

Entrepreneurship and Development: Cause or Consequence?

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Abstract: This paper discusses the inherent tension in the notion of entrepreneurship as developed by Ludwig von Mises and Israel Kirzner. Given that entrepreneurship is an omnipresent aspect of human action, it cannot also be the “cause” of economic development. Rather, for economic development to take place, certain institutions must be present in order for the entrepreneurial aspect of human action to flourish. After further developing this theoretical insight, an in-depth analysis of the institutions necessary for entrepreneurship are considered.

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Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things. All governments which thwart this natural course, which force things into another channel or which endeavor to arrest this progress of society at a particular point, are unnatural, and to support themselves are obliged to be oppressive and tyrannical.

Adam Smith (1776, xliii)

I. Introduction

The question of why some nations are rich and others are poor has been at the center of economic debate for over two centuries. While the post-WWII Keynesian-dominated discussion of economic development focused on and emphasized the importance of such factors as foreign aid and government planning, it is now widely agreed that the entrepreneur is the prime driver of economic progress (Kasper & Streit, 1998: 1-23; Leff, 1979). It is also accepted that the institutions that economic agents (including entrepreneurs) operate in – political, legal and cultural – directly influence their activity and hence economic development (Baumol, 1990; Olson, 1996). Institutions, or the rules of the game, provide a framework which guides activity, removes uncertainty and makes the actions of others predictable. In short, institutions serve to reduce the costs of action and facilitate the coordination of knowledge dispersed throughout society.

Economists associated with the Austrian school of economics have long focused their attention on the study of entrepreneurship and the economic analysis of institutions, providing a robust literature emphasizing the importance of these areas (Boettke, 1994; Boettke, 2001: 234-247; Foss, 1997; Wubben, 1997). In contrast to other schools of economic thought, the Austrians have not only realized the importance of institutions, but have attempted to provide a connection between the market process and an economic understanding of institutions. Moreover, Austrians stress that entrepreneurship does not

describe a distinct group of individuals, but rather, is an omnipresent aspect of human action. As Mises wrote:

In any real and living economy, every actor is always an entrepreneur and speculator... Economics, in speaking of entrepreneurs, has in view not men, but a definite function. This function is not the particular feature of a particular special group or class of men; it is inherent in every action and burdens every actor...The term entrepreneur as used in catallactic theory means: acting man exclusively seen from the aspect of the uncertainty inherent in every action (1949, 252-3).

Economic decision makers do not simply react to given data and allocate their scarce means to realize given ends. The entrepreneurial element in human action entails the discovery of new data and information; discovering anew each day not only the appropriate means, but the ends that are to be pursued (Kirzner, 1973: 30-87). Moreover, the ability to spot changes in information is not limited to a selective group of agents – all agents possess the capacity to do so.

Herein lies the dilemma in the literature on entrepreneurship and economic development. Given the Austrian insight that entrepreneurship is omnipresent, entrepreneurship cannot also be claimed to be the “cause” of economic development. There are countries that have not achieved a level of economic development consistent with their endowment, the state of technology, and the level of human capital investment in the country, yet economic actors are still coping with uncertainty and striving to be alert to hitherto unrecognized opportunities for gain. Obviously, a narrow reading of entrepreneurship cannot help us explain why some nations are rich and other nations linger in poverty. To explore the causal relationship between entrepreneurship and economic growth, we must think more broadly. Entrepreneurship manifests itself differently across alternative institutional regimes and some of these manifestations are consistent with economic development, while others are not. The realization of the role that the rules of the game play in guiding action provides an analytical framework in which we can consider the link between economic progress and entrepreneurship. That is, we must consider the

institutions that comprise the societal organizational environment and consider how they serve to channel entrepreneurial activity in one direction or another.

The question that motivates us is one that has motivated economists at least since the time of Adam Smith – Why are some nations rich while others are poor? Olson (1996) highlighted an interesting dilemma, namely that there are huge opportunities for mutual gain that continue to go unrealized in the less developed areas of the world. In considering why such opportunities are not exploited in terms of the previously mentioned analytical framework, we must look at the rules of the game which provide incentives to economic actors as entrepreneurs. Simply put, economic growth, driven by entrepreneurship, cannot be explained without reference to institutions. In this paper, we will argue that entrepreneurship cannot be the cause of development, but rather, that the type of entrepreneurship associated with economic development is a consequence of it. That is, development is caused by the adoption of certain institutions, which in turn channel and encourage the entrepreneurial aspect of human action in a direction that spurs economic growth. Given our thesis, in those countries where opportunities are left unexploited, we would expect to find either a lack of institutions or an institutional structure that discourages certain types of entrepreneurship. Likewise, in those developed countries where opportunities for mutual gain are exploited, we would expect to see an institutional environment that encourages entrepreneurial discovery of the type that generates greater gains from exchange. Entrepreneurship comes in the form of either arbitrage or innovative action, but some arbitrage and innovative actions are limited in scope, while other steps in the arbitrage or innovative direction are transformative in terms of economic development.

