1995, 1997) and Hardin (1999)). One example of this is driving on a certain side of the road. To drive on the right-hand side of the road has no moral or natural imperative and is relatively low cost to enforce. Violations of this informal norm, which is formally codified in most societies, are rare. This example illustrates the overlap of formal and informal institutions.

The concept of institutions revolves around the formal and informal rules governing human interaction. The main difference between various types of institutions is their durability of time. As illustrated in Table 2.1, some institutions tend to change quickly while others tend to take significant periods of time to evolve in a sustainable fashion. Further, certain types of institutions constrain the nature and evolution of other institutions. For example, a society's embedded institutions will constrain the feasible formal institutions and hence policies.

2.2 A History of Institutions in Economics

The notion of institutions can be traced back to the earliest days of the discipline of economics. The classical economists paid attention to the political and legal institutions that were operating in any given society and their impact on economic performance. The founding father of economics, Adam Smith (1776), put forth the famous notion of the "invisible hand" which operated within the market context to ensure that

self-interested behavior would be steered in a direction that produced public benefits.

It was not the behavioral postulate of rational self-interest that drove Smith's understanding of the "invisible-hand" or his larger project to explore the wealth and poverty of nations. In fact, Smith went to great lengths to argue for what Levy and Peart (2005) have termed, "analytical egalitarianism." Individuals were postulated to be analytically equal in terms of natural endowment of rationality and aspiration. It was the different experiences that shaped people, and the different contexts within which they acted that produced different outcomes. The different talents and dispositions we possess do not stem so much from nature, but from "habit, custom and education" (Smith, 1776, p. 15). Context of behavior determines the direction toward which individuals strive to realize their goals. This context is provided by formal and informal institutions.

The analysis of political and economic systems one finds in Smith did not examine men as they may behave if they were perfect in knowledge and spirit. Instead, it postulated "men in all their given variety and complexity, sometimes good and sometimes bad, sometimes intelligent and more often stupid" (Hayek, 1948, p. 12). The goal of the Scottish Enlightenment writers was not to solve the social dilemma of political and economic order through the assumption of perfect men and/or perfect rulers, but instead to "find a set of institutions by which man could be induced by his own choice and from the motives which determined his ordinary conduct, to contribute as much as possible to the need of all others" (Hayek, 1948, p. 13).

Despite the initial emphasis on institutions by Adam Smith, economists increasingly lost sight of the importance of context for economic outcomes. Instead, behavioral assumptions drove economic analysis due to the demands of modeling. The rise of the "value paradigm" emerged out of the desire to transform economics from a social science

³ The emphasis in Levy and Peart is on deriving the division of labor from an analytical egalitarian perspective. Our emphasis is simply going to be on the analytical import of assuming equal capacity for rationality in terms of shifting the focus of analysis from behavioral assumptions to institutional context.

into a form of social physics which could be formalized and analyzed using the tools of mathematics (see Buchanan (1964) and Kohn (2004)).

The main result of the focus on formal modeling in economics was that institutions were taken as given (Machovec, 1995). By purging many of the imperfections of man through assumption, economists instead concentrated on the mechanisms at work and studied the behavior of economic systems instead of individual actors. Institutional arrangements were held constant. There was no discussion of property rights, of the rules allowing for the proper functioning of political institutions, or of the informal institutions — e.g., norms, trust, organizational forms, etc. — that are so important in the development and maintenance of social and economic relationships. Little to no attention was paid to the emergence of institutions, institutional imperfections, or the implications of various institutional arrangements.

The theory of general competitive equilibrium was complemented by the theory of market failure, and the intellectual apparatus of welfare economics was developed which relied on a stable social welfare function and a benevolent social planner. Economic models of command and control over the economy were developed at the level of microeconomic regulation and macroeconomic demand management. For example, Lerner (1944) and Baumol (1961) rely on the use of mathematics and linear programming to develop the theory of optimal control. These studies illustrate how economists during this period assumed institutions to be constant while focusing on the operation of the broader economic system.

In holding institutions constant, economists needed to assume away the very things that Adam Smith had emphasized in 1776. There was no discussion of how an economy and society dealt with human ignorance and error, as well as the process of learning, discovery and error correction. Instead, economic models assumed perfect information and hyper-rationality on the part of actors. There was no room for error let alone for the entrepreneurial discovery of new profit opportunities. Entrepreneurship is about activity in an open-ended and changing universe. Standard technical economics deals with comparative statics in a closed system. The tools chosen to formalize economic propositions are

more suited to questions of resource allocation, not discovery, learning, choice, and change.⁴

A counter-revolution in economic thought began in the 1960s and 1970s. This shift involved movement from equilibrium theorizing, which focused on the optimal allocation of resources, to a renewed focus on coordination and the institutions within which exchange took place. The study of allocation treats clearly defined and enforced property rights as given. But precisely because property rights are treated as given, it is often easy to forget they are necessary. Such was the fate of mid-twentieth century microeconomics and in particular the analysis of market failure and of market socialism. The derivation of optimality conditions substituted for an economic analysis of alternative institutional arrangements. The counter-revolution in the "new institutional economics" tried to rectify the situation by explicitly bringing back into economic analysis the political, legal, and social framework within which economic interactions and transactions take place (Williamson, 2000). The point of emphasis was, like the work of the classical political economists, on exchange and the institutions within which exchange takes place (Langlois, 1986; Eggertsson, 1990).

To understand the breadth and depth of this intellectual counterrevolution in economics, consider the intellectual developments that

⁴ It is important to stress that the focus on entrepreneurship should not lead to an abandonment of the lessons learned from resource allocation exercises. For many questions in economics, a basic understanding of constrained optimization is very important for deriving answers. Richard Nelson and Sidney Winter (1982) introduced the distinction between formal theory and appreciative theory. Formal theory represents the official theory of the economics profession — the mathematical models we teach our students and develop in the journals. Appreciative theory is the unofficial intuition that we rely on to communicate with our students and peers. It is the story we tell about how markets work that are not quite captured in the textbook model, or the intuition we are trying to capture in the model we develop in the journals. Dimensions of market economies not captured in standard models limited to p and q vectors, are instead captured in the various narratives we construct in communicating. Almost any economist who has ever taught or engaged in research will admit that the formal theory does not reflect in a 1-to-1 nature the story they are trying to tell, and they will appeal in the classroom or in seminar rooms to a narrative that fills out the details which the model necessarily ignores. But Nelson and Winter asked us to consider the possibility that our appreciative theory may at times out distance our formal theory, and thus, that we should be more appreciative of our appreciative theory. This is where the field of entrepreneurship finds itself in the economics profession. Something that everyone knows is important, but they cannot really model and they cannot really measure as precisely as they would like.

followed this line of reasoning: property rights economics, law and economics, public choice economics, new economic history, economics of organizations (including transaction costs economics and also the capabilities approach), and market process economics. For our purposes we can refer to these developments in economic thought between 1960 and 1990 as "new institutional economics" (see Williamson (2000)). During this three decade period, there were several important contributions to the emergence and development of the new institutional field.

Ronald Coase's (1960) paper, The Problem of Social Cost, was critical in emphasizing the importance of institutions. Coase shifted the discussion of externalities from standard welfare economics to a consideration of comparative institutional arrangements. Harold Demsetz (1967) applied the insight of costs and benefits to the emergence and evolution of institutional arrangements. He argued that institutions would emerge where there was a net benefit to the existence of those institutions and where transaction costs were not prohibitively high.

The work of Douglass North and Robert Thomas (1973) brought additional attention to the role of institutions in economic outcomes. In their work, North and Thomas explored the connection between changes in institutions and such variables as population growth and political rents. During this time period, the work of Oliver Williamson (1975) on the economics of the firm also brought increasing attention to the importance of institutions. Indeed, the emergence of the subfield of new institutional economics is often linked to the work of Williamson.

More recently, those working in the new institutional tradition have returned to the important implications of the work of Max Weber (1905), who analyzed how informal institutions influence economic outcomes. For example, North (2005) attempts to incorporate belief systems and cognitive elements into his analysis of institutional evolution and change. This includes a focus on institutional "path dependence" which recognizes that the way in which institutions and beliefs developed in past periods constrain the feasibility set of choices in the current period (see North (1990, 2005)).

The idea that "institutions matter" for economic outcomes received widespread recognition when Douglass North was awarded the Nobel Prize in 1993 for his work on institutions and institutional change. The

emphasis on the role of institutions can be seen in subsequent Nobel Prize winners. For example, in his 2002 Nobel Prize address, Vernon Smith called for a renewed focus on institutional context, especially in our attempt to understand what is considered "rational" behavior and what is considered "irrational" behavior. Smith (2003) differentiates between "ecological rationality" and "constructivist rationality." Ecological rationality refers to the emergent system of norms, traditions, and morality while constructivist rationality refers to the view that institutions should be designed through a process of deductive reasoning. It is Smith's contention that rationality is context dependent. Once the context is specified, behaviors that are often identified as "irrational" may in fact be seen as quite reasonable. Abstract rationality may be universal, but concrete rationality manifests itself in a variety of ways depending on the context of choice under consideration. The analytical emphasis moves from behavioral assumptions in the model to the institutional environment in which agents are choosing and within which they are interacting with one another.

The result of the renewed focus on institutions has been an increase in both the theoretical and empirical work on institutions. Empirical studies in this area have typically relied on two methods — detailed quantitative case studies and standard econometric studies.

One example of the case study method is the work of Hernando de Soto. In *The Other Path*, de Soto (1989) and his team of researchers compiled the list of required procedures by actually going through the process of setting up a business in Peru. In doing so, de Soto was able to document how the existing formal institutional environment influenced the entrepreneurial decision making as manifested in new business formation. The impetus behind the study was the recognition by de Soto that the informal sector comprised a significant portion of the Peruvian economy. He wanted to find out why Peru remained poor despite the fact that there was clearly entrepreneurial activity taking place. He concluded that the formal institutions clashed with the underlying informal institutions leading to perverse outcomes. The formal rules and regulations stifled productive entrepreneurship as entrepreneurs were forced into the underground economy. The widespread underground activity limited the extent of the market and led to large expenditures

on evading formal enforcement. While informal institutions facilitated coordination and cooperation in the underground economy, development was limited due to constraints created by formal institutions.

