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Productive and Non-Productive Entrepreneurship and the Interaction Between Founders and Funders

Enrico Colombatto[i] **and Arie Melnik**[ii]

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Abstract: By focusing on the economics of productive and unproductive entrepreneurship this paper explains venture capitalism in different institutional contexts, defined in terms of property rights and regulation. It is shown that venture capitalism is just one among the various possibilities of transforming good ideas into success stories; and that tends to be discarded when transaction costs are high. Although venture capitalism is likely to be positively correlated with growth, it is not a necessary condition. Still, it can provide indications as for the nature of the prevailing institutional framework and possibly signal unexploited opportunities.

[i] Enrico Colombatto is Professor of Economics at the University of Turin (Italy), Director of ICER (Turin) and Fellow at the Collegio Carlo Alberto, enrico.colombatto@unito.it.

[ii] Arie Melnik is Professor of Economics at the University of Haifa (Israel) and a Senior Fellow at ICER, amelnik@econ.haifa.ac.il.

1 A Tale of Two Entrepreneurs

This paper puts forward an explanation of the features and dynamics of venture capitalism based on what is known as the Austrian approach to entrepreneurship. In particular, sections 1 and 2 recall the concept of entrepreneurship and show its implications for the traditional economics of venture capital. Section 3 introduces the notion of simultaneous entrepreneurship and leads to the central part of the paper (section 4), where the funder-founder relationship is reconsidered and a new and broader vision of the economics of venture capital (VC) is suggested. It turns out that VC is mutually rewarding for the investor and for the receiving firm only when certain conditions apply. These findings are further clarified in section 5, where the interaction between venture capital and the institutional context is examined; and in section 6, where some implications for growth are investigated.

1.1 On the Austrian Approach to Entrepreneurship

Following the Austrians, we define entrepreneurship as the propensity of each individual to improve his wellbeing by exploiting his knowledge, resources, talents or sheer luck so as to produce goods, services and ideas and transform them into profitable opportunities.[1] Of course, individuals are not all equally endowed with entrepreneurial talents. Moreover, such talents show up in different ways as people display different propensities – say – to accept risk, to engage in one industry rather than in another, to work alone or in teams. However, it is fair to assume that the distribution of talents does not depend on race, geographic location or political regime. The same also applies to entrepreneurship, which does not follow the institutional framework, either – since the desire to improve one's own wellbeing is always there. Nonetheless, institutions and political regimes do affect the rules of the game according to which such efforts take place and the chances to obtain success. That is, individuals do react to the institutional environment where they operate. And ap-

[1] See for instance Boettke and Coyne (2003). According to this definition, consumers are not entrepreneurs. They do use their knowledge and skills in order to enhance their well-being. But do not seek to profit from the sale of products or services. Honest politicians are not entrepreneurs either, since they are supposed to make rules in the public interest, not in their own.

ply their entrepreneurial talents in different ways and to different degrees, following their own inclinations, emotions, ideologies, expectations.

In many cases entrepreneurial commitments benefit both the economic actor and his counterparts. Obvious examples are product and process innovations, but also insights in the realms of marketing and organization.[2] If so, overall economic growth takes place. In other cases all the benefits are internalized and thus restricted to the actor. It might also happen that property rights are violated, e.g. by means of rent-seeking or criminal behavior. Then, entrepreneurship actually produces unjustified welfare losses for at least some economic actors. In fact, the dynamic effects of competition always lead to welfare gains for some (the successful producers and the buyers) and to welfare losses for others (the losing producers). From an Austrian standpoint, this process is 'just' when it complies with the freedom-to-choose principle and does not violate freedom from coercion. As such, it can obviously generate undesired negative indirect effects (i.e. undesired by some). It is 'unjustified' otherwise. Of course, fear of unjustified confiscation reduces the incentive to create wealth and thus inhibits growth.

1.2 Baumol's Productive and Unproductive Entrepreneurs

Consistent with this broad framework, some years ago Baumol (1990) relied on the institutional tradition and identified two types of societies. One generates incentives that induce entrepreneurs to be productive and use their abilities in order to ultimately satisfy consumers' wants. In this context innovative action enhances overall economic growth. Instead, the alternative institutional framework encourages unproductive behaviours, whereby entrepreneurs find it rewarding to engage in rent-seeking or even in outright destructive operations (violence). When so, their skills are directed to making a profit (or avoiding a loss) without creating new wealth. In fact, they often absorb resources and/or provoke inefficiencies.