Part II of this paper will serve as an overview of the varying notions of the entrepreneur and his role in economic development. Focus will be placed on the

implications of the rules of the game on each particular concept of entrepreneurship. Part III will address the mechanics of economic development. We will discuss the neoclassical growth model with particular focus on the critical role that institutions play in economic development. The shortcomings of the model in capturing these critical elements will be discussed. Part IV will consider empirical studies of the various institutions that are the causes of entrepreneurship. Finally, in Part V, we summarize our findings and provide concluding remarks.

II. Entrepreneurship in the Literature

In this section we will provide an overview of the three main views of the notion of the entrepreneurial process: Schumpeter's view of the entrepreneur as innovator, Kirzner's notion of entrepreneurship as arbitrage and the view of entrepreneurship in history as one of betting on ideas.ⁱ In considering each of these views, we will pay particular attention to the implications of the institutional environment on the particular notion of entrepreneurship.ⁱⁱ

Before considering Schumpeter's notion of entrepreneurship and economic development, it is important to clarify his view of the market and his understanding of the capitalist system – his characterization of capitalism is directly tied to the role the entrepreneur occupies within it. While rejecting the widely accepted view of the market as a perfectly competitive construct, Schumpeter couched his analysis in an initial state of general equilibrium.ⁱⁱⁱ He viewed the market process as a dynamic process driven by creative destruction: “It [referring to the market process] must be seen in its role in the perennial gale of creative destruction; it cannot be understood irrespective of it...”(1950: 83). Schumpeter linked the market process of creative destruction – which he associated with “new combinations” – and therefore economic development and progress, to innovation and

distinguished the entrepreneur as the prime innovator.^{iv} In addition to being an innovator, the entrepreneur is a leader. His actions channel the means of production into previously unexploited markets and other producers follow him into these new markets (1960: 89). Perhaps Kirzner best described the market impact of Schumpeter's entrepreneur when he wrote: "...for Schumpeter the essence of entrepreneurship is the ability to break away from routine, to destroy existing structures, to move the system away from the even, circular flow of equilibrium" (1973: 127).

Although not the emphasis of his analysis, Schumpeter recognized that the entrepreneur (in addition to all economic actors) would have to adapt to his surrounding institutional environment:

...the field of individual choice is always, though in very different ways and very different degrees, fenced in by social habits or conventions and the likes: it still remains broadly true that, within the circular flow, everyone adapts himself to his environment so as to best satisfy given wants....as best he can (1960: 91).

Moreover, Schumpeter realized the necessity of private property in providing financial motives for entrepreneurial action and hence economic development.^v The entrepreneur, working within the societal institutional framework will adjust and adopt his actions based on the incentive structure he faces. Without a conducive framework in which he can pursue the activities of innovation and leadership, Schumpeter's entrepreneur will fail to carry out his function.

While there are similarities between Schumpeter's and Kirzner's notion of entrepreneurship, there is a foundational juxtaposition between each author's understanding of the market process which leads to differing views of the role of the entrepreneur.^{vi} As compared to Schumpeter's characterization of the market process as creative destruction, Kirzner emphasized that markets "tend continually...towards equilibrium, as the consequence of continually-stimulated entrepreneurial discoveries" (1999: 6). The key

concept in Kirzner's notion of entrepreneurship is the alertness to opportunities – i.e., the discovery of knowledge previously unknown (1973: 35, 1979: 139). Entrepreneurial discoveries are realizations of ex post errors made by market participants which either caused them to be, ex-ante, over or under pessimistic in their expectations (1999: 6). The existence of error provides scope for profit opportunities that actors can realize if they move in a direction less erroneous than before.^{vii} For Kirzner, alertness, and therefore discovery, is characterized as “knowing where to look for knowledge” (1973: 66-8). While both Schumpeter's and Kirzner's notions of entrepreneurship are grounded in the exploitation of profit opportunities, the greatest difference is that the former shifts the market away from equilibrium while the latter serves to continually move the market toward equilibrium.^{viii} While Schumpeter's entrepreneur is an innovator who destroys the current structure, Kirzner's entrepreneur is alert to arbitrage opportunities based on past errors and serves to exploit and correct those errors, and in doing so, directs the market towards equilibrium.

Kirzner recognized the role that the entrepreneur would play in economic development. “In economic development, too, the entrepreneur is to be seen as responding to opportunities rather than creating them; as capturing profit opportunities rather than generating them... Without entrepreneurship, without alertness to the new possibility, the long-term benefits may remain untapped” (1973: 74). For Kirzner, the competitive market and entrepreneurship are inseparable – the competitive process is in essence entrepreneurial (1973: 15-16). The consideration of economic progress and the institutions that facilitate that development through entrepreneurship occurs here on two levels. First, given that competition and entrepreneurship are inseparable, we must evaluate if the institutional framework provides a structure for competition. Second, we must consider if the

institutional framework provides the incentive structure for the entrepreneur to: (1) exercise his subconscious alertness, and (2) act on his alertness to exploit arbitrage opportunities.