There have been numerous quantitative studies exploring the role of institutions on economic outcomes. These studies typically analyze the connection between institutions (captured through some aggregate measure of institutions or institutional quality) and various outcomes. Instead of reviewing all of this literature, we will briefly discuss a few of the recent papers in this area to give the reader a sense for the current state of empirical research (see Aron (2000) for a broader literature review).

Barro (1996) analyzes the relationship between democracy and economic growth and finds a nonlinear relationship — democracy enhances growth at low levels of political freedom but hurts growth once some moderate level of political freedom exists. Barro (1997) finds that for a given level of starting income, economic growth is enhanced by higher levels of schooling and life expectancy, lower government consumption, stronger rule of law, and improved terms of trade.

Acemoglu et al. (2001, 2002) consider the role of institutions in economic performance. After controlling for a variety of variables which could potentially explain development, the authors find that private property institutions are the main determinant for economic performance. Along similar lines, Rodrik et al. (2004) empirically analyze the role of institutions, geography, and trade on income. They find that institutions trump geography and trade in explaining differences in income across countries.

Building on this earlier work, Acemoglu and Robinson (2005) "unbundle" property institutions. They differentiate between "contracting institutions," (e.g., courts) which enforce agreements between private citizens and "property rights institutions," which protect citizens from government expropriation. They find that property rights institutions are more important than contracting institutions for economic performance. In other words, state expropriation through property rights violations are more harmful to economic performance than predation by private individuals against other private individuals. One explanation for this is that individuals can often avoid private predation

through private mechanisms or by avoiding interaction with certain people. In contrast, when governments engage in predation, it is difficult for citizens to avoid since the scope of government is typically broader than that of private individuals.

Levine (1997) reviews the empirical evidence regarding the connection between financial development and economic growth. Easterly (2001) finds that high quality institutions can overcome ethnic tensions and conflict which, left unresolved, can severely limit economic development. Mehlum et al. (2006) explore the connection between the economic development and the "resource curse." They find that the quality of institutions is the driving factor behind whether an abundance of natural resources contributes to economic growth or stagnation.

There is also an empirical literature exploring the connection between informal institutions and economic outcomes. Knack and Keefer (1997) empirically analyze the impact of social capital — measured through indicators of trust and civic norms — on economic performance. They provide evidence that social capital does indeed matter for economic outcomes. Grier (1997) and Barro and McCleary (2003) explore the connection between religion and economic growth while Guiso et al. (2006) analyze the impact of culture on economic outcomes.

Most economists now consider institutions to be a critical ingredient in understanding the "wealth of nations." As the rules of the game, institutions direct individual behavior for better or worse. We cannot fully understand economic outcomes without considering the institutional context within which that outcome emerged. The next subsection builds on this history of institutions in economics and identifies four views regarding the emergence of institutions that have evolved in the institutional literature.

2.3 Four Views on the Emergence of Institutions

Institutions can be broadly understood as the formal and informal rules governing human behavior and interaction. However, it is important to recognize that there is not complete consensus on how institutions emerge. According to Acemoglu (2003) and Acemoglu et al. (2005),

several views of institutional emergence exist in the literature. These views can be summarized as follows:

The Efficient Institutions View — This view emphasizes that
institutions will emerge when they are socially efficient. Likewise, institutions will be abandoned when they are socially
inefficient.

The work of Harold Demsetz (1967) falls into this category. Demsetz argued that property rights' institutions would emerge when there was a net benefit (i.e., the benefits to society outweighed the costs). To illustrate his point, Demsetz drew on the historical emergence of property rights among American Indians. Originally, property rights over land were absent. However, as hunting increased land began to become increasingly scarce and property rights emerged. Absent the emergence of those property rights, the land would be overused resulting in the well-known tragedy of the commons.

According to the efficient institutions view, differences in institutional structures across societies are a direct result of the costs and benefits facing individuals in those societies. Where there is net benefit to establishing certain institutions they will emerge, and where there is a net cost to establishing certain institutions they will not emerge. Critical here is the selection environment and the resulting costs and benefits tied to various courses of action within that environment.

2. The Group Conflict View — This view of institutions emphasizes that institutions are often not chosen by all members of a society. Instead, institutions are often chosen by a subset or group of individuals within a society. The selection of institutions by these individuals may not be socially efficient, and instead might benefit the members of the group with decision-making power at the expense of "outsiders" who are not in the group making the decisions over institutions. From this standpoint, institutions lead to conflict between certain groups in society.

To understand this view of institutions, consider the case of an autocratic ruler. In order to maintain their position of power, autocrats will often have little incentive to establish binding constraints on predation by the government. If the autocrat was to establish such constraints, they may very well reduce their personal future income stream. The result is that the overall wealth of society is not maximized, but the wealth of the autocrat is maximized. There is a conflict here between the personal interests of the autocrat and the broader interests of society.

A main focus of recent research is to understand the "economic origins of dictatorship and democracy" (see Acemoglu and Robinson (2005)). Research in this area focuses on the tension between various groups in society and the conditions under which the ruling elite is willing to facilitate changes in institutions to maintain their positions of power.

3. The Ideology-Based View — This view of institutions emphasizes the importance of ideology and belief systems in the emergence and evolution of institutions. Its origins can be found in the work of Max Weber (1905), who analyzed how certain beliefs influence economic outcomes. According to the ideology-based view, differences in institutional arrangements can be explained by differences in underlying belief systems. As belief systems change, so too will institutions.

To further understand this view of institutions, consider the work of Hayek (1979) who discussed the fundamental political principles that provide the foundation for a sustainable liberal political order. He highlighted the importance of past experiences and traditions, including the underlying beliefs and dispositions, "which in more fortunate countries have made constitutions work which did not explicitly state all that they presupposed, or which did not even exist in written form" (Hayek, 1979, pp. 107, 108). Hayek's point is that a constitution is a codification of the underlying beliefs, traditions, and habits of a society, and hence a successful instrument of liberal democracies if those underlying beliefs,

etc. were part of the cultural endowment in the first place. Effective constitutions do not need to specify all possible states of affairs because the underlying belief systems facilitate widespread cooperation.

In the modern economics literature, the recognition of the importance of past experiences manifests itself in the concept of "path dependence" — the way in which institutions and beliefs developed in past periods constrain choices in the current period. Past experiences will facilitate or constrain the transformation of situations of conflict into situations of coordination. North (1990, 2005), who is a key contributor to the path dependency literature, has emphasized that formal rules and institutions are indeed important but must be complemented and reinforced by informal rules and institutions (conventions, beliefs, norms, etc.) in order to operate in the desired manner.

The main takeaway from this view of institutional emergence and evolution is that sustainable institutional change can only take place with changes in underlying belief systems. Where there is a disconnect between belief systems and formal institutions, the formal institutions will be dysfunctional. Along these lines, Boettke et al. (2008) and Coyne (2008) discuss how efforts to exogenously impose institutions often fail because they do not align with indigenous belief systems.

4. The Spontaneous Order View — This view emphasizes that many institutions are the by-product of actions which were not directly intended to generate the institutions which actually emerged. The notion of "spontaneous order" (i.e., emergent order) refers to institutions which emerge through purposeful human action, but not through human design. When individuals pursue their various plans and goals, those actions often have the unintended consequence of contributing to the formation of sustainable institutions. These institutions are unintended from the standpoint that

no single individual, or groups of individuals, centrally planned or designed the institution. Instead, the institution emerges from the actions, and interactions, of numerous dispersed individuals.

One example of a spontaneous order is language. Language originally emerged, not through central planning, but instead through efforts by individuals to communicate in order to coordinate their activities with others. Over time language emerged as a wide-scale and focal means of communication. This broader outcome was not the design of any specific individual or group of individuals.

Another example of spontaneous order can be found in the Tilly's (1990) analysis of the formation of the modern European state. According to Tilly, the modern state emerged through a process of competition between numerous states each attempting to secure resources to fight wars. The increasing costs of weapons and armies required larger states to cover the related expenses. The result of this competition was the political institutions that exist today. Of course the modern state is a complex entity with many facets, some of which were planned and other which were not. The point is that the outcome that exists today was not centrally planned by any one individual or group of individuals.

It is important to note that none of these views is necessarily better or more accurate than any of the others. Further, the four views are not mutually exclusive. For example, it is not hard to imagine a society where some institutions are the result of societal choice (the efficient institutions view), while other are the result of certain groups (the group conflict view) and still others institutions are emergent (the spontaneous order view). Each view of institutional emergence can potentially contribute to our understanding of how and why institutions emerge as they do.

As we will discuss throughout the rest of this survey, entrepreneurship can take place both within a given set of institutions (Sections 3, 4, and 5), as well as on institutions (Section 6). The four views of

institutional emergence presented here are important for understanding the broader concept of institutions. Further, understanding how institutions emerge is an important first step in understanding how entrepreneurs can influence institutions. In the next section, we turn the question of "how" institutions impact economic outcomes.

How Institutions Matter for Economic Outcomes

3.1 Institutions, Exchange and the Extended Order

Modern economic civilization depends on the extended order of complex exchange relations between peoples and across geographic boundaries. Our tribal past may have been built on the foundation of the intimate order of face to face relations, but as Adam Smith (1776) indicated, in the extended order we address ourselves not to the humanity of our brethren, but to their self-interest. The butcher does not provide beef out of benevolence, but rather in order to make profit. However, in pursuing his own self-interest, the butcher generates positive unintended benefits for numerous consumers who now have access to his product. It is the array of formal and informal institutions that enable, or prevent, cooperation with strangers and the resulting progress that results from specialization and exchange.

