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IFN Working Paper No. 716, 2007

The Political Economy of Entrepreneurship

Robin Douhan and Magnus Henrekson

THE POLITICAL ECONOMY OF ENTREPRENEURSHIP*

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Abstract:

We outline a politico-economic growth system centered around the entrepreneur. By defining entrepreneurs in relation to economic rents we are able to develop a more general theory comprising central aspects of research within the fields of entrepreneurship/small business, public choice and new institutional economics. The entrepreneurial function is shown to depend crucially on the existing institutional framework. We also point to the necessity of viewing institutions as endogenously influenced by entrepreneurs. A typology of entrepreneurship is developed to further our understanding of the bilateral effects between institutional context and entrepreneurial activity. We use developments in modern history as a real-world context to substantiate our framework. Particular attention is devoted to the effects of enforcement of property rights and taxation, two of the most prominent institutions in the literature.

JEL Codes: H32; L5; L25; M13; O31; P14.

Keywords: Entrepreneurship; Industrial Policy; Innovation, Property Rights; Regulation; Self-employment; Tax Policy.

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1. Introduction

Entrepreneurship is normally associated with profit-driven business activities. Still, political aspects of entrepreneurship have been dealt with in several strands of research, including the entrepreneurship/small business literature, new institutional economics, and public choice. In this paper we develop a framework which unifies the political role of entrepreneurship as it appears in these three fields with its traditional economic role.

Consistency and stringency in definitions are concerns that must be taken seriously in a young field such as entrepreneurship research. In particular, an attempt to unify several strands of literature runs the risk of merely attenuating and confusing existing concepts. This is why considerable effort is put into conceptual issues in the first sections of this study.

It is also necessary to stress initially that although our analysis extends the role of the entrepreneur into the political and institutional sphere, the focus is on the entrepreneur as an agent pertaining primarily to the production system of an economy.¹ In this sense our analysis belongs to the small business/entrepreneurship literature which emphasizes the need to understand the causal mechanisms which lead from entrepreneurship to economic performance. For instance, in Wennekers and Thurik (1999), the entrepreneur affects economic outcome by making decisions at the firm level. Similarly, Hébert and Link (1989, p. 47) propose a specific economic function of entrepreneurship: “making judgmental decisions that affect the location, form, and the use of goods, resources, or institutions”. The presence of this function is asserted to be necessary for improved economic performance.

In the entrepreneurship literature it has long been recognized that institutions shape the actions of entrepreneurs, such as the entry decision, or the growth trajectories of new firms (Parker 2004, section 3.3). However the causal link between institutions and entrepreneurs is often assumed to be unilateral. For instance, Boettke and Coyne (2003) argue that entrepreneurship is the consequence of economic growth while institutions are the sole cause. In our view this is only half the story, as entrepreneurial actions often sway politically determined institutions.

The analysis of entrepreneurship within the field of public choice has been highly influenced by Baumol (1990) and Murphy, Shleifer and Vishny (1991). Agents are assumed to be heterogeneous with respect to talent for management (Murphy *et al.*) or entrepreneurial ability (Baumol). The most talented agents obtain the highest return from productive innovation and the management of firms. However, if other types of activities yield a higher return to talent/ability, then entrepreneurs will instead direct their efforts toward such activities. Relative returns are determined by the institutional context, i.e., the rules of the game.

The relationship between entrepreneurship and institutions can be captured by the metaphor of a watershed. What pours through a watershed can run at different speeds, be channeled in different directions or even change the pathways itself. In the simplest theory commercial entrepreneurship can be hampered or facilitated by institutions. Analogously, more or less water can run through the shed. Baumol (1990) and Murphy *et al.* (1991) add a public choice ingredient to the analysis; entrepreneurial talent can be redirected through institutions, and even be unproductive or destructive.² We would add yet another aspect to the issue, by noting

¹ Hence, we do not analyze pure political entrepreneurship (*cf.* Holcombe, 2002).

² The term rent seeking is used by public choice scholars to denote socially wasteful but privately profitable activities. As will soon become clear we will use the term in a different sense.

that entrepreneurs do not always respond passively to institutions, and can directly or indirectly work to alter them (as water in time can shape the flow of the river). This concept has been touched upon previously in the public choice school. Buchanan (1980, p. 14) noted: “Faced with a prospect of differentially unfavorable tax treatment by government, a person or a group may (1) engage in lobbying effort; (2) engage directly in politics to secure access to decision-making power, and/or (3) make plans to shift into or out of the affected activity.” Unfortunately, the subsequent public choice literature has not paid sufficient attention to this issue.

New institutional economics offers a somewhat more dynamic account of institutions. Moreover, key texts, notably North (1990), feature the entrepreneur as an agent of institutional change. But a common problem in this literature is that the definition of the entrepreneur becomes too vague to be useful. The notion becomes increasingly broad when the entrepreneur is no longer regarded primarily as an agent with unique productive capacities, but rather as an agent of change in general.

Our theory outlines the entrepreneur as the key agent in an economic system governed by political institutions. In contrast to the abundance of scholarly uses of the concept of entrepreneurship we retain the strong association between entrepreneurship and the production system assumed in the small business literature (Alvarez 2007).³

Moreover, we move away from standard equilibrium analysis by positing that the existence of economic rents is an inherent trait of a dynamic economy. Entrepreneurs are the agents who create rents but who can also find ways to appropriate rents from others. Depending on the institutional setup entrepreneurial talent is channeled in these different directions. In addition, institutions are important in that entrepreneurs may expend effort in avoiding or circumventing obstacles raised by institutions.

The possibility that entrepreneurs may appropriate rents created by others poses an analytical difficulty. It is important to avoid a situation where robbery qualifies as a kind of entrepreneurship and a thief is an entrepreneur. Our theory therefore builds on the proposition that in order to appropriate, rather than create, rents the entrepreneurs must interact with institutions. These kinds of entrepreneurship entail some innovative way of influencing the institutions or an innovation that substitutes for malfunctioning institutions (e.g., a new contractual form).

Furthermore, we argue that, in the context of institutions, a welfare analysis must be related to an optimal institutional arrangement. A proper analysis of institutions and entrepreneurship cannot only focus on how institutions channel entrepreneurs into more or less productive activities. It must also account for how the more unproductive activities change institutions, with an optimal institutional arrangement as the relevant benchmark.

We outline our model of entrepreneurial activity in Section 2. Entrepreneurial activity in terms of rent seeking is analyzed in Section 3. We then discuss what kind of welfare analysis applies to entrepreneurial activity. In Section 5 we consolidate our model by embedding the entrepreneur in a politico-economic system and identifying the key role of the entrepreneur in

³ In a survey of how entrepreneurship scholars define entrepreneurship Gartner (1990) found that almost one third regarded the profit motive as unimportant. Moreover, Gartner (2001, p. 34) concludes that: “There is no theory of entrepreneurship that can account for the diversity of topics that are currently pursued by entrepreneurship scholars.”

this system. These first four sections contain the theoretical core of our theory. Examples from recent history are used to illustrate the workings of our model in Section 6 and detailed examples of two pertinent institutions are examined in Section 7. Section 8 concludes.

2. A Model of Entrepreneurial Choice

2.1 *Entrepreneurial talent*

We follow Baumol (1990) and Murphy *et al.* (1991) by defining an entrepreneur according to a set of talents. There is no consensus in the literature about the exact nature of these talents, with some scholars emphasizing cognitive abilities and others pointing to motivation (preferences).⁴ Entrepreneurial talent, in our model, makes an individual more perceptive and more dynamic, i.e., it includes both motivation and ability. The entrepreneur is apt to recognize opportunities and prone to take action in response. These actions yield an expected return exceeding the risk-adjusted market rate of return, i.e., an economic rent. We discuss the nature of these rents in more detail in Section 3.

While retaining a broad definition of the entrepreneur, we emphasize the distinction between being an entrepreneur and engaging in entrepreneurial activity. The former is a necessary but not a sufficient condition for the latter. Entrepreneurial activity is the purposive response to perceived opportunity. Institutions may prevent entrepreneurs from engaging in such activity, for example by imposing prohibitively high entry costs.

Self-employment and the start-up of new firms are the prototypical forms of entrepreneurship both in reality and in the literature. However, our definition precludes many forms of self-employment. Most importantly, self-employment due to a lack of other opportunities (often called necessity entrepreneurship) does not qualify as entrepreneurship. Nor does self-employment induced by artificially high returns stemming from subsidies and tax breaks.

For simplicity, we will treat the supply of entrepreneurially talented individuals as exogenous and focus on the relationship between entrepreneurial talent, institutions, and entrepreneurial activity. In reality, it is plausible that the supply of entrepreneurs varies over time, among other things depending on the institutional setup. We abstract from this additional complexity in our analysis.

⁴ What are typical entrepreneurial properties? There are several suggestions in the literature. Two major themes can be discerned; one refers to cognitive abilities and the other to motivation. The prototypical entrepreneur is someone who is alert to opportunities. Cognitively, this amounts to structuring abundant information efficiently to make judgment feasible; see, for instance, the survey by Chell, Haworth and Brearley (1991). It also involves a capacity to think imaginatively and in novel ways. As regards motives, the longest standing characterization of an entrepreneur is associated with the need to achieve and create (Weber, 2001[1905]; McClelland, 1961). Furthermore, an entrepreneur exhibits a willingness to take calculated (but not necessarily calculable) risks. For instance, Knight (1921) discusses the ability to cope with uncertainty as the main function of entrepreneurship. This implies a predisposed willingness to take (incalculable) risks. For a survey of the empirical evidence on these motivational aspects, see Rausch and Frese (2000). These properties are consistent with the historical accounts in Schumpeter (1934) and Kirzner (1973, 1999).

2.2 Entrepreneurship – A Typology

We divide entrepreneurship into six segments, based on a two-dimensional typology. See *Figure 1*.