According to Kirzner, competition exists as long as there are no arbitrary barriers to entry (1973: 97; 1985: 130, 142). The competitive process necessarily must allow those who are able and willing to provide a potential offer the ability to do so. Only when barriers have been erected to prevent potential competitors from entering the market and offering a more attractive deal will competition be retarded. Furthermore, there can be only two possible restrictions to entry – the lack of resources needed for an activity or government imposed restrictions. Entrepreneurial activity, according to Kirzner, does not require any initial resources so the only means of restricting the competitive process is the latter – government imposed restrictions (1973: 99-100). If we are looking for the connection between economic development and the entrepreneur and accept Kirzner's notion, then one institution we must consider is the presence of barriers to entry. If Kirzner's notion of entrepreneurship and competition is accurate, we would expect to see countries with high barriers to entry less economically developed than those where the competitive process is largely uninhibited.

As discussed, alertness is the key element of Kirzner's entrepreneur: "...the market performs a crucial function in discovering knowledge nobody knows exists..." (1979: 139). Kirzner also realized that the institutional structure could influence this aspect of human action: "it must appear highly desirable to choose among alternative social institutional arrangements those modes of organization that generate the greatest volume of spontaneous, undeliberate learning" (ibid: 147). If the goal is to encourage the entrepreneurial aspect of human action, the best institutions are those that promote alertness to previously unknown knowledge.

For Kirzner, entrepreneurship does not just involve alertness, but also the exploitation of the opportunity realized through alertness:

It follows, then, that for opportunities for social improvement to be more rapidly discovered and exploited, these opportunities must be translated into opportunities that are not merely encountered...but into opportunities that are to the advantage of these potential entrepreneurs, and that most effectively excite their interest and alertness...(ibid, 149).

Given such, we must also consider the societal institutional environment in terms of the incentives it provides the entrepreneur in exploiting potential arbitrage opportunities. Here we can make a connection with the motives of Schumpeter's entrepreneur in terms of the necessity of private property. However, we must be careful to avoid distorting Kirzner's notion of entrepreneurship. It is critical to remember that Kirzner's entrepreneur need not own any resources to fulfill his function:

The pure entrepreneur...proceeds by his alertness to discover and exploit situations in which he is able to sell for high prices that which he can buy for low prices...It is not yielded by exchanging something the entrepreneur values less for something he values more highly. It comes from discovering sellers and buyers of something for which the latter will pay more than the former demand. The discovery of a profit opportunity *means the discovery of something obtainable for nothing at all*. No investment is required; the free ten-dollar bill is discovered to already be within one's grasp (1973: 48).

However, as Harper (1998) has pointed out, although the ownership of property is not a necessary condition for alertness, it would be extremely difficult for entrepreneurs to execute on the opportunities they have observed without it (in Kirzner's example the "sellers" and "buyers" involved in the transaction did not have known control of the related resources). Moreover, although the entrepreneur need not start with any assets, it is quite possible that he will own some of the capital necessary to execute on his plan (Kirzner, 1973: 49; 1985).

The third view that we will consider is the notion of entrepreneurship in history as one of "betting on ideas" (Brenner, 1985; Mokyr, 1990). Historians, in an attempt to explain the economic advancement of developed countries, often use this notion of

entrepreneurship. Its main focus is on the uncertainty of innovation as well as the risks and gambles involved in changing a known production process, or introducing a new product. Through historical analysis of economic development, this notion concludes that a number of institutions facilitated entrepreneurs in their role as risk takers and innovators. That is, the rules of the game provided the stability and incentive for individuals to take risks. Examples include the creation of firms to diversify risk (Mokyr, 1990), a stable monetary policy (Brenner, 1985), a predictable rule of law, the introduction of bills of exchange, insurance, private property, a standardized accounting methodology, the development of a widely understood business ethic and a regular and systematic code of government taxation (Birdzell & Rosenberg: 29-30, 113-139). These institutions served to facilitate innovative behavior due to decreased uncertainty and therefore decreased risks. Prior to the development of these institutions, the gamble of undertaking potentially innovative activities was in many cases too high. With these institutions in place, prospective entrepreneurs were able to shed a portion of the risk and participate in such activities. This notion of entrepreneurship provides insight into the impact of various institutions on the risk/reward tradeoff that economic agents, acting within them, face.

Despite differences in the notion of entrepreneurship, each of the notions emphasizes the dual role of entrepreneurship in the economic process – this is represented in Figure I. The entrepreneur, in discovering previously unexploited profit opportunities, pushes the economy from an economically (and technologically) inefficient point (A) towards the economically (and technologically) efficient production point (B). Moreover, in discovering new technology and new production processes,