The total output that can be produced in a society at any point in time is a function of: (1) the resources available, (2) existing technological knowledge, and, (3) the existing institutional arrangement that either allows or prevents the full and efficient use of the available resources. Through the process of arbitrage, productive entrepreneurs reallocate resources — physical resources as well as knowledge — to push the economy toward reaching the maximum potential level of output (Kirzner, 1973). Further, entrepreneurial innovation increases the amount of total output that an economy can potentially produce (Schumpeter, 1942). For example, developing a new production process can increase the total amount of output for a given amount of inputs.¹

This logic of Kirznerian and Schumpeterian entrepreneurship is represented in the production possibility frontier (PPF) illustrated in Figure 3.1.

A production possibilities frontier illustrates all of the possible combinations of output that can be produced given existing resources and technological knowledge. There are two PPFs represented in Figure 3.1. Assume the economy starts with the PPF represented by Y_1X_1 . All of the points on the PPF (e.g., point B) indicate that an economy is using its resources as efficiently as possible. Point A, which is inside the PPF, represents an inefficient point, meaning the economy is not making full use of its resources. Existing resources could be rearranged resulting in increased output. The movement from point A to point B

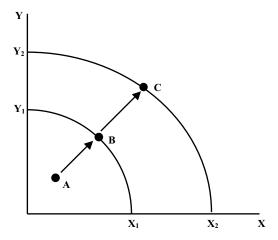


Fig. 3.1 Production possibility frontier.

¹ For more on the differences between Kirzner's and Schumpeter's notions of entrepreneurship, see Kirzner (1999).

represents an act of productive entrepreneurial arbitrage (i.e., Kirznerian entrepreneurship). It occurs when entrepreneurs rearrange given resources to push the economy closer to the PPF. In general, arbitrage ensures a tendency toward a given PPF.

It is also possible for the PPF to shift as illustrated by the movement from Y_1X_1 to Y_2X_2 . The outward shift can occur due to a discovery of additional resources, to improvements in institutions or because of innovation through the discovery of new production processes (i.e., Schumpeterian entrepreneurship). Innovation ensures that within a truly competitive economy the lure of profit will spur individuals to continually seek out ways to push out the PPF.

While all three factors — resources, technology, institutions — are important for total output, we would argue that institutions are the most important. Only under a certain institutional environment will entrepreneurs have an incentive to discover new resources, substitutes for existing resources or trading partners to obtain resources. Further, only in certain institutional contexts will entrepreneurs have an incentive to discover new technological knowledge such as new production processes or new organization structures. As discussed, the institutional context influences the payoff associated with various activities. Where institutions are such that the payoff to productive entrepreneurship is relatively low, entrepreneurs will tend not to be alert to those opportunities.

The tendency of market societies to produce goods and services as efficiently as existing technology permits, as well as the tendency of market societies to serve as innovation machines, are consequences of productive entrepreneurship (see Baumol (2002)). The presence of productive entrepreneurship is a direct function of the institutional environment which determines payoffs to various courses of action.

A critical ingredient in the development or stagnation of societies is whether or not individuals are free to bet on ideas, and to find the financing to bring those bets to life. Willingness to risk financial capital on a business venture, and the ability to secure the financial means to pursue the venture is ultimately determined by the quality of institutions that govern social interaction. A vibrant entrepreneurial culture is a by-product of institutions, not a cause (see

Boettke and Coyne (2003)). The precise mechanism by which economic growth and development follow from this institutional environment is the competitive entrepreneurial market process (see Holcombe (1998)).

In sum, institutions matter for economic outcomes because they influence the benefits and costs associated with various courses of action. Institutions play an important role in directing entrepreneurial activity because they influence the payoffs to various activities. The next sub-section further clarifies this insight by distinguishing between different types of entrepreneurship.

3.2 Entrepreneurship: Productive, Unproductive, Destructive, and Evasive

Entrepreneurs are present in all societies. In all settings, individuals will act to better their position. Individuals will pursue opportunities to better their position and increase their wealth, defined in the broadest sense. However, the nature of feasible opportunities will be determined by the formal and informal rules of the game. Differences in institutions are one major factor in the feasible entrepreneurial opportunities in any given society.

William Baumol (1990) made the important distinction between productive and unproductive entrepreneurship. Baumol's central thesis is that "... while the total supply of entrepreneurs varies among societies, the productive contribution of the society's entrepreneurial activities varies much more because of their allocation between productive activities such as innovation and largely unproductive activities such as rent seeking or organized crime. This allocation is heavily influenced by the relative payoffs societies offers to such activities" (Baumol, 1990, p. 893). Our contention is that the relative payoffs are a result of the formal and informal institutions existing in a society at any point in time.

Productive activities — arbitrage, innovation, and other socially beneficial behaviors — constitute the very essence of economic growth and progress. As noted in our discussion of the PPF (Section 3.1), productive entrepreneurs serve a dual role. The first is in discovering previously unexploited profit opportunities. This pushes the economy from an economically (and technologically) inefficient point toward

the economically (and technologically) efficient production point (the movement from point A to point B in Figure 3.1). The second role takes place via innovation. In this role of an innovator, the entrepreneur shifts the entire PPF outward (the movement of the PPF from Y_1X_1 to Y_2X_2). This shift represents the very nature of economic growth — an increase in real output due to increases in real productivity.

In addition to driving economic growth through arbitrage and innovation, productive entrepreneurial activities continually contribute to the development of new markets and their subsequent evolution as well as the evolution of existing markets. Along these lines, Holcombe (1998, p. 46) notes that "The connection between entrepreneurship and economic growth is that these previously unnoticed profit opportunities must come from somewhere, and the most common source of profit opportunities is the insights of other entrepreneurs. Entrepreneurial ideas arise when an entrepreneur sees that the ideas developed by earlier entrepreneurs can be combined to produce a new process or output." The central point is that in addition to increasing the efficiency of the economy, productive entrepreneurship also creates subsequent productive opportunities which further spur future growth. In general, productive entrepreneurship is positive sum and wealth enhancing.

In contrast to productive activities, unproductive activities include rent-seeking and the redistribution of resources. In the case of unproductive entrepreneurship, it is possible that innovation is taking place, but these activities do not move the economy closer to the PPF or shift the PPF outward. For example, consider new techniques for engaging in rent-seeking. Rent-seeking occurs when actors seek to extract uncompensated value from others by manipulating the economic and political environment. Examples would include lobbying efforts for tariffs, subsidies, and other barriers to competition. While rent-seeking activities lead to increased profit for the entrepreneur undertaking the activity, they result in a deadweight loss for society as a whole.

There is an important distinction between unproductive entrepreneurship and destructive entrepreneurship (see Desai and Acs (2007)). The key difference is that unproductive entrepreneurship seeks to redistribute from one individual to another individual (the entrepreneur). This means that unproductive entrepreneurship is zero sum in nature. In contrast, destructive entrepreneurship reduces the total surplus in an attempt by the entrepreneur to increase his own wealth. For example, a situation of theft which redistributes wealth and destroys existing resources in the process is an example of destructive entrepreneurship. Violent conflict over resources is another example of destructive entrepreneurship. Unproductive entrepreneurship can reduce growth by affecting incentives for investment and innovation negatively. Destructive entrepreneurship has the same perverse impact, but also has the negative effect of reducing existing productive capacity.

An important connection can be made between Baumol's framework and the various levels of institutions illustrated in Williamson's institutional hierarchy (Table 2.1, Section 2.1). Williamson highlights that different institutional levels constrain and influence other institutional levels. Baumol clarifies *how* changes to the various institutional levels impact entrepreneurial activities. Changes in institutions change the payoffs to various activities, which redirects entrepreneurial activity for better or worse.

Numerous studies recognize, although not all of them explicitly, Baumol's central point regarding the connection between institutions and the payoff to various types of entrepreneurial activity. In a 1991 study, Murphy et al. (1991) analyze the proportion of engineers to lawyers. They conclude that a large number of engineers has a positive impact on growth and a large number of lawyers have a negative effect because of a high level of rent-seeking. The underlying idea is that lawyers can be productive in enforcing existing laws and rules. However, lawyers can also be unproductive because they play a key role in the rent-seeking process.

Sobel (2008) explicitly tests Baumol's hypothesis regarding productive and unproductive entrepreneurship utilizing cross-sectional data from the continental 48 United States. Using a variety of measures for institutional quality, productive entrepreneurship and unproductive entrepreneurship, Sobel finds that Baumol's theory holds. Where the payoff to engaging in unproductive activities is relatively high, entrepreneurs will tend to exploit those opportunities at the expense of productive opportunities which contribute to economic growth.

An existing literature explores how the structure of industry and the broader economy has changed the relative payoffs attached to various entrepreneurial opportunities (see, for example, Acs (1996, 1999), Acs and Audretsch (2001), Audretsch and Roy Thurik (1997, 2000, 2001), Audretsch et al. (2000), Carree and Roy Thurik (1997), Carree et al. (1999, 2000), Thurik (1995), Verheul et al. (2001)). Specifically, work in this area explores how the economies of OECD countries have become increasingly decentralized over time — what is referred to in the literature as an "entrepreneurial economy" — resulting in an increase in the number of small firms. This literature highlights the point that as the structure of economic institutions changes, so too do the payoffs to entrepreneurial opportunities. Research in this area provides several explanations for the changes in economic opportunities including globalization and global competition, changes in demographics and the evolution of new technologies.

A related literature explores the connection between economic freedom and entrepreneurship. Gwartney et al. (1999), Harper (1999, 2003), and Scully (1988, 1992) highlight the importance that economic freedom, manifested through well-defined property rights, a freely functioning price mechanism, a stable legal system and the rule of law, and trade liberalization plays in providing incentives for productive entrepreneurship and in generating economic growth. The underlying explanation of these findings is that economic freedom provides an incentive for productive entrepreneurship.

Bjornskov and Foss (2006) analyze cross-country evidence of entrepreneurship. They find a negative correlation between the size of government and entrepreneurial activity and a positive correlation between sound money and entrepreneurial activity. Using panel data, Nyström (2008) explores the determinants of entrepreneurship. She finds that entrepreneurial activity is positively correlated with a smaller government sector, better legal structure and security of property rights, as well as less regulation of credit, labor, and business.