The agent almost always has the option not to obey the rules, perhaps facing a punishment. This applies both to formal rules that are enforced by organized bodies (most importantly the state), and informal rules, such as social norms. One dimension of our typology therefore distinguished behavior within the constraints of the institutions from evasion of the rules.

The other dimension separates entrepreneurial response to institutions into three categories, defined in relation to the creation or appropriation of rents. The three categories are productive, unproductive and predatory entrepreneurship.

Productive entrepreneurship is defined as those activities that create rents. This definition is closely related to Schumpeter's (1934) discussion of new combinations. Hence, productive entrepreneurship can entail: (i) introduction of a new good (or a new quality of a good); (ii) introduction of a new method of production; (iii) opening of a new market; (iv) conquest of a new source of supply of raw materials or semi-manufactured goods; (v) implementation of a new organizational form. One can summarize these points as new combinations of resources and technology on the market.

Productive entrepreneurship increases the innovativeness of an economy as well as its ability to adapt. Innovativeness refers to Schumpeter's (1934) entrepreneur who disturbs the existing equilibrium, while the ability to adapt captures the essence of Kirzner's (1973, 1992) entrepreneur.⁵ Normally, productive entrepreneurship can be expected to enhance economic performance. Nevertheless, the relative need for adaptation and innovativeness is also likely to depend on the external environment. For instance, in times of rapid change, driven for example by a high rate of technological progress or new supply of resources, adaptability becomes more important.⁶ Since the relation between productive entrepreneurship and growth is not the focus of this paper we will not elaborate more on this issue.

Unproductive entrepreneurship consists of activities that do not directly create any rent but are driven by the opportunity to capture rent from others, primarily the productive entrepreneurs. These activities are still entrepreneurial since they presuppose an ability to perceive potential and actual rents towards which actions can be directed.

A central proposition of our theory is that unproductive (and predatory) entrepreneurs must, to a greater or lesser extent, rely on institutional mechanisms to accomplish the diversion of rents. Hence, the unproductive (and predatory) activities are entrepreneurship also by virtue of involving perception of opportunities within the institutional framework. Unproductive entrepreneurship can rely on institutions in different ways. First, some opportunities are made possible by helping others to sidestep regulations. An example is a law firm that draws up contracts to help other firms circumvent restrictive labor market regulations. Second, some opportunities arise as opportunities to substitute for lacking or malfunctioning institutions. One example is again a law firm, one that draws up contracts to substitute for malfunctioning

⁵ See Baumol (2005) and Yu (2001) for discussions of these two aspects and how they can be combined in the same system. See also Kirzner (1999) for a critical assessment of such merging.

⁶ Our concept of adaptability is related to, and could be regarded as a subset of, North's (1990) adaptive efficiency.

property rights protection. A further example is a bureaucrat who, in a society with high red tape barriers, makes arrangement that, for those willing to pay, speeds up the process of industry licensing. These first two instances of unproductive entrepreneurship often cause an *indirect* change to the institutions, by eliciting a political response. The third instance involves more *direct* attempts to change some institution; a prototypical example is lobbying of legislators.

Predatory entrepreneurship differs from unproductive entrepreneurship in that it entails an outright attack on the productive entrepreneur, while unproductive entrepreneurship is based on a voluntary relation between the productive and the unproductive entrepreneur. Examples of predatory entrepreneurship include the organization of illegal crime syndicates. Even well-functioning economies are subject to fraudulence and systematic lawsuits against other businesses. We maintain that also predatory entrepreneurship relies on some institutional mechanism. In cases such as organized crime syndicates and mafia, this mechanism is in most cases innovative ways of coexisting with legal enforcement institutions.

Apart from capturing some of the rents created through productive entrepreneurship, unproductive and predatory activities induce indirect or direct changes in formal institutions. Thereby they also change the amount of rent created by productive entrepreneurs, resulting in an ambiguous net outcome for productive entrepreneurship. This point is crucial. Even though unproductive (and predatory) entrepreneurship does not necessarily create or destroy any rents directly, it is still likely to do so indirectly by effectively altering the institutional context faced by others.

Productive, unproductive and predatory entrepreneurship are the main categories of our typology. As already said, institutions are key determinants of the opportunities for and relative return of these activities. However, it is of equal importance that institutions also affect the absolute returns by imposing costs on these activities. An entrepreneur has to decide whether to abide by or evade existing institutions. Each alternative involves a transaction cost and an information cost. If the entrepreneur chooses not to abide by the institutions, the transaction cost is lowered but a new cost in the form of a risk of sanctions is incurred.

Evasive entrepreneurship is defined as activity aimed at circumventing the institutional framework without an explicit violation. By avoiding violations, the activities of evasive entrepreneurs reduce the risk of sanctions and hence the costs imposed by institutions. Unlike the first dimension of entrepreneurship, evasive entrepreneurship is not an end in itself. Instead, it is a means to an end embedded in the other three categories. It therefore enters as a second dimension, largely independent of the first, in our typology. These definitions are illustrated and exemplified in *Figure 1*. It should be noted that all types of entrepreneurship refer to activities and that the same person can be engaged in two or more kinds of activities at the same time.

	ABIDE	EVADE
PRODUCTIVE	Pursue a business opportunity within prevailing institutions	Sidestep regulation, or offer bribes, in order to expand a profitable business; evade taxes on rents
UNPRODUCTIVE	Create contracts to overcome institutional shortcomings; lobbying; help others avoid taxes	Creation of a bureaucratic body where rents are earned by selling licenses or granting subsidized loans; help others avoid/evade taxes
PREDATORY	Rogue states; rivalry between warlords	Illegal syndicates; the Mafia; sophisticated fraud and economic crimes

Figure 1. A Typology of Entrepreneurship and Some Illustrative Examples

3. Entrepreneurship as Rent Seeking

In the previous section the entrepreneur was defined as an individual endowed with the requisite talents to undertake activities that yield a rent exceeding the risk-adjusted market return. Hence, entrepreneurs may be regarded as a kind of rent seekers. It should be obvious that the term “rent seeking” is not used in the constrained way usually applied in public choice to “describe behavior in institutional settings where individual efforts to maximize value generate social waste rather than social surplus” (Buchanan, 1980, p. 4).⁷

Our approach diverges from public choice, where rents usually are artificially created (e.g., Murphy *et al.*, 1993). The prototypical case of such a rent is a government that takes advantage of its power to grant monopoly rights. In Krueger (1974), the term rent seeking pertains to the effort of agents to obtain these rights. It is these efforts, and the resources expended on them, that are wasteful. In contrast, our focus is on the entrepreneurial creation (or discovery) of rents, and our notion of rent seeking has no connotations of social waste.⁸

3.1 Rents Due to Productive Entrepreneurship

In the context of productive entrepreneurship, we begin by considering the alternative definition of rent as return in excess of a resource owner’s opportunity cost (Tollison, 1982). There are several means by which an entrepreneur could secure such superior employment of resources. In the broadest sense, these means all involve the possession of some resource or technology which is unique or at least in very limited supply.

In David Ricardo’s (1821) classical analysis fertile land was the scarce resource. Obviously, this does not *per se* mean that a Ricardian rent seeker is an entrepreneur. What is of interest is

⁷ See also Lewin and Phelan (2001) and Alvarez (2007) for a discussion of entrepreneurial rents.

⁸ By at this stage separating the activity of rent seeking from the outcome in terms of social return (Hindmoor, 1999), we can use the concept more broadly.

how agents perceive and realize a certain combination of resources on the market. If a landowner could perceive the superior fertility of a piece of land, and had the motivation to exert effort to secure the property rights for that land, s/he would then be regarded as a productive entrepreneur.

Entrepreneurs can secure the kind of unique resources needed to generate Ricardian rents in several ways. Obvious examples include patents on valuable innovations and copyright as well as skillful implementation of tacit knowledge that cannot be imitated and other entrepreneurial innovations that require a resource available to potential competitors.

Most rents do not last forever, and the durability varies substantially. Activities which are easy to imitate and where the knowledge or skill is not embodied in a specific individual or organization exhibits a more rapid decay of rents; in this case the rents are sometimes called "Marshallian rents." Normally, imitating competitors enter the market, which increases the supply and lowers the price. According to calculations by Nordhaus (2004), entrepreneurs retain on average a mere two percent of the surplus generated by their activities.

3.2 Rents Due to Unproductive and Predatory Entrepreneurship

In the sense that unproductive and predatory types of entrepreneurship involve an attempt to reap the rents created by others, both are closely related to the public choice notion of rent seeking. Although both unproductive and predatory entrepreneurship evolve in close relation to institutions, these two types are not necessarily wasteful in a suboptimal institutional setting (i.e., any real-world institutions). We will now illustrate this point by means of two examples.

Consider a product where a chemical substance is used as input. There exists only one expert with specific knowledge and skills for safe use of the substance. As a first case, consider a situation where the sale of the substance is prohibited through environmental legislation, and the cost of evading this legislation is sufficiently high to bar entry of all potential producers. The expert has the option to invest resources to push through a legislative change which would allow the substance and give him sole administrative rights. In our vocabulary, this could amount to either productive or unproductive entrepreneurship. By using his/her sole possession of the resource, the expert could establish a monopoly position to earn rents. This would amount to productive entrepreneurship, since the expert is the one who introduces a new product. The expert could also continue to use his/her position as a gatekeeper and sell the substance to other producers. In this case, the expert engages in unproductive entrepreneurship and reaps part of the rents created by other producers.