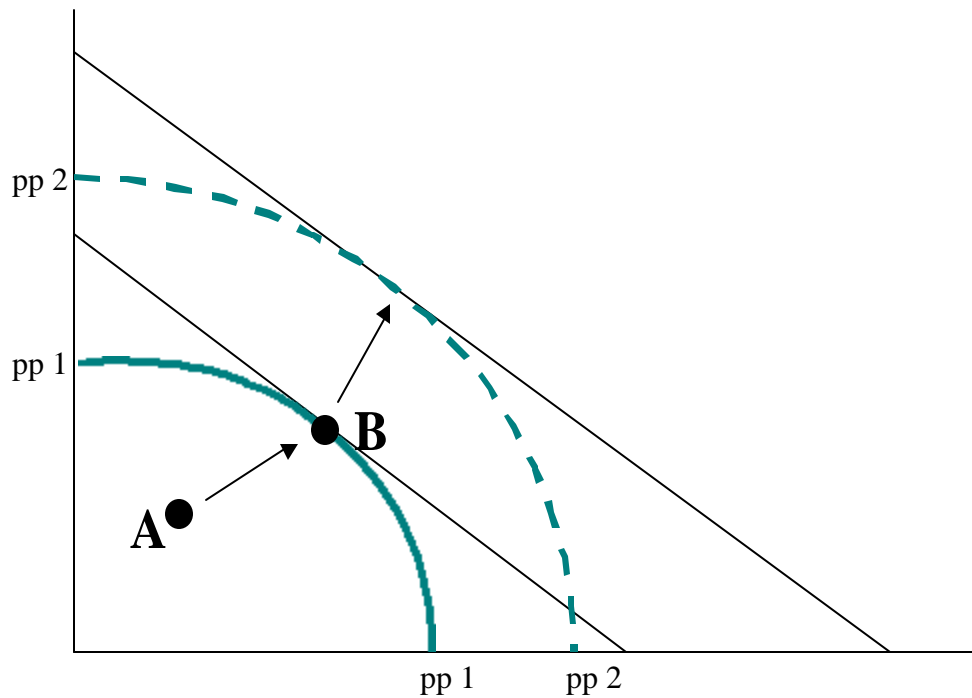


Figure I

which use resources in a more efficient manner, the entrepreneurial process shifts the entire production possibility curve out from “pp 1” to “pp 2” (Kirzner, 1985).^{ix} This shift represents the essence of economic growth – an increase in real output due to increases in real productivity.

Additionally, we can find further parallels that tie the varying concepts of entrepreneurship together – specifically the institutions or environment that are necessary for the entrepreneur to fulfill his function. We have already discussed the importance of private property for all three notions of entrepreneurship. Moreover, we can put forth several other general categories of institutions which apply to all three views of entrepreneurship: a notion of freedom, a rule of law which is certain, general and equally applicable to all, freedom of choice, and the ability to freely contract with others (Birdzell & Rosenberg, 1986; Brenner, 1994; Harper, 1998; Mokyr, 1990; North, 1994; Olson, 1996).^x

We will return to a discussion of the institutions that encourage entrepreneurship in Part V of this paper when we consider empirical studies on the topic.

III. Mechanics of Economic Development

We have established that the entrepreneurial aspect of human action is the prime catalyst for economic growth. Moreover, we have discussed several notions of the entrepreneurial function and the role that institutions play in encouraging or discouraging that aspect of human action. We now turn to a discussion of neoclassical growth economics and the role – or lack thereof – that the entrepreneur and institutional organization play in that framework.

Neoclassical growth theory has long overlooked the importance that institutions play in economic growth (Kirzner, 1985; North, 1994). Simply put, for Neoclassical economists, institutions did not matter. Instead, they focused on calculating equilibrium as well as the relevant prices, variables and outputs for arriving at that end state. It was not until the postwar period that economists began to realize the importance of the entrepreneur as the driver of economic progress. Several decades later (1960's – 1970's), economists began to focus on institutions in their analysis of economic growth (Kasper & Streit, 1998). As Stiglitz writes:

The neoclassical view prevailed until 30–40 years ago, when people became convinced that the laws of supply and demand did not explain everything about economic equilibria... The breakthrough came when people began to recognize that economic theory ought to be able to explain the reason for institutions in a society, the functions they serve and the forms they take (2000: 2-3).

The standard neoclassical growth model is defined as:

$$Y = K, L, \text{Tech}, SK, NR, \Delta ST$$

Capital (K) was originally deemed important for long-term growth since it was assumed that growth was positively correlated to the accumulation of capital, which in turn is a function

of savings and net investment. Soon thereafter, economists began focusing on the relationship between capital, labor (L) and technology (Tech). An increase in labor was seen as having a positive influence on growth. Likewise, technological advances shifted the production function out, allowing for increased levels of output. Growth theory was further refined when economists realized the importance of human capital. Increases in the skills and knowledge (SK) of the labor force had a positive correlation with increases in productivity. Moreover, natural resources (NR) were included as an important determinant in economic growth. This was a logical inclusion because natural resources, like all other factors, are scarce and there was rising concern in the late 1960's that the supply of some natural resources might soon become exhausted. Finally, in the 1970's some studies indicated that the structural organization of economic activity changes (ΔST) as income changes, or that macroeconomic growth was an extension of microeconomic foundations.