Kreft and Sobel (2005) find that entrepreneurial activity is the driver of economic growth. They also find that entrepreneurship causes additional inflows of venture funding and not vice versa. They

conclude that policy should focus on creating institutions conducive to entrepreneurship. Once such an institutional environment is in place, venture capital will follow entrepreneurial activity.

Sobel et al. (2007) explore two channels through which government policy impacts entrepreneurship. The first channel is through government's impact on the quantity and quality of inputs used in the entrepreneurial process — human capital, resources, venture capital, etc. The second channel is through the impact of government policy on the institutional environment. They conclude that economic growth is a function of good institutions, which provide a payoff to productive entrepreneurship, and also the ability to succeed or fail in the competitive marketplace.

Coyne and Leeson (2004) expand on Baumol's framework and add a third category — evasive entrepreneurship — to the previously discussed categories of productive and unproductive entrepreneurship. Evasive activities include the expenditure of resources in evading the legal system or in avoiding the unproductive activities of other agents. Tax evasion is one readily example of evasive activities, as are efforts to avoid bribing corrupt officials. In general, as rules become more burdensome and raise the costs of interaction, one should expect economic actors to invest more resources in avoiding those rules. Evasive entrepreneurship allows for productive activities by avoiding stifling regulations and rules. However, the overall benefits are limited because some resources have to be redirected from the process of wealth creation to evasion. Coyne and Leeson provide evidence from Romania to illustrate this argument.

The importance of institutions for the type of entrepreneurial opportunities has important implications. One reason we observe different outcomes from entrepreneurial behaviors is because activities yielding the highest payoffs vary across societies. In countries with low growth, it is not that entrepreneurs are absent or are not acting, but rather that they are stymied by either a lack of functional markets and hence profit opportunities or by the existence of profit opportunities yielding outcomes counter to economic progress. Indeed, many poor countries remain underdeveloped because profit opportunities are tied to socially destructive behaviors.

Given the realization that economic growth and development are a consequence of specific institutions, we can better understand why we observe a lack of convergence between rich and poor countries. A central problem in poor countries is the combination of private and public institutions currently in place in less developed countries. The key question then is what institutional environment promotes productive entrepreneurial activity? The next sub-section addresses this issue.

3.3 Socialism, Private Property, and Economic Calculation

Perhaps no example is clearer about the negative consequences for both economic thought and the practice of economic policy of failing to pay sufficient attention to institutions — especially the institutions of private property and contract — than the twentieth century experiment with socialism. The debate on the viability of socialism in the 1920s and 1930s was fundamentally a debate about the best way to organize society and economic activity. As such, it was fundamentally a debate about different institutional structures, von Mises (1922) argued that socialism, defined as national ownership over the means of production, was impossible given the stated ends of socialists, which were to out produce the capitalist system based on the private means of production. The arguments by Mises, as well as Hayek (1948), during the debate continue to have important implications for our understanding of institutions and entrepreneurship within different institutional contexts (see Kirzner (1988)).²

At the center of the Mises–Hayek critique of socialism was the notion of "economic calculation." Economic calculation refers to the decision-making ability to allocate scarce capital resources among competing uses. According to Mises, "economic calculation is either an estimate of the expected outcome of future action or the establishment of the outcome of past action. But the latter does not serve merely historical and didactic aims. Its practical meaning is to show how much one is free to consume without impairing the future capacity to produce" (von Mises, 1949, p. 210–211). Due to scarcity, all choice involves

 $^{^2}$ For modern treatments and applications of the socialist calculation debate, see Lavoie (1985) and Boettke (1990, 1993, 1998).

alternatives and trade-offs. Given this, people must be able to compare the relevant alternatives and decide which ones to pursue. In making this decision, individuals must have some aid for comparing inputs and outputs. During the socialist calculation debate, Mises and Hayek emphasized that individual's decision-making ability is directly dependent on the institutional context of private property. Their central point was that the necessary informational inputs into the decision process are made available to decision-makers only through the market process. The argument regarding economic calculation can be summarized as follows:

- 1. Without private property in the means of production, there will be no market for the means of production.
- 2. Without a market for a means of production, there will be no monetary prices established for the means of production.
- 3. Without monetary prices, reflecting the relative scarcity of capital goods, economic decision-makers will be unable to rationally calculate the alternative use of capital goods.

In short, without private property in the means of production, rational economic calculation is not possible. Under an institutional regime which attempts to abolish private ownership in the means of production, advanced industrial production is reduced to choice in the dark as decision-makers are denied the necessary compass of how to select among competing alternatives. As Mises noted, economic calculation "provides a guide amid the bewildering throng of economic possibilities. It enables us to extend judgments of value which apply directly only to consumption goods — or at best to production goods of the lowest order — to all goods of higher orders. Without it, all production by lengthy and roundabout processes would be so many steps in the dark . . . And then we have a socialist community which must cross the whole ocean of possible and imaginable economic permutations without the compass of economic calculation" (von Mises, 1922, pp. 101, 105).

Economists arguing for the viability of socialism were misled to overestimate the performance capabilities of socialism due to a preoccupation with technical questions concerning optimality conditions in equilibrium states. For sake of argument, Mises and Hayek were willing to grant the assumption that socialist economic managers were as capable and as motivated to produce goods and services as efficiently as the average capitalist entrepreneur. But even if so motivated, Mises and Hayek argued, outside the context of the market economy it was unclear how that managers would come to learn what the most efficient production processes are at any given point in time.

Production processes and cost curves cannot be treated in practice as objectively given facts as they are in the textbook and on the blackboard. "What is forgotten," Hayek argued, "is that the method which under given conditions is the cheapest is a thing which has to be discovered, and to be discovered anew, sometimes almost from day to day, by the entrepreneur, and that, in spite of the strong inducement, it is by no means regularly the established entrepreneur, the man in charge of the existing plant, who will discover what is the best method. The force which in a competitive society brings about the reduction of price to the lowest cost at which the quantity saleable at that cost can be produced is the opportunity for anybody who knows a cheaper method to come in at his own risk and to attract customers by underbidding the other producers" (Hayek, 1948, p. 196).

In the actual world, economic decision-makers are confronted with imperfect information and an array of technologically feasible production projects. What economic calculation provides is a means to select from among these projects to assure that resources are employed in an economic (i.e., efficient) manner. Waste, as a result, will be minimized as decision errors are continually detected and corrected by the aid of profit and loss accounting. Only through this process of error detection and correction within the market can it be said that entrepreneurial hunches are tied to the underlying reality of consumer tastes, resource endowment, and technological possibilities.

Every entrepreneurial act is a wishful conjecture about a future which is different from today, but wishing so cannot make it so by itself. Entrepreneurial wishes yield profits only when technological possibilities are arranged in a manner which best satisfies consumer preferences in the most economic fashion. Given changes in consumer preferences and the stock of technological knowledge, entrepreneurs try to bring

their new conjectures to life in order to realize profits. If their conjecture is wrong, or poorly executed, then the ensuing losses will redirect their efforts. As Mises noted, "Every single step of entrepreneurial activities is subject to scrutiny by monetary calculation. The premeditation of planned action becomes commercial precalculation of expected costs and expected proceeds. The retrospective establishment of the outcome of past action becomes accounting profits and losses" (von Mises, 1949, p. 229).

It is the entrepreneurial competitive market process that results in the discovery of least cost technologies and the product innovations that better satisfy consumer demands. Market exchange presupposes recognized private property rights and freedom of contract. It is the desire to realize the gains from exchange, and competitive entry of new entrepreneurial ventures, that are the sources of new and ever fresh knowledge to economic participants. It is the buying and selling in the market place, as well as the abstaining from buying and selling, that determines the terms of exchange that coordinate economic activity. Without private property and freedom of contract (as well as a host of other institutions associated with capitalist societies), these practices would not take place. By abolishing these institutions socialism eliminated the very practices that provide the incentives and information required for economic actors to learn what the most efficient production technologies were, what mix of products best satisfied consumer demands, and what terms of exchange reflected the exhaustion of the gains from trade.

Through the market process, entrepreneurs are redirected in their activity either to make conjectures that are more in line with the underlying tastes and preferences of their fellow citizens or to lose the monetary resources which enable them to finance their wishful conjectures. Nobody's financial resources are unlimited. What spurs entrepreneurship is the lure of profit, and what disciplines entrepreneurs is the penalty of loss. The property rights structure provides the incentives and establishes the issue of the residual claimant, and the price system provides economic actors with the information to act on the bases of those incentives to utilize resources effectively.

To understand the importance of disciplinary devices to ensure that resources are being effectively allocated, consider the various market mechanisms that have evolved to deal with the principal-agent problem. When ownership is separated from control, the principals (owners) can be exploited by the agents (those entrusted to manage the assets) unless these agents are monitored effectively. The principals, however, by the nature of the problem we are setting up, cannot directly monitor the activities of the agents. In the context of a market economy, various impersonal market mechanisms emerge to provide a corporate governance structure and effectively monitor the behavior of agents. For instance, there is both the market for corporate control through takeovers and mergers, and the market for managerial labor.

The evolution of the modern corporation provided a means for financing expansion in business while not incurring all the risk. By selling shares in its business entity, an enterprise could raise needed financial capital. However, with the creation of the corporation, a chasm exists between the owners (shareholders) and the managers — between principals and agents. The share price of a firm is a reflection of the expected future profitability of the firm. If the firm's assets are not of high value and its expected future earnings are low, its share price will fall and in the limit the firm will be driven out of existence. If, on the other hand, the firm's assets are highly valued, but its current earnings do not match that expectation, the share price will fall and others will have an incentive to buy those shares at the lower price in order to reorganize the firm to realize the potential earnings of those assets. Managers who do not realize the potential of the firm's assets will be displaced through the process of mergers and acquisitions in the market for corporate control.

Additionally, a vibrant market for managerial labor exists and individuals compete vigorously to establish themselves as being qualified to realize the full potential of a firm's assets through their organizational and leadership skills. The impersonal forces in a market economy discipline the behavior of agents so it aligns with the interests of the principals. This is accomplished by the institutional functions of property, prices and profit and loss.