As a second case we assume that legislative enforcement is much weaker and several entrepreneurs have managed to evade the legislation (e.g., bought the substance on the black market) and earn rents by producing the product. If the expert manages to establish him-/herself as the sole administrator of the substance, this could have several effects. First of all, evasive entrepreneurship would no longer be necessary. If the option to evade legislation is still open for the incumbent producers, we would expect the rent reaped by the expert to equal the difference in cost between evading and abiding by the legislation. If this is not an option, the expert could in principle acquire the entire rent. In both cases the expert would be engaged in unproductive entrepreneurship.

The distinction between unproductive and predatory entrepreneurship was made on the basis of the voluntariness of the productive entrepreneur. The prototypical case of predatory entrepreneurship is a mafia syndicate. By undermining the protection of property for productive entrepreneurs, these activities seem to constitute an obvious case of social waste. However, we maintain our emphasis on separating the activity from the outcome. Under unstable institutional circumstances, or poor enforcement of property rights, organized crime can actually provide a substitute. Bandiera (2003) discusses how the Sicilian mafia thrived in a situation where the old feudal system was reformed and landholdings redistributed to the private sector without the concomitant creation of public institutions for law enforcement. In a similar vein, Milhaupt and West (2000) argue that organized crime in Japan is a natural response to maladaptive institutions. Organized crime is, in their words, “an entrepreneurial response to inefficiencies in the property rights and enforcement framework supplied by the state” (*ibid*, p. 43). Mafia could in these cases actually make the environment more predictable for the productive entrepreneur.

3.3 Non-entrepreneurial Rent Seeking

Some of the pitfalls in using the term rent-seeking were discussed in the previous section. Another kind of problem is that this term inevitably brings to mind activities such as bribery, corruption and lobbying. However, such activities cannot be uncritically associated with entrepreneurship. Everyone who hands out or receives bribes in a corrupt economy is unlikely to be an entrepreneur. If bribery is part of routine business conduct, it is not an entrepreneurial activity. Similarly, if every interest group employs a lobbying organization, this is not entrepreneurship.

For clarity, it is necessary to spell out the implications of our model in relation to bribery and lobbying. With regard to bribery one must be careful to separate the giver from the recipient. An entrepreneur who hands out bribes is in many cases engaged in evasive entrepreneurship, whereas the recipient of the bribes is normally not an entrepreneur. The recipient is only entrepreneurial if s/he finds a novel way to obtain bribes on a larger scale.

Lobbying organizations offer ample opportunities for entrepreneurs to perceive ways of institutional change which would generate rents. In most cases, these rents accrue to someone else in the economy. The unproductive entrepreneur who engages in lobbying can ensure the appropriation of large part of these rents by some *ex ante* contract.

4. Entrepreneurship and Social Welfare

The typology laid out is based on descriptive definitions. In this respect we depart from most other accounts which apply the labels productive, unproductive or predatory (destructive) based on the alleged effects on aggregate output (e.g., Coyne and Leeson, 2004). It is common to separate these activities on the basis of their effect on the production possibility frontier. The production possibility frontier (PPF) is defined as the welfare maximizing output of society, given the present technological level. This implies a first-best analysis, where productive entrepreneurship is defined as activities which expand the PPF, whereas predatory entrepreneurship contracts the PPF or reduces its growth rate, leaving unproductive entrepreneurship somewhere in between.

In the context of entrepreneurs and institutions this welfare concept is problematic. First, if institutions determine both the activities of entrepreneurs and the PPF, then they are a more fundamental cause of productiveness or wastefulness than the activities of entrepreneurs. Moreover, things are more complex than this, since we allow institutions to change as a result of entrepreneurial activities. The activity of a predatory entrepreneur may, for instance, shift the PPF, not because of the destruction of resources or technology that it causes, but because it affects the institutions. In terms of the PPF this implies an undesirable circularity.

Moreover, a first-best outcome is a relevant benchmark when analyzing particular instances of institutions (such as taxes and tariffs). However, most relevant real-world circumstances are far more complex. It is highly unlikely that the economy, apart from the institution under scrutiny, is undistorted. In such cases a second-best analysis applies (Bhagwati, 1982).

One way to avoid the consequences of a second-best analysis where we cannot say anything about welfare consequences is to invoke a concept of optimal institutions.⁹ This is the benchmark against which all institutional changes may be evaluated. In our case these would be the kind of institutions where all entrepreneurial talent is spent on the most productive activities; given heterogeneity of productive opportunities. It should be noted that the optimal institutions are likely to depend on the level of technology.

Such an approach makes research in institutional analysis of entrepreneurship an even more challenging task. Not only must we evaluate the current institutions with regard to how these channel entrepreneurs into different types of activities. We must also analyze how the entrepreneurial activities cause the institutions to change, and how this change moves the economy compared to the optimal institutions.¹⁰

5. The Politico-Economic Role of the Entrepreneur

5.1 The Politico-Economic Approach

Equipped with the definitions and typology elaborated in the previous sections we now introduce a complete politico-economic growth system. Bilateral causal effects between politics, institutions and economic performance have held a long standing interest among economists,¹¹ and there are several alternative models in the literature. The model adopted here is an extended version of the model in Acemoglu *et al.* (2005). This is a model which we believe takes important steps towards a more rigorous general equilibrium analysis, while at the same time retaining a high level of parsimony.

Acemoglu *et al.* (2005) separate economic and political institutions. Institutions, more generally, shape human action and interaction, and are commonly referred to as “the rules of the game” that govern the conduct of economic activity and that result in “the social structure

⁹ The related, but still different, concept of institutional possibility frontier has previously been used by in Djankov *et al.* (2003).

¹⁰ Benson (1984, 2002), are examples of studies which adopt an approach along these lines.

¹¹ That policies which emanate from the political sphere influence economic outcomes is a key assumption in economics. Effects of economic performance on political institutions have proven more difficult to isolate. However, at the macro level, there are some recent studies identifying such effects (e.g. La Porta *et al.*, 1999; Chong and Calderón, 2000).

of payoffs.”¹² Economic institutions of particular importance for entrepreneurship include tax codes, social insurance systems, labor market legislation, competition policy, trade policies, capital market regulation, enforcement of contracts and law and order (Hall and Jones, 1999). Constitutions are examples of a political institutions with economic significance, for example through their implications for voting systems, the degree of centralization, federalism, *etc.* (Persson and Tabellini, 2004, 2006).¹³

The separation between political and economic institutions is not innocuous. In countries where a ruling elite has much discretionary power it becomes difficult to separate political institutions, political power and economic institutions. Examples include developing countries where the ruling elite benefits from inappropriate institutions and thus contributes to preserving the *status quo* irrespective of welfare costs (North, 1981; Lundahl, 1997).¹⁴ However, in a mature democracy, economic interests have a limited ability to alter economic institutions directly. It is then justified to make an analytical separation between economic and political institutions. However, this is not to deny that political markets are present even in well-functioning democracies. Ever since Stigler (1971), it has been recognized that policy making is highly influenced by interest and lobbying groups. Moreover, in the opposite direction, politicians may extract rents by threatening to impose unfavorable regulation (McChesney, 1987).

Limiting the analysis to the institutions mentioned above also implicitly means that we simplify the analysis by only considering formal institutions. Informal rules such as norms, values or codes of conduct are harder both to enact and to analyze, but no less important. However, since informal rules are seldom imposed through political decisions, we leave them out for the sake of simplicity.¹⁵

Moreover, a formal institution that is not enforced is likely to lose its practical relevance, something that may have important effects by also undermining the strength of other related rules. We will not elaborate on the distinction between formal institution and enforced institution but refer to an institution in terms of its actual implementation and enforcement.

Apart from this, the model proposed by Acemoglu *et al.* captures some other aspects of special importance for our purposes; most importantly that in a society with high inequality a wealthy minority is likely to have a large impact in the political sphere. Moreover, the institutions in the model feature inertia, reflecting the fact that rules that affect individual

¹² This concept is borrowed from Baumol (1990). Institutions have moved to the fore of mainstream explanations for economic performance, especially over the longer term; see, for example, North and Weingast (1989), Rodrik *et al.* (2004) and, in particular, Acemoglu *et al.* (2005).

¹³ It is often useful to distinguish between three types of institutional change: (i) effects on *policy measures within given institutions*, such as changes in interest rates or enforcement of a law or a regulatory measure; (ii) effects through *changes in formal institutions*, such as a tax reform or new environmental legislation; (iii) changes at the *constitutional level*: introduction of mass democracy, a new voting system, granting of autonomy to the central bank, *etc.* The third type pertains to political institutions, whereas the first two types affect economic institutions.

¹⁴ In such contexts it is often difficult to implement requisite reforms, since the reforms themselves would undermine the political power of the ruling elite. One solution to this problem would be for the prospective winners of the reforms to make binding commitments to compensate the ruling elite. All parties could potentially benefit from such an arrangement. However, without a third party to guarantee compliance, binding commitments would be difficult to enforce (Acemoglu *et al.*, 2005).

¹⁵ We also do not deal with factors such as social attitudes toward entrepreneurship as an individualistic venture (Hofstede, 2001). Schumpeter (1934) discussed how the entrepreneur broke away from old routines, so that special powers were required to endure social resistance due to entrenched values.

behavior often take time to become established and, once established, are often hard to remove.

5.2 Building Blocks

We follow the general outline of the model proposed by Acemoglu *et al.* (2005), shown in *Figure 2*. The structure of both economic and political institutions is determined by those with political power.

There are two types of political power: *de jure* and *de facto*. *De jure* political power originates from political institutions, whereas *de facto* power captures the possibility of wielding power without having to rely on political institutions. It is useful to think of *de facto* political power in terms of coups and upheavals. Although we consider less extreme instances, *de facto* power still requires the possession of resources. The significance of dividing political power into two distinct types is illustrated in Acemoglu and Robinson (2006), where some of the mechanisms in *Figure 2* are formally modeled. One result emerging from their analysis is so-called invariance; the effects on the elite of varying *de jure* circumstances can be offset by compensatory elite investments in *de facto* political power.