While not denying the importance of the factors mentioned above, the neo-classical growth model suffers from its inability to incorporate the relationship between time and the institutional structure.^{xi} In short, the neoclassical model fails to ask the pertinent questions *why?* and *what?* Why is there capital accumulation through forgone consumption and investment or a lack thereof? Why are there new technological advances in some countries and not others? Why is existing technology used more efficiently in some places as compared to others? What causes laborers to invest in their own development and what causes employers to invest in their employees? Why are natural resources used in different ways in different countries and why are the same resources used more efficiently in some countries as compared to others? What are the incentives that economic actors face and why do they act as they do? These questions can only be answered in the institutional context. If some countries have higher capital accumulation than others, or faster and more

innovative technological advances, or a more highly skilled labor force, we can conclude that there are incentives in place to encourage this behavior. The neoclassical growth paradigm is incapable of capturing this information and therefore is unable to accurately predict economic development^{xii}. As North writes:

Neoclassical theory is simply an inappropriate tool to analyze and prescribe policies that will induce development. It is concerned with the operation of markets, not with how markets develop...When applied to economic history and development it...ignored the incentive structure embodied in institutions...In the analysis of economic performance through time it contained two erroneous assumptions: (i) that institutions do not matter and (ii) that time does not matter (1994, 359).

The emptiness of growth theory is present not only in its inability to consider the rules of the game and the incentives that those rules provide, but also in its failure to understand the growth process itself. An economic analysis lacking institutional considerations has led many economists to offer misguided policy advice. For an example of this, one need only look at the fall of the Soviet empire and the inability of western economists to both predict its occurrence and to offer pertinent development advice directly after the fact.

Human interaction in an economy relies on regular, expected patterns of behavior. The rules of the game facilitate interaction and reduce the coordination costs of undertaking economic activities by making actions more predictable. In addition, the institutions that arise provide an incentive structure that influences the actions that economic agents, including entrepreneurs, will take. Given that the entrepreneur is the catalyst of economic growth, any theory of economic development must consider the deeper issues that effect the entrepreneurial aspect of human action. These issues include a broad range of institutions including political, legal and sociological considerations such as culture, ideology, values and preferences.^{xiii} Additionally, in order to arrive at more robust results, economic growth theorists must recognize that development is the result of a mixture of formal and informal rules and that the same rules will have different consequences when applied to different

economies. Moreover, political regimes directly influence development through both the intended and unintended consequences of their involvement in the institutional environment. Finally, adaptive institutions, which are able to change and evolve over time, are more likely to lead to faster economic development as compared to institutions that are inflexible (North, 1994).

In order to continue to develop an understanding of economic growth, one constructive endeavor for both Austrians and Neoclassicals to undertake is the development of an analytical framework which can be used to judge the effectiveness of various institutions. There is a great opportunity for the further development of this analytical construct. Initially, some measurement must be developed to identify “good” institutions from “bad” institutions. Stiglitz (2000) has suggested a basic benchmark of a good institution as one that fulfills its function. This, of course, is a very general benchmark which would need clarification to be effective. Additionally, this point of reference only considers the stated goals versus the performance. Other considerations include the allocation of resources or services due to the operation of the institution – that is, does the institution grant favors or special privilege to some while excluding others? If it is agreed that the entrepreneur is the driver of economic progress, economists should also continue to develop measurements to determine the impact of certain institutions on that function of entrepreneurship. Creating an analytical framework with which economists can study the rules of the game will only help in better understanding economic development.

III. Institutions as Cause, Entrepreneurship as Consequence

Having concluded that the entrepreneur is indeed the prime driver of economic progress within a certain institutional framework, we now turn to a survey of the literature

on entrepreneurship in the developing market context. In these contexts, the institutions within which economic actors transact are undergoing a process of transformation. As discussed, it is widely agreed that the incentive structure influences the action of economic agents. This allows us to rule out such considerations as the availability of technological knowledge, the population level, migration, etc. as factors which can serve to explain the differences in wealth across countries (Olson, 1996). Instead, we can focus on the institutional environment and consider its influence on economic activity.^{xiv}

The two most important “core” institutions for encouraging entrepreneurship are well-defined property rights and the rule of law. It is well established that those countries where these core institutions are developed have a record of strong economic growth (Boettke & Subrick; Gwartney, Holcombe and Lawson, 1998, 1999; Scully, 1988). Moreover, a majority of the other institutions that are correlated with economic growth are grounded in these two institutions. In a study of five post-communist countries, it was found that the two countries (Russia and Ukraine) placed in the “backward group” diverged from the others largely due to differences in protection of property. The study also confirmed that these countries had the weakest rule of law. Courts were used less and the cost of interacting with government was higher in these countries (Johnson, McMillan and Woodruff, 2000). In addition to property and the rule of law, the previously mentioned survey also considered firm performance (growth, contraction and start-ups) and the development of market infrastructure – which are directly linked to the core institutions.