[2] The pure imitation of a product or of a process is not enough to qualify a producer as an entrepreneur. But if this producer manufactures a well known product in a way that others had not figured out or made use of before, or finds new methods to reach demand, then he is indeed a productive entrepreneur. However, to the extent he does so by preventing others from reaching potential buyers – e.g. thanks to his efforts to obtain regulation or tariff barriers – he becomes an unproductive entrepreneur (see sections 2 and 3 on the various categories of entrepreneurship).

Of course, the distinction between productive entrepreneurs and rent-seekers was already prominent in the literature on the economics of privileged interest groups, which has indeed grown enormously since Gordon Tullock's seminal work in the late 1960s. However, Baumol's contribution is important in that it posits that entrepreneurs change the nature of their activity – productive or unproductive – from one period to another, as a consequence of the reward structure in the economy. In Baumol's view this provides useful guidelines to analyze growth episodes in history. For instance, low growth during the classical period was explained by its institutional incentive structure, which encouraged entrepreneurs to concentrate on rent-seeking, protect their privileges and disregard productive ventures. The opposite was true during the Industrial Revolutions.

2 Baumol's Founders and Traditional Venture Capitalists

By developing the concepts mentioned in the previous section, we take advantage of Baumol's distinction between productive and unproductive entrepreneurship, we introduce the idea of simultaneous interaction between these forms of entrepreneurship and then use it to shed light on the relations between two categories of entrepreneurs: founders and funders. Founders engage in the production of goods and services in order to make a profit; while funders intervene by supplying financial resources.

In this paper the term 'funders' actually refers to a specific category of investors – venture capitalists (VCs).[3] If one accepts Baumol's original framework with no further qualifications the role of venture capitalists is straightforward. Within a productive-entrepreneurial context, VCs acquire control in relatively small firms with a potential for growth, and eventually end their participation by going public (IPOs), direct selling or liquidating, depending on the success and features of the company. When doing well, VCs' profits consist of the remuneration of their ability to spot a potential winner and to take steps to transform it into a real victor.[4] Instead, when the

[3] VCs will be defined in greater detail in section 4.

[4] Tykvová (2007) provides an exhaustive survey of the existing literature on the theoretical questions relating founders and funders, which are understandably concentrated on designing optimal contracts within a dynamic principal-agent context.

rent-seeking scenario applies the name of the game is creating or protecting rents, not financing new ideas and economic activities; and traditional VC funders are often out of the picture.[5] Indeed, when young companies present a potential for high profits because of their promising rent-seeking prospects, their founders devote most of their energies to maintaining and expanding their connections, rather than to hitting upon new equity and thereby losing control. That explains why unproductive entrepreneurs are more likely to raise funds by asking friendly bankers to supply credit or by going public, than by opening to venture capitalists; indeed, in Western Europe there are many examples of companies that enjoy state protection (e.g. trade barriers or exclusive licenses, if not outright monopoly power), make fat profits and succeed in attracting both bankers and shareholders looking for limited exposure to competitive pressure and prospects of safe dividends.[6] In fact, when founders are ready to accept new equity from dynamic and watchful investors the potential has often been exhausted, and traditional VCs are no longer interested.

3 From Sequential to Simultaneous Entrepreneurship

In this paper we extend the actions of the entrepreneur from Baumol's sequential rotation of efforts to a simultaneous one. A producer can do his best to generate output (through acts of productive entrepreneurship), but can also seek rents and privileges at the unjustified expense of other people's welfare (through destructive entrepreneurship); or strive to protect his wealth from aggression (through defensive entrepreneurship). All at the same time.[7] Put differently, simultaneous entrepreneurship means that founders often find it rewarding to engage in unproductive ac-

[5] A non traditional VC would be one who engages in the political market. That is unlikely to happen, though: Rent-seeking is frequently labour intensive, it often requires a long-term vision (developing personal contacts with bureaucrats and policy-makers), is not transparent. That explains why VC funders are interested neither in direct rent-seeking (if anything, their job would be funding rent-seekers, not carrying out rent-seeking themselves), nor in supporting rent-seekers (too many intangibles, exceedingly high monitoring costs, lack of transparency).