Economic outcomes are analyzed in two dimensions: economic performance and distribution. The first dimension refers to growth in resource stocks, national income and other common measures. The second covers the equality dimension, i.e., how resources are distributed in the population or among particular groups (e.g., ethnic, religious or gender) of the population. It is this distribution which affects *de facto* political power.

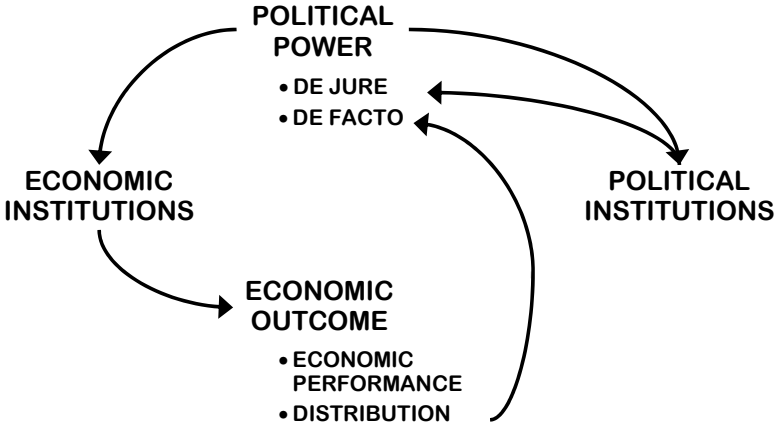


Figure 2. The Acemoglu *et al.* (2005) Growth System.

This model explicitly takes into account, and separates, economic and political institutions. This forces us to consider the distinction between institutions that have a direct effect on economic outcomes and those that work through a political process. It also proposes an explicit link between economic outcome and political power. This effect emanates from the economic outcome in terms of distribution. Not only are the *de facto* aspects of political power affected directly. There is also an indirect effect; in a long-term perspective, *de facto* power will leave its mark on political institutions and thereby be translated into *de jure* political power.

5.3 A Model with Entrepreneurs

The mechanism behind the link from economic institutions to economic outcome remains implicit in the Acemoglu *et al.* (2005) model. We close this gap by incorporating the entrepreneur and a production system, which is shown in *Figure 3*. It is essential to our approach that entrepreneurial activity can only be evaluated within an institutional context. When viewed as a resource, the entrepreneur is qualitatively very different from capital and labor. There is no guarantee that a potential entrepreneur will actually devote his or her time and effort to productive use. In our model, it is the entrepreneur who directly shapes economic outcomes, which is why we have drawn the causal link to economic outcome through production from the entrepreneur only. Nonetheless, the characteristics of this link are inextricably related to the institutions. The subset denoted “pertinent institutions” consists of those economic institutions that we consider to be major determinants of the level and direction of entrepreneurial activity.

We complete the model with the dynamics of the production system, which is captured by its ability to adapt to changing conditions and to renew itself through innovations.¹⁶ Productive entrepreneurship is the vehicle of these capacities. Capital (both human and physical) and labor are the inputs in a more or less productive environment, which allows for greater or less dynamism. In the limit, when no entrepreneurship of any form takes place, this environment congeals, resulting in a static economy. But even for positive levels of entrepreneurship, the net effect of productive, unproductive and predatory entrepreneurship can be very modest.

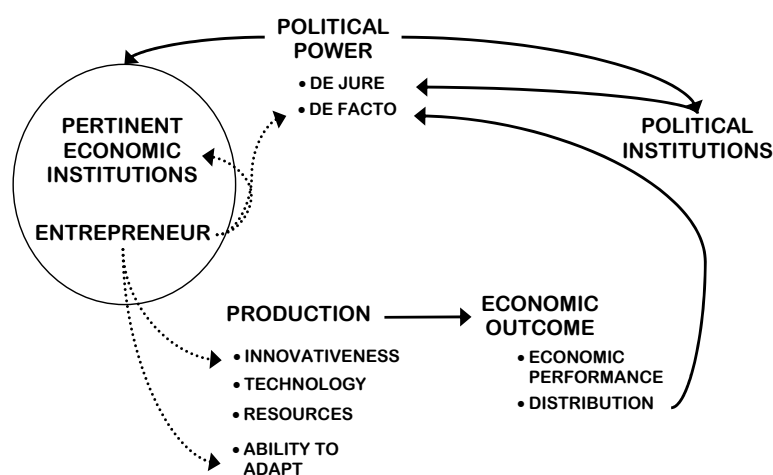


Figure 3. The Complete Growth System.

Predatory and unproductive entrepreneurship are illustrated by the same two links: one goes from the entrepreneur to *de facto* political power and the other from the entrepreneur to the economic institutions. This separation is intended to illustrate the fact that some types of entrepreneurship require an entrepreneur to enter into the political decision-making sphere,

¹⁶ See Myhrman (1989) regarding the key role of an economy’s ability to adapt and the importance of institutions.

whereas other types are contained within the institutions.¹⁷ The same two links also represent evasive entrepreneurship, with the difference that these activities do not result in the establishment of an organization but are undertaken in order to facilitate the pursuit of productive, unproductive or predatory entrepreneurship.

To the extent that unproductive and predatory entrepreneurship involve wielding *de facto* power, they need to be backed by resources. At the same time, as entrepreneurial undertakings, they hold a potential for reaping economic rents. In this respect, there is a cumulative side to entrepreneurial wealth creation. This is true also for productive entrepreneurship.¹⁸ Successful productive entrepreneurs subsequently become important in determining the *de facto* political power. This is an important dynamic aspect which we are not able to illustrate in the simple figures above but which is still incorporated in our system through its effect on the distribution of resources and thereby the entrepreneur's ability to wield *de facto* political power.

It should be emphasized that our system leaves several components largely unexplained, primarily new scientific knowledge, inventions and resource endowments. In the model presented here, we simply take these as exogenous, but recognize that there is considerable margin for endogenizing them. As it is here presented, it should be regarded as being embedded in a more complex dynamic (*cf.* Kim, 2005).

6. Historical Examples

We now use examples from recent history to illustrate our model. After addressing the role of institutions in channeling entrepreneurs in different directions, we clarify the extent to which entrepreneurs are able to affect institutions, in particular by mustering *de facto* political power. The role of political institutions is also explored. With regard to the last two issues we acknowledge that the examples are sketchy. This is largely due to lack of previous research.

6.1 The Allocation of Entrepreneurship

Our first example is China and its transition to a socialist command economy. China is a particularly interesting case since entrepreneurs are also likely to be key agents in the more recent transition from socialistic planning (see 6.3). The move to a full-blown socialist regime after the Chinese Communist revolution in 1949 was a gradual process completed in 1956–57.¹⁹ Step-by-step, private enterprise was circumscribed as more and more sectors were collectivized and government involvement in management was extended. In a first move from 1949 to 1952 private financial institutions were nationalized and private capital markets were shut down. The government began placing processing orders with private producers and took

¹⁷ Note that, in *Figure 3*, there is no direct link from the entrepreneur to political institutions. This is a deliberate delimitation of our study. Such a link would imply political entrepreneurship, where entrepreneurs enter directly into politics (e.g. Holcombe, 2002).

¹⁸ It is well documented in the US that households where some member is engaged in entrepreneurial activities own a substantial share of total wealth and income (Gentry and Hubbard, 2000). There is also a positive significant correlation between entrepreneurship and socio-economic mobility (Quadrini, 1999). Moreover, since the effect on the socio-economic position can be both positive and negative (Holtz-Eakin *et al.*, 2000) depending on the initial position, entrepreneurship is arguably a powerful engine of social change and the formation of new interest groups.

¹⁹ This is a brief summary of Chapter 4 on the role of the entrepreneur in China by Lu (1994).

charge of large parts of the allocation of resources. Plans for production and sales had to be approved by officials.

Entrepreneurs were still allowed to operate on the market and respond to market signals, but the institutional reforms brought about far-reaching changes in the way entrepreneurs operated. Entrepreneurial activity became a contest for processing orders and escaping controls. At the same time, the system implied ample opportunities for officials in charge of processing orders and means of production to earn rents through corruption. The consequences for private firms and the economy as a whole were highly detrimental. In 1951, the government began to strike at the “five evils”: bribery of government officials, tax evasion, theft of state property, cheating on government contracts, and theft of economic information for speculative purposes. The blame was largely directed towards the private sector, and resulted in an accelerated rate of collectivization and nationalization of resources.

The communist takeover radically changed the institutional setup in China. The new institutions drastically increased the cost of productive entrepreneurship. Entrepreneurs found themselves in a situation where they had to expend an increasing amount of effort on evasive activities. The new institutions also provided fertile soil for unproductive forms of entrepreneurship. Rents could be earned by competing for bureaucratic positions that functioned as gatekeepers for various forms of licenses and government contracts. These changes gave legitimacy to demands for further institutional reforms. Radical communist factions gained political power as private enterprise was blamed for the malfunctioning quasi-socialistic economy. The increased power of these groups led to further changes in economic institutions.

Another country where socialist and collectivist ideologies had an impact on many of the institutions is Sweden. Of course Sweden, in contrast to China, maintained strong democratic institutions and a high level of protection of private property rights throughout the twentieth century. And although socialization of the private sector did not begin until the mid 1970s, policies were implemented that consistently eroded the accumulation of private wealth, private ownership of the business sector and, ultimately, productive entrepreneurship. As shown by Henrekson and Jakobsson (2001), tax and industrial policies moved the economy towards larger business entities, institutional rather than individual ownership and high debt-equity ratios. Taxation at the firm level was low for large, capital-intensive and largely debt-financed firms, while it was high at the owner level (in real terms often exceeding 100 percent for individual owners). This created a large wedge between wealth accumulation at the corporate and individual levels, thereby benefiting large incumbent firms relative to new entrants and individual entrepreneurs.²⁰ The major incumbent owners managed to retain control despite this large wedge through a growing disparity between control rights and cash-flow rights. A number of devices were used to achieve this, the most important of which were dual-class shares and pyramiding with tax-favored closed-end investment funds as the prime control vehicle. It was not until the comprehensive tax reform in the early 1990s and the deregulation of credit markets that individual entrepreneurship and new-firm formation could gain in importance and challenge incumbent firms and capital owners.