One is able to further realize the importance of the core institutions by analyzing the “unofficial economy.” We normally see an underground economy in those countries where property rights and the rule of law do not exist or are poorly defined or enforced. Extralegal activities evolve in order to circumvent the current institutional structure which prevents or

retards key economic activities. This usually occurs through the prohibition of certain transactions, or the failure to enforce transactions due to poorly defined property rights or rule of law. Examples of institutions that stunt economic growth include government, police and/or court corruption, excessive taxation and/or regulation, unstable and/or inconsistent monetary and fiscal policy. (Frye and Shleifer, 1997; Johnson, McMillan, Woodruff, 1999, 2000; Gwartney, Holcombe and Lawson, 1998, 1999; Johnson, Kaufmann, Zoido-Lobaton, 1998; Shleifer, 1997; Shleifer and Vishney, 1993, 1994; Soto, 1989, 2000).

There have been several studies which attempt to measure the unofficial economy and the variables that cause its existence (Enste and Schneider, 2000; Johnson, Kaufmann and Shleifer, 1997; Johnson, Kaufmann, and Zoido-Lobaton, 1998). The findings of these studies serve to highlight the institutional structure – or lack thereof – which encourages underground activity. These studies have identified several general relationships between the institutional structure and underground economic activity. First, there is high correlation between the percentage of total GDP comprised by the unofficial economy and the level of regulation – the unofficial economy comprises a large share of GDP in those countries with stringent and excessive regulations. Second, higher taxes on businesses lead to higher levels of unofficial economic activity. Third, higher levels of corruption – government, police, and courts – lead to higher levels of unofficial economic activity. The study of five post-communist countries discussed above supports these findings. Russia scored a 4 out of 5 in terms of regulation (the higher the score the worse the regulations for business) and scored last in regulatory discretion and lax enforcement of rules (Johnson, McMillan, Woodruff, 2000). Furthermore, in a separate but related study, Ukraine scored last in terms of tax structures that helped business with Russia not far behind. Both countries also scored extremely low in terms of rule of law (Johnson, Kaufmann, Zoido-Lobaton, 1998). Clearly

the lack of institutions in these countries is highly correlated with their lack of economic growth.

Capital flight is yet another indicator which highlights the influence of the institutional environment on entrepreneurship and hence, economic growth. Again, the issue of capital flight is directly linked to the core institutions – private property and the rule of law. It has been established that foreign capital only matters after private property has been established. Even with capital at the entrepreneur’s disposal, there will be little incentive for him to invest it without property rights (Johnson, McMillan and Woodruff, 2000).^{xv} Additionally, as discussed in Part II, the notion of entrepreneurship – especially for Kirzner – does not require the ownership of any resources to undertake entrepreneurial activities. However, as indicated, it is often the case that the entrepreneur does own resources that are used in the execution of his plan. Furthermore, even if the entrepreneur does not own or contribute any of his own capital, it is a safe assumption that capital will be needed from some source to accomplish his plan. It is in this aspect that we can make the connection between the importance of well-defined property rights and the notion of capital.

Property rights, while critical in encouraging capital flow into a country, are not the only influencing factors. Other variables that play a key role in attracting capital are the stability and certainty of the tax structure, macroeconomic stability (including controlled inflation and stable monetary policy), trade rules and regulations and the ability of agents to develop their own businesses and firms which in turn allows for the development of investor confidence (Bhattacharya, 1999; Sheets, 1996; Wintrobe, 1998). Hernando de Soto has identified the following “effects” that have allowed the West to develop capital:

- (1) defining the economic potential of assets through securities, title, contract, etc.;
- (2) integrating legal information into one system;

- (3) making people accountable through the legal system;
- (4) making assets fungible by representing them in some standard form facilitating interaction and exchange;
- (5) forming a network of people which allows assets to move between agents; and (6) protecting transactions via the rule of law (2000: 49-62).

Recalling that the role of institutions is to remove uncertainty and facilitate social interaction, the effects identified by de Soto make logical sense. In those countries where the environment is characterized by uncertainty and riskiness, there is great potential for a lack of capital which makes it difficult for entrepreneurs to carry their plans to fruition.

In discussing overall economic development as well as capital flight, one of the key factors is the ability of agents to form firms.^{xvi} The firm is important to economic development for several reasons. As discussed in Part II, the firm allows for the diversification of risk and encourages research, development and innovation. Moreover, the firm enables workers to specialize and allows for different individuals with varying skills, knowledge and ideas to interact potentially spurring innovation. Given this, we can learn much about an institutional structure by considering its effect on startups and spin-offs.^{xvii} This indicator is closely tied to the previously discussed notion of capital. The ability to attract capital, in part, relies on how capable firms are in attracting investors. However, to grow and become more stable, firms need capital to fund their expansion. There is a circularity here that can lead to continued difficulty and economic stagnation if it is not remedied. If there is a shortage of capital, firms may have a difficult time expanding operations and gaining stability which in turn, may sour investor confidence to supply capital. Much depends on how institutions are implemented and the signals that those institutions send to foreign investors. Returning to the study of five post-communist

countries, startups and spin-offs were “stagnant” in the “backward group” while the other three countries considered (Poland, Slovakia, and Romania) were much more “dynamic” (Johnson, McMillan and Woodruff, 2000). Again, this is in line with our conclusion that those countries with well-defined property rights and the rule of law develop at a faster rate than their counterparts.