The market economy tends to the simultaneous realization of exchange efficiency, production efficiency, and product-mix efficiency. But it does so only within a system of well-defined and enforced private property rights and a system of freedom of contract embedded in a rule of law. It is important to stress, however, that while a competitive market economy exhibits this tendency toward efficiency the real power of the market economy is the ability to continually adapt to changing conditions. The constellation of prices in a free economy is constantly shifting to reflect changes in underlying tastes, technology and resource availability so that the equilibrium tendencies are never fully realized in practice. Price adjustments and the lure of pure profit ensure that supply and demand are coordinated, and that new ideas are commercialized. None of this would emerge without specified institutions, and our ability to understand this process without analyzing those institutions is hampered.

In order to better understand the institutions central to economic calculation, and hence entrepreneurship, consider the four major steps in argumentation against socialism in Mises's and Hayek's writings on the topic:

- 1. Private property and incentives.
- 2. Monetary prices and the economizing role they play.
- 3. Profit and loss accounting.
- 4. Political environment.

Regarding the first argument, Mises and Hayek emphasized how private property engenders incentives which motivate individuals to husband resources efficiently. The second argument deals with the issues of economic calculation and how the exchange ratios established in a market allow individuals to compare alternatives by summarizing the subjective assessment of trade-offs that individuals make in the exchange and production process in a common denominator. The third argument focused on how the static conditions of equilibrium only solved the problem of economic calculation by hypothesis, and that the real problem was one of calculation within the dynamic world of change, in which the lure of pure profit and the penalty of loss would serve a vital error detection and correction role in the economic process.

Finally, Mises and Hayek warned that the suppression of private property leads to political control over individual decisions and thus the eventual suppression of individual choice, creativity, and innovation to the concerns of the collective. All four arguments are criticisms of socialist proposals. On the other hand, the private-property market economy is able to solve each of the three economic issues.

The main implication is that understanding different economic, social, and political outcomes requires a focus on institutional context. Some institutional environments do a better job of providing an inducement to actors to act prudently and utilize resources efficiently, and provide the necessary feedback so that actors are continuously learning how better to coordinate their plans with those of others to realize the gains from trade. As Mises and Hayek emphasized, the ability to engage in rational economic calculation is central to the process of coordinating the myriad plans that exist at any point in time. Market institutions do a good job in providing the required knowledge to entrepreneurs regarding what projects to undertake, abandon and pursue. Even in the presence of market failures and the absence of static efficiency, market institutions tend to keep entrepreneurs on course, mobilizing and directing their energies toward ventures that are worth pursuing. The economic market rationale, however, cannot be easily applied in all relevant areas of human activity and society. In the next sections, we consider different institutional contexts — social settings and political settings — with particular focus on the conduciveness of those institutions to economic calculation.

Social Entrepreneurship

4.1 What is Social Entrepreneurship?

The notion of "social entrepreneurship" has become increasingly popular over the past two decades. Leadbeater (1997) notes the dramatic rise in social entrepreneurial endeavors while Salamon and Anheier (1996) indicate that the nonprofit sector accounts for about 5% of total employment in seven major OECD countries. Cannon (2000) indicates that the number of nonprofit organizations in the United States have increased by 40% during the 1990–2000 period.

One issue with the study of social entrepreneurship is that there is no clear consensus regarding how the concept is defined (see Dees (2001), Mair and Marti (2006), Peredo and McLean (2006)). For the purposes of this survey, we consider social entrepreneurship as entrepreneurship driven by social considerations — peer recognition, appreciation, strengthening social ties and bonds, etc. — rather than economic (profit) or political (power) considerations. As Dees (2001) notes, "Any definition of social entrepreneurship should reflect the

 $^{^1}$ For a discussion of the different notions and aspects of social entrepreneurship, see Boschee (1998), Fowler (2000), Mair and Marti (2006), and Peredo and McLean (2006).

need for a substitute for the market discipline that works for business entrepreneurs" (Dees, 2001, p. 3). Given this, we will place particular emphasis on alternative disciplinary mechanisms in the social context.

The existing literature emphasizes different aspects of social entrepreneurship. For example, some emphasize social entrepreneurship as nonprofit activities aimed at creating social value (see Boschee (1997) and Austin et al. (2006)). Others view it as a means of alleviating social ills while serving as a catalyst for social change (see Alvord et al. (2004)). For our purposes, social entrepreneurship may entail philanthropy, charity, social activism, or starting a nonprofit organization. Although social entrepreneurship is driven by motivations other than profit, there is sometimes a close connection to for-profit businesses. For example, some for-profit firms have nonprofit foundations which are focused on philanthropy and charity. While these foundations are part of a broader for-profit organization, their purpose is not to earn a profit so we can treat them as distinct entities for purposes of analysis.

4.2 Existing Literature on Social Entrepreneurship

The existing literature on social entrepreneurship covers a wide variety of topics and concepts. This variety stems from the many nuances of the concept of social entrepreneurship and also the lack of consensus regarding what exactly social entrepreneurship entails.

Dees (2001, p. 4) discusses the five main qualities of social entrepreneurs as follows:

- (1) Adopting a mission to create and sustain social value (not just private value).
- (2) Recognizing and relentlessly pursuing new opportunities to serve that mission.
- (3) Engaging in a process of continuous innovation, adaptation, and learning.
- (4) Acting boldly without being limited by resources currently in hand.
- (5) Exhibiting heightened accountability to the constituencies served and for the outcomes created.

These characteristics are meant to define an ideal social entrepreneur. Others have explored other characteristics of social entrepreneurs. For example, Prabhu (1999) notes that social entrepreneurs, like commercial entrepreneurs, want to control their environment and have a relatively high tolerance for uncertainty. Catford (1998) highlights that social entrepreneurs share a similar focus with commercial entrepreneurs and also have a high sense of "social justice." Cannon (2000) discusses three "types" of people that enter the realm of social entrepreneurship. The first includes wealthy individuals who are interested in philanthropy. The second are individuals disenchanted with the state social system. The third group includes those that have pursued higher education with the goal of being social entrepreneurs. Theoretical models of social entrepreneurship and nonprofit activity are reviewed and developed by Fowler (2000), Thompson et al. (2000), Boettke and Prychitko (2004), Mair and Marti (2006), Nicholls (2006), Peredo and McLean (2006), Perrini (2006), and Weerawardena and Mort (2006).

Most studies of social entrepreneurs rely on qualitative methods. For example, in his well-known book, Bornstein (2007) profiles nine social entrepreneurs from around the world to understand the similarities and differences across social entrepreneurs. There are currently very few empirical studies of social entrepreneurship. One exception is Sharir and Lerner (2006) who identify the factors impacting social entrepreneurs in Israel. The authors study 33 new social ventures and conclude that the following factors impact the success of the ventures of social entrepreneurs: (1) the entrepreneur's social network; (2) total dedication to the venture's success; (3) the capital base at the establishment stage; (4) the acceptance of the venture idea in the public discourse; (5) the composition of the venturing team, including the ratio of volunteers to salaried employees; (6) forming cooperations in the public and nonprofit sectors in the long-term; (7) the ability of the service to stand the market test; and (8) the entrepreneurs' previous managerial experience.

One should expect the number of empirical studies of social entrepreneurship to increase over the coming years as new data becomes available. For example, Meyskens and Post (2008) recently carried out an initial empirical analysis of 70 social entrepreneurs associated with the global social venture network Ashoka, which identifies and invests in social entrepreneurs. The study, which is still being completed, will empirically study the relationship between the strategies of social entrepreneurs and the existing patterns and relationships found in the literature on commercial entrepreneurship.

A growing literature from a variety of disciplines explores the topic of philanthropy (see, for example, Sargeant (1999), Lindahl and Conley (2002), Acs and Braunerhjelm (2005), Acs and Desai (2007), Havens et al. (2007), Sargeant and Woodliffe (2007)). Bremner (1994), and McCarthy (2005) study the history of philanthropy. Brooks (2005) and Dekker and Halman (2003) explore the factors that motivate giving and volunteering while Smith (2005) considers the moral issues associated with philanthropy and charity. Boettke and Coyne (2009) employ the economic way of thinking to analyze the political economy of the philanthropic enterprise. Most recently, Bekkers and Wiepking (2008) provide a detailed review of all of the literature in the area of philanthropy. They consider over 500 studies that fall into two broad categories — (1) who gives how much, and (2) why people give.

Mair and Marti (2006) emphasize two key areas requiring future research — developing measures of social performance and impact, as well as understanding how social entrepreneurship is embedded within existing social and cultural institutions. They put forth a series of questions to highlight specific potential areas of research on social entrepreneurship:

If context and embeddedness is so important, to what extent is it possible to transfer practices and scale out initiatives across geographic and community borders? Are some forms of organizing for social entrepreneurship better suited to address specific needs than others? How does social entrepreneurship differ in developed and developing countries? Can we observe geographical clusters with higher levels of social entrepreneurial activity, e.g., India and Bangladesh, or Brazil and Ecuador? If so, what explains the emergence of such clusters? Are there

isomorphic forces within and across clusters? What institutional factors explain the emergence of social entrepreneurship and what theoretical lenses may help us understand those factors? What is the link between social entrepreneurship and sustainable development, and how can social entrepreneurship contribute to sustainable development? (Mair and Marti, 2006, p. 43)

As these questions indicate, the young field of social entrepreneurship is full with many opportunities for study and research.

The reader will notice that there is little existing work on the role that institutions play in social entrepreneurship. Much of the existing literature focuses on the characteristics of social entrepreneurs or the noninstitutional factors impacting social entrepreneurship. There is much research to be done on the role of both formal and informal institutions in the process of social entrepreneurship. What formal institutions encourage or discourage social entrepreneurship? What role do informal institutions, such as norms and trust, play in social entrepreneurship? What incentives are necessary for successful social entrepreneurship and what institutions create these incentives? These are just some of the open research questions in the area of social entrepreneurship. Finding answers will require a focus on the institutions governing social entrepreneurship.