[6] See Berger and Udell (2002) on small firms and 'relationship lending'.

[7] Following the definition proposed in section 1, the notion of productive entrepreneurship also includes the activities of those who try to destroy rent-seeking situations, such as tariff barriers or normative constraints to the freedom of contract. On the other hand, lobbying to introduce tariff barriers is an act of destructive entrepreneurship, whereas lobbying to avoid legislation to that effect is here considered an act of defensive entrepreneurship.

tivities as long as they succeed in acquiring or maintaining some privileges (e.g. as a consequence of special personal relations with the authorities) so as to monitor and possibly affect the design of future regulation, reduce the bureaucratic entry costs they are facing in some industries or geographical areas, increase barriers to entry for potential competitors.

By means of these two notions – destructive and defensive entrepreneurship – we also believe we clarify an intrinsic ambiguity that characterizes Baumol's original definition, in that his term 'unproductive' is limited to what we here call 'destructive' and omits to consider defensive activities, which are in fact far from negligible (Tullock 1993). In particular, defensive activities cannot be captured by Baumol's productive/unproductive distinction for they absorb resources which could otherwise be devoted to productive purposes (hence they are unproductive), but at the same time happen to avoid greater destructions of wealth (hence they are also productive).

The reward structure of the economy – institutions – determines how profit-seeking efforts are allocated and which company features are conducive to better results. For instance, one may expect that productive entrepreneurship be intense when institutions encourage and protect economic freedom – private property and freedom of contract.[8] Instead, entrepreneurship will reveal significant wealth-destructive features if rent-seeking opportunities are promising. And will bring to light defensive elements whenever economic freedom is jeopardized, either by other individuals or by state organizations. Uncertainty and fears about policy-makers' discretionary power usually discourage (productive) entrepreneurs from taking action, but may create a favorable environment for those who believe they can successfully influence political mechanisms, or stand better chances to protect their property from outside interference. Under these circumstances one observes a mix characterized by acts of destructive and acts of defensive entrepreneurship.

In a simple extension of this principle entrepreneurs may also conceive strategies that recognize the role of unproductive activities in order to enhance the profitability of their productive efforts. As an example, this explains why small-size software developers are inclined to sell their business to larger companies, which are indeed

[8] See for instance La Porta, Lopez-de-Silanes, Shleifer and Vishny (1997), Laffont (2000), Glaeser and Shleifer (2003), Weede (2006).

able to reach a wider market (economies of scale in distribution); but are also more effective in making sure that the government does not force them to reveal the codes of their newest products, thereby transforming a private profit into a free ride.

As hinted above, company size is also likely to be affected. For instance, in countries where labour-market regulations increase in severity with the size of the firm, defensive entrepreneurs would restrict the size of their company well below what would allow full exploitation of the economies of scale. On the other hand, in countries where rent-seeking is more pervasive, large firms are going to be more effective in lobbying national governments, and size might increase beyond what would be optimal from a strictly manufacturing standpoint.

3.1 Simultaneous Entrepreneurship and Transaction Costs

Simultaneous entrepreneurship also helps to shed new light on the role of transaction costs, an issue of particular importance in the economics of venture capitalism. When analyzing efficiency, economists usually focus on how to reduce transformation and (standard) transaction costs (Williamson 1981). The former are just a matter of good engineering, as taught in introductory economics. Standard transaction costs are the expenses that producers incur in order to reach their business counterparts, specify the nature of the contract, deliver the goods that form the object of the transaction. Contract enforcement also belongs to the category of standard transaction costs. As a result, according to the traditional approach producers are efficient when they equalize relative factor prices to the marginal rate of technical substitution (optimality condition); and minimize standard transaction costs.