Having concluded that the core institutions for economic development are well-defined property rights and the rule of law, we must address the issue of transition. There is much literature on this topic but we will limit ourselves here to a discussion of some of the issues that a country faces when attempting to implement these institutions. Institutional change is often met with many barriers – new rules and institutions often clash with their longer-established counterparts. Additionally, there is often corruption, rent seeking and power grabbing by government officials and those who seek privilege from them. Finally, even with institutional change, the underlying values and culture of a country may be slow to change and prohibit the new institutions from being effective. Regarding privatization and deregulation, there are many issues that must be decided including the valuation and sale of public assets, distribution of sale proceeds, the speed and sequence of privatization, what sectors or industries to privatize and how much of the economy to privatize, as well as the many political and bureaucratic barriers that are sure to arise. Establishing a rule of law that is conducive to economic growth suffers from the problems discussed above as well as coordination it with privatization and deregulation.

Historically, those countries that have well-defined property rights and a strong rule of law also have a high growth rate. In considering developing countries, those that have adopted these core institutions as well as others that stem from it – freedom of choice, predictable government activity, rules conducive to market and firm development, freedom

of contract and exchange, etc. – have also grown at a faster rate as compared to their counterparts which have adopted different institutions. The adoption of these institutions has provided an incentive structure which encourages the entrepreneurial aspect of human action, and hence continued economic progress.

IV. Conclusion

While economists have a difficult time arriving at unanimous agreement, there are a few general principles where the profession is able to find common ground. It is agreed that incentives matter and that the institutional environment in which the economic agent acts serves as an incentive structure which guides and influences action. Moreover, it is widely agreed that the entrepreneur is the catalyst of economic progress.

The Austrians have long realized the importance of the entrepreneur and the need for economic analysis of the institutional organization that influences economic actors. For the Austrians, entrepreneurs are not a separate class of individuals who fulfill an entrepreneurial function. Rather, entrepreneurship is an omnipresent aspect of human action such that all individuals are entrepreneurs. Given this, entrepreneurship cannot be the cause of economic development. Instead, we must look at the rules of the game and determine the behaviors which those incentives encourage and discourage. We have demonstrated that entrepreneurship is a consequence of a country's development – specifically the adoption and development of institutions that encourage the entrepreneurial aspect of human action. Stimulating entrepreneurial action will in turn spur economic development and growth. Therefore, if economic growth is the goal, attention should be paid to achieving the institutional mix that encourages the entrepreneurial aspect of human action.

Neoclassical growth theory is ill equipped to deal with the time and institutional aspects that are critical for a firm understanding of economic development. The formalized models overlook the deeper issues – institutional evolution, political, legal and sociological - that influence entrepreneurship. There is a robust research program for Austrians and Neoclassicals alike in determining an analytical framework by which we are able to evaluate the effectiveness of institutions on growth and development.

We determined that the two core institutions, necessary for achieving the goal of encouraging entrepreneurship are private property and the rule of law. While these are not the only institutions that influence entrepreneurship, the impact of all other institutions stems from the adoption of these core institutions. Determining the institutions which encourage entrepreneurship and implementing them are very different endeavors. There are many barriers to transition including political, bureaucratic, and resistance to change. Institutions which are effective in one country may fail to have the same impact in other countries. This is due to the fact that institutions operate in a moral and cultural context, which in some cases may hamper the workings of the market. This is not a result of the market as such, but rather how agents decide to act within it.

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ⁱ For further discussion on entrepreneurship in the literature, see Kirzner, 1973: 75-84. For a discussion of the historical role of the entrepreneur in economic theory see Blaug, 1998 and Soltow, 1968. For a discussion of the development of entrepreneurship in the Austrian school, see Kirzner, 1994.

ⁱⁱ Baumol (1990) makes the distinction between “productive” and “unproductive” entrepreneurship. If anything, his analysis further highlights the simple fact that institutions matter. Our analysis of the institutional structure dovetails nicely with Baumol’s thesis in that we realize that the societal organization channels the entrepreneurial aspect of human action towards certain activities. However, while Baumol focuses on productive (i.e., innovation, etc) versus unproductive (i.e., rent seeking and organized crime) entrepreneurship we focus on this aspect of human action as being transformative or not. Transformative entrepreneurship requires alertness to hitherto unknown opportunities. An example of this is the recent trend of drug dealers in Baltimore lowering the age of their distributors and providing them with mopeds. This entrepreneurial activity (in the sense that it reflected alertness to a previously unknown opportunity) lowers the cost of getting caught and raises the cost of the police catching the distributors. Furthermore, this activity is neither productive nor unproductive in the sense that Baumol uses these terms.

ⁱⁱⁱ For a further discussion of Schumpeter’s analysis of entrepreneurship grounded in Walrasian general equilibrium, see Rothbard, 1997.

^{iv} Schumpeter was careful to distinguish between “innovation” and “invention”:

This function does not essentially consist in either inventing anything or otherwise creating the conditions which the enterprise exploits. It consists in getting things done (1950: 132).