The institutional framework in Sweden seems to have precluded many opportunities for productive entrepreneurship, and sharply increased the cost of other opportunities. This hampered productive entrepreneurship, whereas entrepreneurs clearly did not increase their

²⁰ The actual effects of these policies on such variables as the size distribution of firms and employment and the industry distribution of production and employment are documented in Davis and Henrekson (1997).

activities, with directly harmful social consequences. It is probably fair to say that the long-run effects of socialist institutions and ideology have had a stifling effect on the supply of entrepreneurial effort. However, the extent to which entrepreneurial effort was exerted in circumventing and manipulating regulation, i.e., evasive and unproductive entrepreneurship, should not be underestimated.

6.2 *Wielding de facto Political Power*

At a macro level of analysis, most examples of entrepreneurial influence hinges on the previous accumulation of wealth. In previous studies, the negative implications of wealth concentration are the most dramatic in models where business owners can form interest groups to persuade politicians to bar new entrants from the market (e.g. Do, 2004).²¹ But many accounts are less pessimistic. For instance, Baumol (2002) describes how strong economic interests historically managed to strike bargains with the ruling elite by inducing them to relinquish some of their discretion over property rights. This, in turn, created incentives for productive entrepreneurship and sparked a cumulative process where institutions that favored secure property rights gradually replaced existing institutions characterized by arbitrary seizure of property by the ruler and other arbitrary decisions. The cases presented here nuance the issue of wealth accumulation further. In relation to our model it should however be noted that this is only one of several possible ways in which entrepreneurs influence institutions.

According to Åslund, Boone and Johnson (2002) post-Soviet Russia is locked in an “under-reform trap”. The political dimension of this trap is evidenced by the continued political strength and influence of the former communist elite. Moreover, political influence from large firms in Russia is often related to the oligarchs (Guriev and Rachinsky, 2005). This group consists of people from the former Soviet nomenclature who, after the fall of the Soviet Union, seized power over the companies which they managed. A typical pattern in former socialist countries is that former party cadres take advantage of their pre-reform position and their social network.²² Other Russian oligarchs are relatively young entrepreneurs who amassed their wealth in the late 1980s. They took advantage of the huge arbitrage opportunities created by partial reforms and the co-existence of regulated and quasi-market prices during the Gorbachev era. Today, the oligarchs’ far-reaching influence on the economy and the opportunities for entrepreneurs in general have resulted in, for example, the takeover of the Russian Union of Industrialists and Entrepreneurs. The prevalence of political influence of large firms at the local level, and the negative effect on entry of new firms is underscored by Slinko *et al.* (2005).²³ Other research has shown that in comparison to other more

²¹ Another possible mechanism that has been pursued in theoretical work is resistance to new innovations. Groups with vested interests try to influence economic institutions in order to prevent the introduction of new innovations (e.g. Mokyr, 1999). Since it is seldom costless to convert human and physical capital investment to suit new production technology some groups normally face (at least) a short-term loss in terms of unemployment or capital obsolescence. Such groups can potentially form a political alliance against change (Krusell and Ríos-Rull, 1996). Other potential losers are incumbent firms with monopoly power (Parente and Prescott, 1999).

²²In a study from Hungary, using statistics on prior party position and post-reform engagement in entrepreneurship, Rona-Tas (1994) found that party cadres were more likely to own a non-corporate business, although the effect disappears when education is controlled for. However, the positive relationship between cadre membership and involvement in a corporate business is robust to the inclusion of education. The same author also hypothesizes that incomplete reforms keep cadres away from private enterprise, a hypothesis which could also be of some relevance for China after Deng Xiaoping.

²³ Slinko *et al.* (2005) find that firms that were *not* subject to preferential treatment (primarily tax breaks and subsidized loans) experienced slower growth in regions with a high degree of political capture. Moreover, a high

successful transition economies (e.g., Poland and Slovakia), Russian entrepreneurs face more corruption, higher official as well as unofficial start-up costs, higher tax rates, more bureaucracy and weaker protection of property rights. These weak property rights have severely impeded the willingness of firms to reinvest their profits (Johnson *et al.*, 2002).

What is of interest here is not primarily how currently weak protection of property rights circumscribes the set of productive opportunities and how it instead breeds unproductive and predatory entrepreneurship. It is rather how a powerful elite seems to have a large impact on the institutions. This elite partly consists of entrepreneurs who, during the transition phase, could earn exceptionally large rents. At least on the local level, this group now expends effort and resources in order to wield *de facto* political power.

Our next example deals with the Chinese minority in Indonesia. Although examples of Chinese influence can be found in many Southeast Asian countries, the case of Chinese dominance in Indonesia is striking. Chua (2004) describes how the historically strong position of Chinese entrepreneurs in Indonesia shaped the country's post-colonial history. Unlike socialist-inspired takeover of private property in many other countries during this period, the wave of nationalizations during President Sukarno's rule in the 1950s and 1960s was motivated more by ethnic conflicts than by a desire to eradicate private ownership. Economically influential minorities, in particular the Chinese, were targeted. As a result of nationalizations, the Indonesian economy was fraught with widespread corruption and poorly managed enterprises. When Suharto seized power in 1966, he endorsed economic liberalization and foreign investments. In so doing, he allied himself with the Chinese business community – which had retained much of its economic influence – and with Chinese entrepreneurs. During Suharto's autocratic rule, the Chinese minority enjoyed protection. Large corporations were treated preferentially and endowed with lucrative business opportunities, in a symbiosis that also enabled the ruling family to accumulate a massive fortune. When the Suharto regime fell in 1998, the Sino-Indonesian minority (about 3 percent of the population) controlled approximately 70 percent of the private sector. The collapse of the Suharto regime was followed by anti-Chinese violence and resulted in the break-up of Chinese conglomerates and redistribution of their wealth. Many formerly profitable companies subsequently experienced severe difficulties under their new management.

In contrast to the Russian case, the wealthy Chinese minority in Indonesia has not been able to uphold its political influence. During Suharto's regime the Chinese minority had a large influence on the institutions. To the extent that this influence prevented Indonesians from opportunities to earn economic rents, it was in fact, plausibly, an important reason why the Suharto regime was overthrown. The indigenous majority was able to muster enough *de facto* political power to overthrow the regime. Although the Russian case spans a shorter time period than the Indonesian one, the contrast between the two cases illustrates the importance of recognizing the ethnic dimension in the distribution of resources.

6.3 Other Ways of Entrepreneurial Influence

In our last example, we return once again to China. After the death of Mao in 1976, Deng Xiaoping rose to power in 1978 and initiated reforms that extended the scope of private enterprise. One example of the role of the entrepreneur in the ensuing transformation of

degree of preferential treatment of large firms was found to have a negative effect on small firms. This result is interpreted as evidence that when large firms hold high political stakes they can prevent entry of new firms.

Chinese institutions was the implementation of the practice of “contract-production-to-household”, which allocated land to households on a long-term basis and allowed farmers to keep the profits. This practice was officially endorsed in 1983, but had already been widely adopted. The former laws which prohibited private profits from household farming had lost all practical relevance. Another example is the policy document enforced in 1981, according to which limited private enterprise was allowed, but with severe restrictions on, for instance, the maximum number of employees (two employees and five apprentices). However, these limitations did little to confine the size of private firms, many of which grew well beyond the size permitted. By the end of 1986, an official survey showed that a large number of firms had exceeded the stipulated limits. New institutional reforms in 1987–88 then granted these firms legitimate status. Lu (1994, p. 117) concludes that “the Chinese policy makers did not pre-design the boom of the private sector in the 1980s and the relating changes in institutions. In many cases, what happened was the official adaptation to reforms initiated by private entrepreneurs.”

Daokui *et al.* (2006) coin the term “institutional entrepreneur” for someone who starts a business venture and thereby contributes to the destruction of prevailing institutions that are unfavorable to entrepreneurship. Apart from open advocacy of reforms and private persuasion of politicians, they mention two other strategies. A business owner can claim that he represents a special case and that exceptions should be made for him. Once a concession has been made, additional concessions are easier to obtain, and numerous exceptions amount to a *de facto* change in institutions. The other strategy is to begin by circumventing regulations and, once a successful enterprise has been established, argue for an *ex post* justification.²⁴ As observed by Gilley (2002), Chinese politicians appointed at the local level frequently have a background as former (or current) entrepreneurs. Furthermore, Djankov *et al.* (2006) present evidence that Chinese entrepreneurs value political freedom significantly more than non-entrepreneurs. These results suggest that entrepreneurs might be an important force also in bringing about change in the political institutions.

Although many of the Chinese institutions that imposed restrictions on entrepreneurship were still in place in the mid-1970s, the political will to enforce such regulation weakened under Deng Xiaoping. The risk of sanctions, and hence the cost of evading the institutions, decreased significantly. Our example shows how this enhanced productive entrepreneurial activity. This was a cumulative process in which the costs of evading regulation fell to a level where the institutions had lost all practical relevance, in the end, were formally abolished.

7. Two Pertinent Institutions

We now focus on two key institutions, property rights and taxation. We also comment on their interaction with other parts of our system. This also entails a move from a macro illustration through historical examples to a micro oriented description.