4.3 Social Entrepreneurship and Economic Calculation

As noted in Section 3, private property, prices and profit and loss are critical for rational economic calculation. In market settings, private entrepreneurs are able to continually receive feedback regarding the allocation of resources. The result is a continuous process of adjustment and change in resource allocation as entrepreneurs respond to this feedback. A key difference between social entrepreneurship and market entrepreneurship is that the latter is driven by the desire for profit while the former is not. This indicates that we have to pay careful attention to the institutions within which social entrepreneurs act, including the incentives and feedback mechanisms they face, absent the profit motive.

Recall that in for-profit settings the entrepreneurial market process disciplines the wishful conjectures of economic actors through the incentives of private property, the information of relative prices and the feedback in terms of rewards and penalties of profit and loss. Alertness to opportunities is switched on by a variety of factors, but the context of the private property market economy directs that alertness to exploit the opportunities for mutual gain, and errors of either over pessimism (mutual gains go unrecognized) or optimism (mutual gains are perceived when they are not there) are revealed and corrected through the discipline of loss or the lure of profit. In this sense, the market economy exhibits a strong tendency for self-correction and efficiency in exchange and production. This is not the case in nonprofit settings where the disciplinary mechanism of profit and loss is absent.

In his analysis of the conditions for economic calculation, Mises was explicit on the limits of monetary calculation and strictly restricts the role of monetary calculation to the sphere of exchange relations and production through a roundabout process. Honor, beauty, and happiness all exist outside the strict delineation of exchange relations and thus monetary calculation. Nonetheless, Mises insists that recognizing the limits to monetary calculation does not detract from its significance for everyday economic life. Honor, beauty, and happiness are goods of the first order, and thus can be valued directly, but not interpersonally.²

Mises follows his discussion of the limits of monetary calculation with an argument for its importance. Within its appropriate sphere monetary calculation "does all that we are entitled to ask of it." Without it, we would be lost "amid the bewildering throng of economic possibilities," and thus "all production by lengthy and roundabout processes of production would be so many steps in the dark" (von Mises, 1922, p. 101). Mises recognized the precise issue with the notion of social entrepreneurship — namely that because it is nonprofit, it is outside the realm of economic calculation.

This is the case despite the fact that donors often provide gifts to social entrepreneurs in monetary terms. These monetary donations

² First order goods refer to final consumer goods while second, or higher order goods are those that contribute to the production of first order goods.

are gifts instead of profit. Thus, if we follow Mises and insist on the limitation of monetary calculation to the arena of exchange relations, we would expect that social entrepreneurs would be limited to activities which can be directly valued, or else it will be characterized by waste. However, there are striking examples of nonprofits successfully fulfilling local demands through incentive-compatible, community-based projects in which the nonprofits maintain strict accountability to donors within a limited scope (see, for example, Cornuelle (1965), Yunus (2003), Chamlee-Wright and Storr (2008)).

Social entrepreneurs engage in projects to help the needy and increase human welfare where the state and the market have failed. These entrepreneurs operate in the nonmarket component of civil society. In this setting they lack recourse to the feedback mechanism of profit and loss. Given this realization, the central question becomes: by what mechanisms can we ensure that actions undertaken are not merely to feel good, but actually to do good? Stated differently, what mechanisms, if any, guide the behavior of entrepreneurs in the nonmarket setting to ensure that they are allocating resources to those that need them the most? Absent profit and loss, how can the social entrepreneur sort between alternative projects and the allocation of scarce time and resources to avoid waste? How can donors overcome the principal-agent problem by ensuring that the agent (i.e., social entrepreneur) is achieving the desired ends?

Boettke and Coyne (2009) argue that in the absence of this mechanism, the nonmarket sector relies on the disciplinary devices most appropriate for that sort of interaction, namely reputation. In this case, the informal institution of reputation capital replaces the profit and loss mechanism. The only way that the social entrepreneurs can decide between competing projects is to limit their activities to those initiatives that can be directly monitored and disciplined on the basis of reputation.

In making grants and donations to social entrepreneurs, if the granting foundation or donor has personal knowledge of the grantee and can monitor closely to make sure that the agent (recipient) is acting in the interest of the principal (donor), then the entrepreneurial innovation is more likely to be more effective in accomplishing its goal.

It is possible to overcome the principal-agent problem discussed in Section 3 through reputation effects. Since the reputational capital of the recipient is what is being held as collateral, the recipient has a strong incentive to accomplish the task for which he has received the grant.

Given the necessity of reputation as the main self-governing mechanism in the context of social entrepreneurship, the activity of social entrepreneurs is really a function of betting on people, not on projects. Boettke and Coyne (2009) contend that donors should identify people they trust and these people must put their reputation on the line each time. Projects can be attractive, but unless the feedback loops are well established even the most promising project can be poorly executed.

The reputation mechanism can operate in a variety of ways in the nonprofit sector. In some cases the donor will establish a direct relationship with the social entrepreneur. In other situations, donors provide funds to intermediate organizations — NGOs, churches, etc. — which are entrusted to allocate the funds in an effective manner. These intermediaries act as middlemen who have superior knowledge of local conditions, as well as the ability to judge viable projects. Note that trust and reputation is at play here on two levels. First, there is the relationship between the donor and intermediary. Second, there is the relationship between the intermediary and the social entrepreneur. Reputations are built over time by creating trust. In a situation of repeated interactions, the reputation mechanism will produce intermediaries to allocate funds to viable projects and for social entrepreneurs to deliver on their proposed project. The end result is that donor intent will tend to be satisfied even though there may be no direct contact between the donor and social entrepreneur.

In many cases donors and intermediaries require frequent proof of progress in the form of reports and various metrics. Proof of performance can ensure donor intent and can contribute to further reputation capital for future interactions. Another point of interest is that one observes many cases where social entrepreneurship and philanthropy are self-financed. In such cases, the donor overcomes the principal-agent problem by assuming the positions of donor and social entrepreneur.

It is important to note that reputation collateral is not a substitute for economic calculation. Absent monetary calculation we cannot be confident that the decision of donors to provide monetary support to social entrepreneurs is an efficient allocation of resources. Likewise, we cannot be confident that the mistakes of social entrepreneurs will tend to be self-correcting as in private markets. Acting in the nonmarket setting, whether it is giving by donors or the undertakings of social entrepreneurs, means that people are acting outside the feedback mechanisms of prices and profit and loss. Given this, the best we can do is to find disciplinary devices that ensure that social entrepreneurs tend to meet the desires of donors. Reputation collateral is one means of ensuring this occurs.

Political Entrepreneurship

5.1 What is Political Entrepreneurship?

Many credit Robert Dahl (1961) with introducing the term "political entrepreneur" into the political and social science vocabulary. He used the term to signify political leaders who set the agenda. For Dahl, the political entrepreneur "is not so much the agent of others as others are his agents" within the political process (Dahl, 1961, p. 309). The political entrepreneur, according to Dahl, is successful when he pyramids his access to resources within his influence.

For the purposes of this survey, we define political entrepreneurship as individuals who operate in political institutions and who are alert to profit opportunities created by those institutions. There are numerous potential motivations for political entrepreneurs including monetary gain, job security, power, and prestige. These rewards serve as various types of "political profit." As the existing literature discussed in the next section indicates, scholars have focused on various aspects of political entrepreneurship.

5.2 Existing Literature on Political Entrepreneurship

The policy innovation literature (see, for example, Polsby (1984)) stresses how political entrepreneurs introduce new policy ideas through their ability to build winning coalitions among policy makers. According to this literature, political entrepreneurs shape the political debate through agenda setting and the strategic use of cultural frames to tie individual interests with a vision of collective purpose.

Within a pluralistic political system, the literature in political science tends to see competition among interest groups and the role of the political entrepreneur as beneficial to the advancement of the public good. The pluralistic competition will provide a check and balance against any one group from benefiting at the expense of others. This view of vying political interests producing benign outcomes in terms of both legislation and government structure was challenged by public choice scholars such as Mancur Olson (1965). They emphasize that free riding and political externalities characterize collective action. The result is political failure leading to perverse outcomes.

Richard Wagner (1966), in his review essay on Olson's (1965) classic work, explained the relationship between pressure groups and political entrepreneurs. The political entrepreneur in Wagner's presentation is the individual or interest group that engages in lobbying efforts to secure privileges from government. It is the striving for political profit that defines the activity of the political entrepreneur. Pressure groups help facilitate political entrepreneurship, but are not identical to it. If we outlawed pressure groups, political entrepreneurs would still find a way to plead their case to government officials. The political entrepreneur will exist as long as political profits exist. The reduction of political profits, Wagner argues following Buchanan and Tullock (1962), will only occur as a consequence of changing the voting rules or the organizational structure of government.

Thomas DiLorenzo (1988) has developed Wagner's basic idea of the political entrepreneur. He argues that the uncritical adoption of the neoclassical model of competition into political science has had the intellectual consequence of blinding scholars to the unintended and undesirable consequences of political entrepreneurship. "Competitive" government does not necessarily mean "efficient" government as the neoclassical model can be interpreted to suggest. The alternative to fragmented government is not necessarily monopolistic government DiLorenzo argues. Politicians are "brokers" of legislation, and politicians do not just respond passively to voter demands, but seek to stimulate voter demand for wealth transfer services. "The essence of political entrepreneurship," DiLorenzo states clearly, "is to destroy wealth through negative-sum rent-seeking behavior" (DiLorenzo, 1988, p. 66).

The adoption of the neoclassical model of competitive equilibrium understates the wealth creating benefits of entrepreneurship within the context of the private sector, and when applied to politics it drastically understates the perverse effects of policies initiated by political entrepreneurs. Focusing on the activities of the political entrepreneur improves our understanding of public choice because standard approaches tend to concentrate on the demand side of politics (e.g., median voter) and do not explore enough the supply side (e.g., the active manipulation of the legislative process).