And further juxtaposing the role of inventor with the entrepreneurial role of innovation:

As long as they are not carried into practice, inventions are economically irrelevant. And to carry any improvement into effect is a task entirely different from the inventing of it...Although entrepreneurs of course may be inventors...they are inventors not by nature of their function but by coincidence and vice versa (1960: 88-9).

Innovation on the other hand can be characterized as the introduction of a new good (s), introducing new production or technical method(s), opening a new market, new sources of raw materials or new forms of industry organization (1960: 66).

^v In his analysis of the entrepreneur, Schumpeter attempted to consider the various motives that may drive his efforts. In doing so, he put forth three groups of motives: power and independence, to succeed simply for the intrinsic value of success (i.e., for success's sake), and the joy of creating and achieving. Schumpeter postulated that only the first group of motives required the institution of private property. He also realized that discarding this motive would retard development: "These and other peculiarities incident to the mechanism of 'acquisitive' society make it very difficult to replace it as a motor of industrial development..." (1960: 93-4).

^{vi} It is well known that the differing views of the two authors on the notion of entrepreneurship has led to continued debate and a great deal of literature. Kirzner has recently put forth a reconsideration of both his and Schumpeter's entrepreneur. In doing so, he has drawn several new connections between both notions of entrepreneurship and responded to a number of the criticisms of his earlier work on this topic, see Kirzner, 1999.

^{vii} On a theoretical level, the importance of Kirzner's insight should not be understated because his work provides us with the disequilibrium foundations for the equilibrium economics that underlies standard price theory. Without these disequilibrium foundations, as Franklin Fisher (1983) has argued, our intellectual confidence in the teachings of standard microeconomics would have to fade away.

^{viii} It must be made clear that for Schumpeter, innovation in technology is the only source of change. Since he started from a Walrasian general equilibrium, tastes and resources could not be the source of change.

^{ix} Another relevant point here is the “spillover” effect of entrepreneurship. When entrepreneurs exploit profit opportunities, they simultaneously create new entrepreneurial opportunities for others to exploit (Holcombe, 1998). The entrepreneurial process is reliant on an incentive structure which encourages the entrepreneurial aspect of human action. Additionally, the entrepreneurial aspect of human action is, in a sense, self-sustaining since it creates an environment of further discovery.

^x This is hardly a complete list of the freedoms sufficient or necessary for entrepreneurship. See Harper, 1998 for a more complete list.

^{xi} In the neo-classical effort to develop a mathematically formal model, this exclusion makes logical sense. The other variables in the growth model are for the most part easily quantifiable while the institutional structure and its evolution over time are difficult if not impossible to capture in mathematical form.

^{xii} It must be noted that there have been some attempts to incorporate rule of law and private property indexes in studies of economic growth (Barro, 1997). However, these attempts still suffer from the fact that these indexes fail to capture the institutional process – i.e., the development of institutions over time. At best, these studies are able to compare two sets of historical data to observe the changes at two distinct points in time.

^{xiii} Olson found that differences in personal culture explain only a small part of differences in per capita income between the rich and poor countries (1996: 19). However, culture and ideology do have an important influence on the development of entrepreneurship (Boettke 2001: 248-265). Culture plays a key role in encouraging certain characteristics and values - independence, risk-taking, innovation, competitive aggressiveness (Lee and Peterson, 2000) - which will influence the impact that institutions have.

^{xiv} A finding in the literature on development is that foreign aid tends to be ineffective in countries that lack good governance, but effective in countries that have good governance. The trouble with this conclusion is that countries that have good governance tend to be countries that *do not* need foreign aid. Our argument about entrepreneurship and the institutional environment is simply a variant of this empirical claim - entrepreneurship generates economic growth within the right institutional environment. Entrepreneurial activity outside of that institutional environment will not be effective in generating economic growth. Our argument leads us back to the quote from Adam Smith that is at the beginning of this paper - if you get the right basic institutions, all else takes care of itself in the natural course of individuals realizing the mutual gains from exchange.

^{xv}Another point to consider is that weak financial markets may not prohibit economic growth if companies are able to reinvest their own profits, see Johnson, McMillan and Woodruff, 2000.

^{xvi} There is some empirical literature linking entrepreneurship to economic growth in the industrial organization context. While these studies do not focus on entrepreneurship as an omnipresent aspect of human action, they do realize the importance of the formation of firms as a key element in manifesting entrepreneurial activity and hence, economic growth. This literature serves as an extension of the underlying Austrian insight regarding entrepreneurship. See Audretsch, Leeuwen, Menkveld and Thurik, 2001; Audretsch, Carree, Stel, Thurik, 2002; Reynolds, Miller, Maki, 1995; and Reynolds, Storey and Westhead, 1994 for work in this area.

^{xvii} For a study of regulation barriers to establishing businesses see Djankov, La Porta, Silanes and Shleifer, 2000 and Parente & Prescott 1994. See Sautet, 2001 for a discussion of the necessity of firms for the exploitation of discovered profit opportunities.