The most fundamental economic institution is private property rights, including the existence of legal titles to hold property, and the protection thereof. A wider notion of property rights would also include taxation. Other institutions that are likely to affect entrepreneurship are the extent of publicly provided goods and services, social security, the institutions providing and

²⁴ These kinds of “institutional entrepreneurship” have, according to the authors, changed the institutional environment in rapidly growing economies such as China, India and Vietnam.

supporting R&D, labor market regulation, competition policy and programs aimed at supporting nascent firms.

7.1 Property Rights

Secure property rights ensure that physical objects can be turned into capital, a transformation that requires judgment, imagination and innovation (de Soto, 2000). The entrepreneur is instrumental in this process. The arrow in *Figure 4* indicates shifts in the composition of entrepreneurial activity following a weakening of property rights.

	ABIDE	EVADE
PRODUCTIVE	Pursue a business opportunity within prevailing institutions	Sidestep regulation, or offer bribes, in order to expand a profitable business; evade taxes on rents
UNPRODUCTIVE	Create contracts to overcome institutional shortcomings; lobbying; help others avoid taxes	Creation of a bureaucratic body where rents are earned by selling licenses or granting subsidized loans; help others avoid/evade taxes
PREDATORY	Rogue states; rivalry between warlords	Illegal syndicates; the Mafia; sophisticated fraud and economic crimes

Figure 4. The Effect of Weakening Property Rights.

When the protection of property rights is eroded, a first effect is to reduce the rents pertaining to productive entrepreneurship. For instance, business owners will retain a smaller share of profits in their firms (Johnson *et al.*, 2002). As argued by Claessens and Laeven (2003), physical capital is easier to protect than intangible assets and intellectual capital. They show that investment in R&D, relative to investments in tangible assets, is likely to be suboptimally low when property rights are weakly protected. In other words, weak property rights prevent productive entrepreneurship from reaching its full potential.

The second effect is that entrepreneurship takes new forms. Opportunities arise to earn rents from unproductive entrepreneurship. This involves protective activities such as security firms and the like, which substitute for weak institutions. New forms of contracts, aimed at securing property, are other means of earning rents. Moreover, rents can be earned by legally transferring land titles or other resources among groups of the population. If the protection of property rights continues to fall, purely predatory forms of entrepreneurship, such as extortion, corruption or fraud, will eventually arise.

In a dynamic setting, it seems plausible that those who have gained from low institutional quality would subsequently want to protect their property.²⁵ Could *de facto* political forces work in the direction of better protection? Sonin (2003) shows that, in the event of a highly unequal distribution of wealth, the rich might actually prefer weak property rights protection since they can rely on private protection.

Following this informal reasoning, bad equilibria are not only feasible, but can also be stable. Without a large exogenous shock, such equilibria could be difficult to dislodge. By exogenous shock we refer mainly to changing factor prices or technological breakthroughs, which can rapidly change the balance of (economic) influence. A stable equilibrium with poor protection of property rights would be characterized by a low level of productive entrepreneurship and an uneven distribution of resources. Entrepreneurial talent would be spent on political struggles and predatory activities against existing businesses. Such an economy adjusts poorly to changes in its environment, and its rate of innovativeness is low. Consequently, the economy stagnates.²⁶

In contrast, an equilibrium with strong protection of property rights is characterized by a high rate of productive entrepreneurship, and the economic system exhibits a high degree of innovativeness and ability to adapt. What are the possible threats to such an equilibrium? Given strong protection of property rights, entrepreneurs would find it more profitable to venture into business than to engage in unproductive activities. If the political institutions are strong, entrepreneurs would require the backing of considerable resources in order to wield *de facto* political power. The prospects for this depend on how resources are distributed. Under an even distribution, no group would find it worthwhile to muster the *de facto* political power needed to achieve a redistribution of resources in its favor. However, it is probably more realistic that, in equilibrium, there will always be some factions that try to bend the rules, and possibly reduce the protection of property rights in their favor by wielding *de facto* political power.

7.2 Taxation

So far, the effect of property rights protection on productive entrepreneurship seems to be unequivocally positive. The verdict is somewhat less clear cut if we expand our definition of property rights to include freedom from confiscatory taxation.

²⁵ Besley (1995) develops a theoretical argument as to why the quality of property rights may be endogenous, and finds some empirical support for this hypothesis. In his case, Ghanaian farmers who have invested in their land may subsequently find it in their interest to push for better protection.

²⁶ This description is consistent with, for instance, the literature on corruption (e.g. Murphy *et al.*, 1993, and Mauro, 1995).

	ABIDE	EVADE
PRODUCTIVE	Pursue a business opportunity within prevailing institutions	Sidestep regulation, or offer bribes, in order to expand a profitable business; evade taxes on rents
UNPRODUCTIVE	Create contracts to overcome institutional shortcomings; lobbying; help others avoid taxes	Creation of a bureaucratic body where rents are earned by selling licenses or granting subsidized loans; help others avoid/evade taxes
PREDATORY	Rogue states; rivalry between warlords	Illegal syndicates; the Mafia; sophisticated fraud and economic crimes

Figure 5. The Effect of an Increasing Tax Rate

Using our typology, we can distinguish two different effects of taxes. The most obvious effect is that the cost of abiding by regulations increases. Entrepreneurs respond to this by expending effort on tax evasion. In *Figure 5*, this is illustrated by the move of the arrow to the right. The other effect is that a higher tax level channels entrepreneurship into new forms. Opportunities for unproductive entrepreneurship arise, for instance, in services that offer instruments or transactions to circumvent the institutions, i.e., tax avoidance. This is illustrated as the vertical component of the arrow in *Figure 5*.

Since taxes often involve redistribution, some groups benefit from high taxes and some lose. Both of these groups may be willing to spend resources in order to increase their *de facto* political power. Even in societies with political institutions of high quality, there is some scope for entrepreneurs to exercise such power. However, the issue here is far more complicated since taxes can be levied on many different bases. Therefore, we simply identify a few factors that can contribute to sustaining a high-tax equilibrium.

If taxes entail redistribution from the rich to the poor, the median-voter theorem could, in a democratic context, be expected roughly to predict *de jure* political alliances (e.g., Alesina and Rodrik, 1994). This is to some extent mediated by the effect of *de facto* political power, which has been assumed to be concentrated in a rich stratum of the population. This implies a downward pressure on taxes. However, as shown by Roine (2006), political alliances can be formed in other ways if the very rich are offered some means of avoiding taxes. In the case where such instruments are allowed, the rich incumbent may prefer high tax rates and form a coalition with low-income groups.

A similar mechanism emanates from the fact that taxes affect large and incumbent businesses differently than newly started small businesses. In general, small firms tend to be more dependent on equity financing, whereas large and old firms can rely more on debt financing. Henrekson (2005) documents that Sweden has had a significant difference in effective tax rates on debt and equity for a long time. In our framework, this translates into a situation where resources are concentrated to a few individuals with a high stake in large, incumbent

firms. Such individuals have no reason to resist high taxes, as long as they can avoid them. They can even prefer high taxes, which tend to discourage new entrants, in order to protect their rents and possibly to increase supply of public services from which those individuals benefit.

The effect of taxation on entrepreneurship is a core issue in the entrepreneurship literature. Therefore, we end this section by relating our framework to three of the most influential topics in the literature.

It has been argued that governments can provide insurance by taking part of profits in good times and offsetting losses in bad times (Domar and Musgrave, 1944, Sinn, 1995, 1996). If individuals are risk averse, such insurance encourages the risk-taking central to all entrepreneurial activity. A number of arguments have been put forward to counter this proposition. For instance, it is not valid under progressive taxation and, under most tax codes, losses can only be offset against future profits. Our framework allows us to pose another question: are those who, under the implicit insurance of a welfare state, start their own businesses really entrepreneurs? After all, according to our definition, an entrepreneur has to possess certain talents, and it is unclear whether such individuals really need risk reduction. It could well be that misdirected forms of insurance only serve to encourage new business ventures among those who are not entrepreneurs (de Meza and Webb, 1987; de Meza, 2002).

Second, it has proven difficult to establish empirically a negative relation between tax levels and the rate of self-employment.²⁷ If the success of an entrepreneur is assumed to be heavily dependent on his/her effort, then the theoretical prediction is that high marginal tax rates should have a negative effect on the level of entrepreneurial activity (Robson and Wren, 1999). However, the validity of the rate of self-employment as a measure of entrepreneurship is questionable. One possible explanation for the empirically observed pattern is that self-employment could be a means to avoid taxes. As argued by Feldstein and Slemrod (1980), self-employment can serve to shift from labor income taxed at a high marginal rate to corporate income taxed at a lower rate. Moreover, self-employment facilitates shifting activities to the black market (Watson, 1985; Young *et al.*, 1994). In some cases, avoiding taxes and shifting to the black market would be an example of evasive entrepreneurship.

A third issue concerns the rents that an entrepreneur could capture. Taxes on both capital gains and dividends affect the net rents available to the entrepreneur. For new businesses, the time horizon between firm start-up and exit is often short.²⁸ The close relationship between entrepreneurship and venture capital bears witness to the crucial role of equity that can be injected into new high-risk ventures and then compensated in a relatively early exit (Gompers and Lerner, 1999; Kortum and Lerner, 2000). But these are precisely the two properties that are penalized the most by high rates of capital taxation.

²⁷ This holds for both cross-section studies (Long, 1982; Parker, 2003) and time-series analyses (Blau, 1987). Schuetze and Bruce (2004) find that the evidence is inconclusive. However, recent panel-data studies (Cullen and Gordon, 2002) and new time-series analyses (Bruce and Moshin, 2006) tend to find a weak negative relation.

²⁸ Due to the short time horizon, it cannot be maintained that retained earnings are a marginal source of funding and that investments should therefore be immune from dividend taxes (Auerbach, 2002). On the contrary, investments in new and small firms are impeded by these taxes, as can be observed in the positive correlation between the size distribution of firms and tax rates (Dietz, 2005).