Schneider et al. (1995) peer into the black box of politics and examine the role that political entrepreneurs play in the process of policy making. Building on the work of William Riker (1962; 1986), Schneider et al. (1995) argue that political equilibria are disturbed by efforts at agenda control, strategic behavior, and policy initiatives to create more profitable political opportunities. They argue that while many scholars see entrepreneurship as a useful metaphor outside the realm of the market economy, the idea of public or political entrepreneurship is vital to understanding the nature of political processes. In short, according to Schneider et al. (1995) political entrepreneurs are change agents. These change agents act by discovering and framing opportunities. Whereas in the context of the market economy these opportunities are revealed as profits, in the arena of politics they are manifested as opportunities to redefine the political situation to realize majority support for one's preferred public policy.

In sum, the literature on political entrepreneurship emphasizes different aspects of the concept. One strand focuses on the beneficial and benign outcomes from political entrepreneurship. A second strand of literature, in contrast, emphasizes how political entrepreneurship can be unproductive and even destructive. In the view of those in this second strand, political entrepreneurs engage in rent-seeking behavior to secure resources and wealth at the expense of citizens. The overall result is zero or negative sum. No matter which aspect of political entrepreneurship is emphasized, a critical element is understanding how institutions influence entrepreneurship in political settings.

5.3 Political Entrepreneurship and Economic Calculation

Entrepreneurship manifests itself as alertness to opportunities to better one's position. As discussed in Section 3, within the setting of markets characterized by private property, prices and profit and loss, productive entrepreneurial opportunities come in the form of gains from mutually beneficial trade, or gains from innovation which result in mutual benefits.

That conclusion, however, is institution-specific. Kirzner (1973) has distinguished between the entrepreneurial market process and the act of entrepreneurship per se. Our emphasis on the relationship between institutions and entrepreneurship follows directly from this basic Kirznerian point. To sum it up, entrepreneurship is omnipresent, but the entrepreneurial market process is specific to a particular setting of private property, prices, and profit and loss accounting. Outside of the market setting, the mutuality aspect of the entrepreneurial act of pursuing gains from trade and gains from innovation is in no way guaranteed. We cannot have the same confidence concerning self-correction and efficiency in action once we step outside of the market setting. Yet in all walks of life there are opportunities for individual gain that can be pursued. Entrepreneurship exists in political settings, but there the inducement, guide and discipline provided by property, prices and profit/loss is absent. As such, there are no means of engaging in rational economic calculation to ensure a tendency toward the allocation of resources to their most highly values use.

As we argued in Section 4, the problem when we stretch the concept of entrepreneurship to realms outside of the market economy has little to do with the idea that there are change agents throughout all human realms and everything to do with the disciplinary mechanisms that come to bear on entrepreneurial actors. There is no difference in the realm of politics. There are several reasons why politics and economics do not align perfectly, but one of the most important lessons why good economics and good politics may be in conflict is that intentions do not equal results. A politician may intend to do well with the introduction of a policy initiative, but that intention does not automatically translate into the ability to do well. Policies do not always have their intended impact as there are unintended consequences that must be taken into account. When we trace these unintended consequences we often see their roots in basic questions of incentive incompatibility and distortions between the knowledge of time and place and the knowledge of policy makers removed from the situation.

Consider both sides of the ought/can question. If, for the sake of argument, we can agree that we ought to do policy A to address problem X, then we still have the economic question of whether policy A can actually achieve the solution to X. Due to a variety of factors that modern political economy has highlighted — from long and variable lags, to time inconsistency, to knowledge problems, to rent-seeking, etc. — "ought" cannot presuppose "can" in the realm of public policy.

We can also flip this question around. If we switch the meaning of can to mean that we can pass a piece of legislation then we can envision several situations where assuming we ought to do what we can do leads to serious problems. Aided by political entrepreneurship a variety of legislation can get passed, but just because we can get politicians to sign on does not mean that we ought to pass that legislation. The disjoint between ought and can produces political failure — policies that do not advance the common good, though they may produce a stream of private benefits to preferred groups and individuals.

In the previous section, we discussed how reputation collateral can potentially provide a solution to the principal-agent problem in non-profit settings. Recall that the argument was that reputation collateral provides one means of ensuring that donor intent is satisfied. In this section we have discussed how political entrepreneurs, like social entrepreneurs, are not subject to the discipline of the market mechanism of profit and loss. A central issue is whether the logic of discipline

in nonprofit settings — the reputation mechanism — can be applied to political settings. We argue that it cannot.

To understand why this is the case, consider the state sector and in particular the effectiveness of democracy in assuring that agents act in the interest of the principals. In this example the agents are elected officials, and the principals are the voting public (see Ferejohn (1986)). The central question is as follows: is the vote mechanism an effective means for disciplining the behavior of the agents in relation to the demands of the principals?

There are several reasons why the voting mechanism is an inefficient disciplinary mechanism. Individuals make "high level" electoral decisions, but they have little influence over specific policies. Political promises are not legally binding and goods and services are provided whether voters want them or not. Of course, voters can attempt to punish elected officials through their vote, but this assumes that an individual's vote can influence the outcome of the election. In reality, voting is governed by the logic of concentrated benefits and dispersed costs. The interaction in democratic politics is one characterized by rationally ignorant voters, special interest groups, and vote-seeking politicians. The bias of this interaction is for the politician to concentrate benefits on the well-organized and well-informed special interest voters and to disperse the costs on the unorganized and ill-informed mass of voters (see Mitchell and Simmons, 1994, pp. 39–84).

Reputation is largely ineffective because voters tend to be rationally ignorant of the true actions of politicians. Even where they are cognizant of politicians' true actions, an individual's vote has little impact on political outcomes and is therefore a weak and ineffective disciplinary device. This is why good economics is not necessarily good politics, and thus, policies can be chosen which are counterproductive from the perspective of overall economic growth. What this indicates is that political disciplinary devices are largely ineffective in ensuring the tendency toward the efficient allocation of resources.

Institutional Entrepreneurship

6.1 What is Institutional Entrepreneurship?

The previous sections focused on entrepreneurship within a given set of institutions. We considered entrepreneurship under several alternative institutional regimes — markets, private nonprofits, and politics — to understand the knowledge constraints facing entrepreneurs in each setting. In doing so we focused on the ability of entrepreneurs to engage in economic calculation in each of these institutional contexts. Also important are changes in the very nature and constitution of institutions. As Williamson's hierarchy (Table 2.1, Section 2.1) illustrates, institutional change tends to occur at different rates depending on the institutional level. Level 4 institutions (resource allocation, etc.) change continuously while Level 1 institutions (embedded institutions) tend to take significantly longer to change. The previous sections focused mainly on Level 3 and 4 institutions. In this section, we are concerned with Levels 1 and 2 of Williamson's hierarchy.

In order to provide further clarity, return to the realm of political institutions and political entrepreneurship. James Buchanan and Gordon Tullock's (1962) distinction between "ordinary politics" and

"constitutional politics" enables us to identify political entrepreneurship at two-levels. The first level — ordinary politics — focuses on the realization that political entrepreneurship can come in the form of electoral and legislative activity to realize individual gain. The important point to make is that this form of entrepreneurship treats the structure of politics as given, and then seeks electoral or legislative gains within a given set of political institutions. In the context of elections, this translates into vote seeking by individuals seeking office as well as the strategic activity of special interest voters intent on making sure their candidate is elected to office. Once in office, political entrepreneurs will look for opportunities to realize their agenda. This results in a variety of behaviors, one of which is vote-trading with others in the legislation, or rent-seeking by interest-groups to get privileges in exchange for campaign contributions and constituent votes. This would correspond to the lower levels (Levels 3 and 4) of Williamson's hierarchy. We focused on this first level of "ordinary politics" in the previous section.

The second level of political entrepreneurship involves entrepreneurship over the structure of government — i.e., decisions regarding the general institutions within which ordinary politics take place. Within Williamson's framework, change at the constitutional level will tend to take decades, if not centuries (Level 2 and potentially Level 1). Understanding the process of institutional change, as well as the catalyst of change, is the focus of this current section.

A young but growing literature focuses on entrepreneurship not only within institutions but also on institutions (see Leca et al. (2008)). "Institutional entrepreneurship" involves changes to the fundamental constitution of the formal and informal rules of the game. Eisenstadt (1980) was one of the first to use the concept of institutional entrepreneurship to describe individuals who are the catalysts of structural change. DiMaggio (1998) used the term institutional entrepreneurship in reference to those individuals who have the resources and ability to generate changes in institutions. Institutional entrepreneurs can be driven by a variety of factors including monetary gain, prestige or power.

As noted in Sections 2 and 3 institutions directly influence the costs and benefits associated with certain courses of behavior. As such,

in changing the rules of the game, institutional entrepreneurs also influence the behaviors of others by shifting costs and benefits, and hence incentives.

6.2 Existing Literature on Institutional Entrepreneurship

Hwang and Powell (2005) identify several strands of literature on the topic on institutional entrepreneurship. As noted in the previous section, political entrepreneurs often influence the specific characteristics of private and public institutions. These changes can contribute to economic growth and development if they foster productive market entrepreneurship, but they can also stifle development if they foster unproductive entrepreneurship.

An important area of research focuses on the role of entrepreneurs in introducing or changing organizational forms and mechanisms of governance. Examples would include such things as grievance procedures (Sutton et al., 1994; Edelman et al., 1999) and policies associated with maternity leave (Kelly and Dobbin, 1999). This literature emphasizes that general laws passed by the government are often ambiguous regarding specifics. As such, there is room for interpretation and evolution regarding specific practices and rules within general laws. Over time, many of these rules become institutionalized not only within organizations, but also across organizations (Edelman, 1992). In this role, individuals acting within existing institutions and organizations can influence the evolution of other, related institutions — organization practices and rules. Edelman et al. (1999) provide a detailed analysis of how grievance procedures were introduced by professionals acting as entrepreneurs. These individuals introduced the procedures in terms of the associated cost savings due to adoption.

Boettke and Leeson (2008) make the distinction between "two tiers of entrepreneurship." The first is concerned with market entrepreneurship within a given set of institutions. This entails investments in productive technologies resulting in increases in wealth and standards of living. The second tier involves the creation of "protective technologies" which secure property rights between citizens. In this context, institutional entrepreneurs develop mechanisms allowing market entrepreneurs to engage in productive activities. The authors draw on evidence from Somalia to highlight how institutional entrepreneurs are able to generate informal rules fostering cooperation in the absence of an effective government. Boettke and Leeson's analysis can be extended to any society where formal rules are weak or nonexistent.

Another literature focuses on the creation of voluntary standards. Hwang and Powell (2005, pp. 186–188) note that the process of creating standards involves numerous moments of institutional entrepreneurship. For example, the initial construction of voluntary standards involves an element of entrepreneurship as does the implementation and spread of those rules. For standards to be successful they must be followed and that requires an institutional entrepreneur to obtain "buy in" from the relevant parties.

There is also a growing literature that explores how individuals are effectively able to carry and spread ideas and rules between individuals and groups (see Sahlin-Andersson and Engwall (2002), Meyer (2002), Jepperson (1991), Czarniawska and Sevón (1996), Abrahamson and Fairchild (2001), Finnemore (1993)). Coyne and Leeson (2009) analyze how the media can serve as a mechanism for creating common knowledge around new ideas and perceptions that can result in either marginal or dramatic changes in institutional structures. The conclusion of this research is that the media is one mechanism for facilitating institutional entrepreneurship through widespread coordination around institutional changes.

The acts of institutional entrepreneurs can be either productive or unproductive depending on the nature of the act. Institutional reforms that encourage subsequent productive entrepreneurial activities would contribute to positive sum gains and wealth creation. Examples include the institutional reforms undertaken in what are now considered successful transition countries — Czech Republic, Estonia, Hungary, Poland, etc. In contrast, institutional reforms that encourage unproductive or destructive activities will contribute to economic stagnation.

For example, an institutional entrepreneur may seek to change political institutions to reduce the cost of lobbying.

6.3 Institutional Entrepreneurship and Economic Calculation

The extent to which institutional entrepreneurs can engage in rational economic calculation is directly dependent to the extent of feedback from prices and profit and loss. Many acts of institutional entrepreneurship take place in the context of effective feedback mechanisms. For example, the aforementioned study by Boettke and Leeson (2008) discusses how institutional entrepreneurs are able to develop protective technologies in the absence of effective rules. They indicate that entrepreneurs are motivated to discover and implement these protective technologies precisely because of the associated profit opportunity. Specifically, the profit opportunity is tied to the mutually beneficial cooperation and exchange that takes place in the presence of these protections. Similarly, the adoption of voluntary standards often takes place in the context of feedback. Like protective technologies, voluntary standards can generate profits or losses which indicate whether the standards are efficient.

While some acts of institutional entrepreneurship take place in the context of market signals, others take place outside these signals. Absent market feedback, we cannot be confident that institutional entrepreneurs are allocating their efforts and resources to the most highly valued uses, or that errors will be self-correcting over time. For example, many norms, traditions and customs are not subject to market forces yet they influence the costs and benefits associated with various courses of action. Further, as noted in the previous section, political entrepreneurship takes place outside the market context yet often influences the specific nature of institutions.

To reiterate, the ability of institutional entrepreneurs to engage in rational calculation is directly dependent on the presence of market signals. Where effective market feedback is present, we can be confident that entrepreneurs will tend to adopt institutions that are efficient. In such settings institutional entrepreneurship is analogous to market entrepreneurship. Of course this assumes that other formal and informal institutions — property, trust, social relationships, etc. — are already in place, which allow institutional entrepreneurs to act on perceived opportunities. Similarly, where market signals are absent or weak there will be little feedback regarding the efficiency of institutions and we cannot be confident that inefficient institutions will be corrected. In these situations, absent a corrective mechanism, ineffective institutions can persist for significant periods of time. For example, where profits are not tied to institutional change, it will be difficult for institutional entrepreneurs to engage in calculation. Further, other institutions — political barriers, lack of clear property rights, etc. — can prevent or distort the signals necessary for calculation.

Martin and Storr (2008) analyze how emergent orders can be either beneficial or perverse. Some emergent orders like money and language are socially beneficial in that they facilitate cooperation and mutually beneficial exchange. At the same time, some emergent orders fail to contribute to cooperative behavior and mutually beneficial exchange and can actually lead to conflict. Martin and Storr attribute perverse emergent orders to either negative belief systems or mob behavior. Examples would include discrimination or norms that facilitate cooperation within some groups but conflict across groups.

7

Conclusion — Areas for Future Research

In this final section, we briefly discuss some potential areas for future research in the area of entrepreneurship and institutions. Our discussion is not meant to be exhaustive, but rather to highlight some key gaps in the existing literature discussed throughout this survey.

While social scientists have a good understanding of the institutions necessary for productive market entrepreneurship — private property, low taxes, minimal regulation, and constraints on government — their understanding of how to get these institutions where they do not already exist is far from complete (see Boettke et al., 2008). Indeed, this is one of the central dilemmas in development economics. Along these lines, Rodrik (2007, p. 21) notes that we have a good understanding of the "higher-order economic principles" necessary for economic performance. However, we are still seeking to understand how these higher-order principles map to actual economic policies. Transforming theory to workable practice is where the difficulty lies and additional research is required.

Research also remains to be done regarding the spread of institutions conducive to market entrepreneurship where they are absent. How do these institutions emerge and sustain over time? What exogenous forces, if any, play a role in facilitating or preventing change in institutions? Can "outsiders" — e.g., the international development community, international advisors and experts, military force, market entrepreneurs, etc. — serve as entrepreneurs over institutions in other societies? If so, under what conditions do exogenous institutional entrepreneurs succeed versus fail? What are the constraints on exogenous institutional entrepreneurship? These are just some of the open questions related to this area of research.

Our discussion of political entrepreneurship considered how the absence of adequate feedback mechanisms can lead to perverse outcomes. Olson (1982) has analyzed how special interest groups and other unproductive entrepreneurs can result in the "decline of nations." Research remains to be done on understanding how unproductive institutions can be changed through entrepreneurship within and on institutions. Olson concludes that exogenous shocks, such as natural disasters and war, are one means of eroding entrenched interests in a society. An interesting question is if, and how, unproductive institutions can change through entrepreneurial action. In his analysis of the Soviet transition from communism to capitalism, Boettke (1993, pp. 84–86) emphasizes the importance of low barriers to entry so that exogenous entrepreneurs can overcome the problems posed by entrenched interested groups. Weinert (forthcoming) analyzes how innovation and technological change can serve to overcome the transitional gains trap which typically serves to constrain deregulation and reform.

As noted, a central issue in the area of social entrepreneurship is determining mechanisms of feedback and accountability. Absent profit and loss, social entrepreneurs must find other ways to allocate resources and choose projects. One potential inroad in this area is research on "market based management" (see Cowen and Parker (1997) and Koch (2007)). This approach attempts to extend market principles to internal organization of the firm so that management and employees of the firm are constantly encouraged to behave entrepreneurially. An alternative entrepreneurial perspective on the firm has been developed previously by Frederic Sautet (2000), and more recently Pongracic (2009). Both raise some serious challenges to the theoretical literature on market based management that must be addressed.

The firm is different from the market, Sautet (2000, p. 135) contends and the differences ultimately prevent the wholesale adoption of market institutions within the firm itself. Just as there are limits to the central planning of complex firms (which led to the evolution of the M-form organization), there are limits to the market metaphor in the internal organization of the firm. Firms are planned organizations designed to exploit profit opportunities, and in so doing they must remain nimble and open to the discovery of new opportunities for the exploitation of profit. To put it another way, there always exists a residual claimant within the firm in a way that we cannot say a residual claimant exists for the economy as a whole. That fact, Sautet argues, matters for how far we can extend the market metaphor to the organization of the firm.

Part of the motivation for the development of the market-based management approach to the firm is the further application of that model to the realm of philanthropy. How can we organize the philanthropic enterprise in the most effective way possible? As generations of the foundation heads have found, giving away money responsibly is no easy task. Judging between alternative investments cannot be reduced to a present-value calculation for the simple reason that assessment of success or failure is not as clear cut in the nonprofit world. Interesting research remains to be done regarding the various contexts in which these principles can be applied as well as the boundaries for extending market principles in nonmarket settings (see Boettke and Prychitko (2004)).

An existing literature explores how differences in ethnicity can lead to perverse outcomes including conflict (see Easterly and Levine (1997)). Easterly (2001) finds that high quality institutions can overcome the problems caused by ethnic tensions and conflict. Much research in the area of ethnic fractionalization, institutions and entrepreneurship remains to be done. While perverse outcomes are indeed possible due to differences in ethnicity, such differences also offer potential opportunities for entrepreneurial profit. An interesting line of research involves exploring these entrepreneurial opportunities and understanding how entrepreneurs can bridge ethnic differences through the development of mechanisms facilitating cooperation and mutually beneficial exchange. Work by Leeson (2006, 2008b) offers a

foundation for research in this area. This research explores how socially heterogeneous agents can overcome differences to engage in positive-sum interactions. Also of interest is the work by the contributors in the edited volume by Anderson et al. (2006) which explores how institutions emerged among Native Americans in order to facilitate cooperation and trade.

A final area of research focuses on understanding the outer boundaries of spontaneous orders (see Boettke (2005)). Recall that spontaneous orders refer to institutions that result from purposeful human action, but not human design. These institutions are not the result of a grand central plan but instead emerge through the actions of dispersed individuals each pursuing different ends. The relevant question is how far the logic of spontaneous order can be extended. To what extent can societies be organized through emergent institutions and to what extent is social order and entrepreneurship reliant on planned formal institutions? What role do institutional entrepreneurs play in this process? These questions are especially relevant in the context of "weak" and "failed" states where formal institutions are dysfunctional or absent (see Leeson (2007) and Coyne (2008)). Coyne (2008) explores the constraints on the ability of exogenous actors to impose economic, political, and social institutions in weak and failed states. Research by Leeson (2008a, 2009a,b) seeks to explore the outer boundaries of spontaneous orders by exploring how mechanisms of cooperation can emerge absent the state. Additional research along these lines is needed to understand the emergence of spontaneous institutions as well as the extent to which they can facilitate cooperation and productive entrepreneurship.

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