8. Conclusion

This paper introduces a framework that relates entrepreneurship and politically determined institutions by unifying contributions from research in the areas of entrepreneurship/small business, public choice and new institutional economics. Traditionally, research within the entrepreneurship field has focused on how institutions affect the levels of entrepreneurial activity, whereas public choice research has acknowledged that institutions also may influence the type of entrepreneurship. Endogenous institutions have mainly been explored within new institutional economics, where entrepreneurs are recognized as important agents of change.

A main theoretical challenge consists in carving out a role for the entrepreneur which is not too broad, but at the same time does not overlook important aspects. To avoid confounding phenomena, we argue that it is crucial to retain and identify the entrepreneur as an agent involved in a productive process. In our model, entrepreneurs are characterized by an aptitude for recognizing and exploiting economic opportunities.

We emphasize that the causal relationship between entrepreneurship and institutions is bilateral. Entrepreneurs do not necessarily pursue the socially most profitable opportunities. Instead, they choose how and to what extent they want to employ their entrepreneurial talent depending on the relevant incentive structure as determined by the pertinent institutions. Hence, institutions fundamentally determine the distribution across productive, unproductive and predatory activities. Moreover, given restrictive institutions entrepreneurs may find it economically rational to spend some of their effort on evading the institutions.

We posit that unproductive and predatory entrepreneurship is only possible through interaction with the institutional framework. Ordinary theft or routine bribery cannot meaningfully be classified as entrepreneurship. On the contrary, unproductive and predatory entrepreneurship must entail the perception of some opportunity either to affect institutions or substitute for malfunctioning institutions. Evasive entrepreneurship, in a similar way, is an important source of institutional change (albeit often unintentionally). We argue that this establishes a causal link from entrepreneurship to institutions.

The main conclusion from our analysis is that entrepreneurship can only be analyzed in a well defined institutional context. This result emerges from two circumstances. First, entrepreneurs always respond to incentives embedded in the environment in which they act. The relative return of an unproductive and a productive activity is determined by existing institutions, which thereby affect the allocation of entrepreneurial talent. This aspect of institutions has long been recognized by entrepreneurship scholars. But since entrepreneurial activities effectively change institutions, there is also a second circumstance to consider. A proper elaboration of the institutional context must recognize to what extent these institutions may be affected and altered by entrepreneurs, and how entrepreneurial activities may substitute for maladaptive or missing institutions. The relevant benchmark for welfare analyses is an optimal institutional arrangement, where all entrepreneurial talent would be channeled to the socially most productive activities.

The main message of this paper is methodological: research in the political economy of entrepreneurship cannot be restricted to analyzing how institutions affect the level and type of entrepreneurial activity. It is also necessary to consider how entrepreneurial activities affect institutions and thereby the prospects for long-term growth. Our real-world examples, and the

application of our model to property rights and taxation, provide some intuition for such an analysis. However, more research is needed on these issues.

This is also an important lesson from a policy perspective. Institutional changes aimed at promoting entrepreneurship must always be evaluated with respect to which kind of entrepreneurship is promoted. A tax hike may not only deter productive entrepreneurs, but also foster unproductive entrepreneurship. Just examining the net effect on entrepreneurial activity is likely to be highly misleading.

References

- Acemoglu, Daron and James A. Robinson (2006), "Persistence of Power, Elites and Institutions", draft, MIT and Harvard University.
- Acemoglu, Daron, Simon Johnson and James A. Robinson (2005), "Institutions as the Fundamental Cause of Long-run Growth", in Aghion, Philippe and Steven Durlauf (eds.), *Handbook of Economic Growth*, Amsterdam: North-Holland.
- Alesina, Alberto and Dani Rodrik (1994), "Distributive Politics and Economic Growth", *Quarterly Journal of Economics*, 109(2), 465–490.
- Alvarez, Sharon A. (2007), "Entrepreneurial Rents and the Theory of the Firm", *Journal of Business Venturing*, 22, 427–442.
- Åslund, Anders, Peter Bonne and Simon Johnson (2002), "Escaping the Under-Reform Trap", IMF Staff Papers 48, Washington, DC.
- Auerbach, Alan J. (2002), "Taxation and Corporate Financial Policy", in Auerbach, Alan J. and Martin S. Feldstein (eds.), *Handbook of Public Economics III*, chapter 19, 1251–1292, Amsterdam: North-Holland.
- Bandiera, Oriana (2003), "Land Reform, the Market for Protection, and the Origins of the Sicilian Mafia: Theory and Evidence", *Journal of Law, Economics and Organization*, 19(1), 218–244.
- Baumol, William J. (1990), "Entrepreneurship: Productive, Unproductive, and Destructive", *Journal of Political Economy*, 98(5), 893–921.
- Baumol, William J. (2002), *The Free-Market Innovation Machine*, Princeton University Press: Princeton and Oxford.
- Baumol, William J. (2005), "Entrepreneurship and Invention: Toward Restoration into Microeconomic Value Theory", mimeo, New York University.
- Bhagwati, Jagdish N. (1982), "Directly Unproductive, Profit-Seeking (DUP) Activities", *Journal of Political Economy*, 90(5), 988–1002.
- Benson, Bruce L. (1984), "Rent Seeking from a Property Rights Perspective", *Southern Economic Journal*, 51(2), 388–400.
- Benson, Bruce L. (2002), "Regulatory Disequilibrium and Inefficiency: The Case of Interstate Trucking", *Review of Austrian Economics*, 15(2/3), 229–255.
- Besley, Timothy (1995), "Property Rights and Investment Incentives: Theory and Evidence from Ghana", *Journal of Political Economy*, 103(5), 903–937.
- Blau, David M. (1987), "A Time-Series Analysis of Self-Employment in the United States", *Journal of Political Economy*, 95(3), 445–467.
- Bruce, Donald and Mohammed Mohsin (2006), "Tax Policy and Entrepreneurship: New Time Series Evidence", *Small Business Economics*, 26(5), 409–425.
- Boettke, Peter J. and Christopher J. Coyne (2003), "Entrepreneurship and Development: Cause or Consequence?", *Advances in Austrian Economics*, 6, 67–87.
- Buchanan, James M. (1980), "Rent Seeking and Profit Seeking," in Buchanan, James M. and Gordon Tollison (eds.), *Toward a Theory of the Rent-Seeking Society*, College Station, TX: Texas A&M University Press.
- Chell, Elisabeth, Jean Haworth and Sally Brearley (1991), *The Entrepreneurial Personality: Concepts, Cases, and Categories*, London and New York: Routledge.
- Chong, Alberto and César Calderón (2000), "Causality and Feedback between Institutional Measures and Economic Growth", *Economics and Politics*, 12(1), 69–82.
- Chua, Amy (2004), *World on Fire*, London: Arrow Books.
- Claessens, Stijn and Luc Laeven (2003), "Financial Development, Property Rights and Growth", *Journal of Finance*, 58(6), 2401–2436.
- Coyne, Christopher J. and Peter T. Leeson, (2004), "The Plight of Underdeveloped Countries", *Cato Journal*, 24(3), 235–249.
- Cullen, Julie Berry and Robert H. Gordon (2002), "Taxes and Entrepreneurial Activity: Theory and Evidence from the US", NBER Working Paper No. 9015.
- Daokui Li, David, Junxin Feng and Hongping Jiang (2006), "Institutional Entrepreneurs", *American Economic Review*, 96(2), 358–362.

- Davis, Steven J. and Magnus Henrekson (1997), "Industrial Policy, Employer Size and Economic Performance in Sweden", in Freeman, Richard B., Robert Topel and Birgitta Swedenborg (eds.), *The Welfare State in Transition*, pp. 353–397 Chicago: University of Chicago Press.
- de Meza, David (2002), "Overlending?", *Economic Journal*, 112(477), F17–F31.
- de Meza, David and David C. Webb (1987), "Too Much Investment: A Problem of Asymmetric Information", *Quarterly Journal of Economics*, 102(2), 281–292.
- de Soto, Hernando (2000), *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere else*, New York: Basic Books.
- Dietz, Martin D. (2005), "Dividend and Capital Gains Taxation in a Cross Section of Firms", mimeo, University of California, San Diego.
- Djankov, Simeon, Edward E. Glaeser, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Sleifer (2003), "The New Comparative Economics", *Journal of Comparative Economics*, 31(9), 595–619.
- Djankov, Simeon, Yingyi Qian, Gérard Roland and Ekaterina Zhuravskaya (2006), "Entrepreneurship in China and Russia Compared", *Journal of European Economic Association*, 4(2/3), 352–365.
- Do, Quy Toan (2004), "Institutional Trap", World Bank Policy Research Working Paper No. 3291, Washington, DC.
- Domar, Evsey D. and Richard A. Musgrave (1944), "Proportional Income Taxation and Risk-Taking", *Quarterly Journal of Economics*, 58(3), 388–422.
- Feldstein, Martin S. and Joel Slemrod (1980), "Personal Taxation, Portfolio Choice, and the Effect of the Corporation Income Tax", *Journal of Political Economy*, 88(5), 854–866.
- Gartner, William B. (1990), "What Are we Talking about when we Talk about Entrepreneurship?", *Journal of Business Venturing*, 5(1), 15–28.
- Gartner, William B. (2001), "Is There an Elephant in Entrepreneurship? Blind Assumptions in Theory Development", *Entrepreneurship Theory and Practice*, 25(1), 27–39.
- Gentry, William M. and R. Glenn Hubbard (2000), "Entrepreneurship and Household Saving", NBER Working Paper No. 7894.
- Gilley, Bruce (2002), "Entrepreneurs and Politics in Rural China", in Bonnell, Victoria E. and Thomas B. Gold (eds.), *The New Entrepreneurs of Europe and Asia*, New York and London: M.E. Sharpe.
- Gompers, Paul A. and Josh Lerner (1999), *The Venture Capital Cycle*, Cambridge, MA: MIT Press..
- Guriev, Sergei and Andrei Rachinsky (2005), "The Role of Oligarchs in Russian Capitalism", *Journal of Economic Perspectives*, 19(1), 131–150.
- Hall, Robert E. and Charles I. Jones (1999), "Why Do Some Countries Produce So Much More Output Per Worker than Others?", *Quarterly Journal of Economics*, 114(1), 83–116.
- Hébert, Robert F. and Albert N. Link (1989), "In Search of the Meaning of Entrepreneurship", *Small Business Economics*, 1(1), 39–49.
- Henrekson, Magnus (2005), "Entrepreneurship: A Weak Link in the Welfare State", *Industrial and Corporate Change*, 13(3), 437–467.
- Henrekson, Magnus and Ulf Jakobsson (2001), "Where Schumpeter Was nearly Right – the Swedish Model and Capitalism, Socialism and Democracy", *Journal of Evolutionary Economics*, 11(3), 331–358.
- Hindmoor, Andrew (1999), "Rent Seeking Evaluated", *Journal of Political Philosophy*, 7(4), 434–452.
- Hofstede, Geert (2001), *Culture's Consequences* (2nd ed), Thousand Oaks, CA: Sage Publications.
- Holcombe, Randall G. (2002), "Political Entrepreneurship and the Democratic Allocation of Resources", *Review of Austrian Economics*, 15(2/3), 143–159.
- Holtz-Eakin Douglas, Harvey S. Rosen and Robert Weathers (2000), "Horatio Alger Meets the Mobility Tables", *Small Business Economics*, 14(4), 243–274.
- Johnson, Simon, John McMillan and Christopher Woodruff (2002), "Property Rights and Finance", *American Economic Review*, 92(5), 1335–56.
- Kim, Sung Chull, (2005), "Nested Institutions and the Retardation of the Adaptive Process", *Systems Research and Behavioral Sciences*, 22, 483–495.
- Kirzner, Israel M. (1973), *Competition and Entrepreneurship*, Chicago and London: University of Chicago Press.
- Kirzner, Israel M. (1992), *The Meaning of the Market Process – Essays in the Development of Modern Austrian Economics*. Routledge: New York.
- Kirzner, Israel M. (1999), "Creativity and/or Alertness: A Reconsideration of the Schumpeterian Entrepreneur", *Review of Austrian Economics*, 11(1), 5–17.

- Knight, Frank H. (1921), *Risk, Uncertainty and Profit*, New York: Houghton Mifflin.
- Kortum, Samuel and Josh Lerner (2000), "Assessing the Contribution of Venture Capital to Innovation", *RAND Journal of Economics*, 31(4), 674–692.
- Krueger, Anne O. (1974), "The Political Economy of the Rent-Seeking Society", *American Economic Review*, 64(3), 291–303.
- Krusell, Per and José-Víctor Ríos-Rull (1996), "Vested Interests in a Theory of Stagnation and Growth", *Review of Economic Studies*, 63(2), 301–329.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert Vishny (1999), "The Quality of Government", *Journal of Law, Economics and Organizations*, 15(1), 222–279.
- Lewin, Peter and Steven E. Phelan (2001), "Rents and Resources: A Market Process Perspective", in Foss, Nicolai J. and Peter G. Klein, P (eds.), *Entrepreneurship and the Firm*, Cheltenham: Edward Elgar.
- Long, James E. (1982), "The Income Tax and Self-Employment", *National Tax Journal*, 35(1), 31–42.
- Lu, Ching (1994), *Entrepreneurship in Suppressed Markets: Private-Sector Experience in China*, New York: Garland.
- Lundahl, Mats (1997), "Inside the Predatory State. The Rationale, Methods, and Economic Consequences of Kleptocratic Regimes", *Nordic Journal of Political Economy*, 24(1), 31–50.
- Mauro, Paolo (1995), "Corruption and Growth", *Quarterly Journal of Economics*, 110(3), 681–712.
- McChesney, Fred S. (1987), "Rent Extraction and Rent Creation in the Economic Theory of Regulation", *Journal of Legal Studies*, 16(1), 101–118.
- McClelland, David C. (1961), *The Achieving Society*, Princeton: Van Nostrand.
- Milhaupt, Curtis J. and Mark D. West (2000), "The Dark Side of Private Ordering: An Institutional and Empirical Analysis of Organized Crime", *University of Chicago Law Review*, 67(1), 41–98.
- Mokyr, Joel (1999), "Innovation and Its Enemies: The Economic and Political Roots of Technological Inertia", in Olson, Mancur and Satu Kähkönen (eds.), *A not so Dismal Science*, Oxford: Oxford University Press.
- Murphy, Kevin M., Andrei Shleifer and Robert W. Vishny (1991), "The Allocation of Talent: Implication for Growth", *Quarterly Journal of Economics*, 106(2), 503–530.
- Murphy, Kevin M., Andrei Shleifer and Robert W. Vishny (1993), "Why is Rent Seeking So Costly to Growth?" *American Economic Review*, 83(2), 409–414.
- Myhrman, Johan (1989), "The New Institutional Economics and the Process of Economic Development", *Journal of Institutional and Theoretical Economics*, 145(1), 38–59.
- Nordhaus, William D. (2004), "Schumpeterian Profits in the American Economy: Theory and Measurement", NBER Working Paper 104333.
- North, Douglass C. (1981), *Structure and Change in Economic History*, New York and London: Norton.
- North, Douglass C. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- North, Douglass C. and Barry R. Weingast (1989), "Constitutions and Commitment: Evolution of Institutions Governing Public Choice in Seventeenth Century England", *Journal of Economic History*, 49(4), 803–832.
- Parker, Simon C. (2003), "Does Tax Evasion Affect Occupational Choice?", *Oxford Bulletin of Economics and Statistics*, 65(3), 379–394.
- Parker, Simon C. (2004), *The Economics of Self-Employment and Entrepreneurship*, Cambridge: Cambridge University Press.
- Parente Stephen L. and Edward C. Prescott (1999), "Monopoly Rights as Barriers to Riches", *American Economic Review*, 89(5), 1216–1233.
- Persson, Torsten and Guido Tabellini (2004), "Constitutions and Economic Policy", *Journal of Economic Perspectives*, 18(1), 75–98.
- Persson, Torsten and Guido Tabellini (2006), "Electoral Systems and Economic Policy", in Weingast, Barry R. and Donald A. Wittman (eds.), *Handbook of Political Economy*, New York: Oxford University Press.
- Quadrini, Vincenzo (1999), "The Importance of Entrepreneurship for Wealth Concentration and Mobility", *Review of Income and Wealth*, 45(1), 1–40.
- Rauch, Andreas and Michael Frese (2000), "Psychological Approaches to Entrepreneurial Success. A General Model and an Overview of Findings", in Cooper, Cary L. and Ivan T. Robertson (eds.), *International Review of Industrial and Organizational Psychology*, Chichester: Wiley, 101–142.
- Ricardo, David (1912 [1821]), *The Principles of Political Economy* (3rd ed.), London: J. M. Dent.
- Robson, Martin T. and Colin Wren (1999), "Marginal and Average Tax Rates and the Incentive for Self-Employment", *Southern Economic Journal*, 65(4), 757–773.

- Rodrik, Dani, Arvind Subramanian and Francesco Trebbi (2004), "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development", *Journal of Economic Growth*, 9(2), 131–165.
- Roine, Jesper (2006), "The Political Economics of not Paying Taxes", *Public Choice*, 126(1/2), 107–134.
- Rona-Tas, Akos (1994), "The First Shall Be Last? Entrepreneurship and Communist Cadres in the Transition from Socialism", *American Journal of Sociology*, 100(1), 40–69.
- Schuetze, Herbert J. and Donald Bruce (2004), "Tax Policy and Entrepreneurship", *Swedish Economic Policy Review*, 11(2), 233–265.
- Schumpeter, Joseph A. (1934), *The Theory of Economic Development*, Cambridge, MA: Harvard University Press.
- Sinn, Hans-Werner (1995), "A Theory of the Welfare State", *Scandinavian Journal of Economics*, 97(4), 495–526.
- Sinn, Hans-Werner (1996), "Social Insurance, Incentives and Risk-Taking", *International Tax and Public Finance*, 3(3), 259–280.
- Slinko, Irina, Evgeny Yakovlev and Ekaterina Zhuravskaya (2005), "Law for Sale: Evidence from Russia", *American Law and Economics Review*, 7(1), 284–318.
- Sonin, Konstantin (2003), "Why the Rich May Favor Poor Protection of Property Rights", *Journal of Comparative Economics*, 31(4), 715–731.
- Stigler, George J. (1971), "The Theory of Economic Regulation", *Bell Journal of Economics and Management Science*, 2(1), 3–21.
- Tollison, Robert D. (1982), "Rent-Seeking: A Survey", *Kyklos*, 35(4), 575–602.
- Watson, Harry (1985), "Tax Evasion and Labor Markets", *Journal of Public Economics*, 27(2), 231–246.
- Weber, Max (2001 [1905]), *The Protestant ethic and the spirit of capitalism*, London and New York: Routledge.
- Wennekers, Sander and Roy Thurik, (1999), "Linking Entrepreneurship and Economic Growth", *Small Business Economics*, 13(1), 27–56
- Young, Jung H., Arthur Snow and Gregory A. Trandel (1994), "Tax Evasion and the Size of the Underground Economy", *Journal of Public Economics*, 54(3), 391–402.
- Yu, Tony Fu-Lai (2001), "An Entrepreneurial Perspective of Institutional Change", *Constitutional Political Economy*, 12(3), 217–36.