Although this paper does not deny the importance of standard transaction costs, the introduction of simultaneous entrepreneurship lays considerable emphasis on another category of costs, which we call 'total institutional transaction costs'. In the present context they describe the difference between the costs incurred by a profit-maximizing firm operating in the real world, where the rules of the game generate incentives to engage in unproductive and defensive activities; and the costs incurred by an efficient company in an ideal Lockean institutional context where private property, freedom of contract and freedom from coercion are guaranteed.[9] For instance, other things being equal, companies that make use of labour-intensive techniques usually enjoy more bargaining power when engaging in rent-seeking *vis-à-vis* politicians, who tend to be particularly sensitive to the dynamics of employment, even on a local scale; as a result, they might be encouraged to use labour-intensive techniques even when inefficient from a purely engineering/transformation standpoint. In fact they do so, because such inefficient techniques turn out to be more profitable, once the rent-seeking opportunities are taken into account. Similarly, small-company size might be an advantage when it comes to evading taxation or dodging regulation, even when larger size would allow lower average costs. In order to exploit at least some of the economies of scale, this may thus lead to the existence of networks of more or less cooperating small companies, or even sets of small companies that are de facto run by the same management – among other things, with problematic consequences on the statistics.[10]

As will be explained shortly (see section 4), total institutional transaction costs are likely to play a crucial role in the VC context, for they explain both the features of the firm and its relationship with outside actors, among whom funders. In the presence of significant interdependence between institutional transaction costs and the other costs of production – transformation and standard transaction – the producer might appear to be inefficient according to the traditional approach, but not necessarily under the simultaneous view proposed here. The consequence on the funders can be mixed. Although these actors might understand the importance of optimizing total institutional transaction costs, they may be unwilling to accept their implications: re-

[9] The terms 'total' is explained by the fact that these expenses do not refer to the mere cost of dealing with the institutions (e.g. lobbying). Rather, they concern the cost suffered as a result of the decision to take advantage of the institutional context in order to reap a rent or to avoid a loss. Thus, they often imply less than ideal engineering; and might also affect the choice of the standard transaction costs, say when it comes to selecting the appropriate contract.
Surely, the mainstream literature is well aware of the presence of institutional costs. Nevertheless, it generally considers them as a set of variables that affect localization strategies, i.e. the decision about where to start a new business and which the relevant time horizon should be. Contrary to our approach, the traditional view on institutional costs overlooks the analysis of their implications regarding the operational features and requirements of a firm, and largely ignores the consequences for the funding of newly-born companies.

[10] Both examples are typical of the Italian economic context, which is certainly not unique in this respect.

liance on informal rules, personal and often implicit contracts, exorbitant monitoring expenses.

Finally, total institutional transaction costs can also play a role in a dynamic perspective. Contrary to the original view held by Baumol, where the switch from productive to unproductive activities would take place only in the very long run (historical periods), we posit that today an entrepreneur must be ready to reshape the mix of his efforts relatively quickly. Then, total institutional transaction costs are the appropriate concept to use to account for those entrepreneurial decisions that must be taken in order to adapt the company characteristics to the new normative conditions. Once again, a funder who is not involved in daily management and is unwilling to depart from the business strategies set up at the beginning of the investment period – which is not unusual in the VC world – might not be quick and flexible enough to go along with what the institutional dynamics requires. Or might simply be afraid to blindly trust the founder-manager and take the responsibility for giving up on strict monitoring.

To sum up, we maintain that the ability of entrepreneurs to combine their productive and unproductive efforts following the reward structure has a bearing on the relations between them and the venture capitalists (funders). In the remaining part of this paper we make use of simultaneous productive/unproductive entrepreneurship in order to explore the interaction between such two partners in this new light.

4 The different Roles of a Venture Capitalist

Venture capitalists are a special category of entrepreneurs, loosely defined as "limited partnerships in which the managing partners invest on behalf of the limited partners" (Denis 2004, p. 304). VCs typically acquire a substantial share of equity in relatively small companies with difficult-to-assess prospects, most of the time because of the presence of intangibles and strong information asymmetries, thereby requiring close monitoring.[11] In particular, VCs pick young companies with a potential to expand

[11] VCs may be minority shareholders, but by introducing preferred equity, convertible securities and suitable contract clauses they usually make sure they retain control on strategic decisions, create

and improve,[12] possibly in growing industries; and where they sense that they could make the difference by contributing as active funders. They share ownership with the incumbent stockholders (the founders), provide expertise in various domains, often appoint new managers and revise human-resource policies in the early stages. However, although their efforts are crucial to obtain success, VCs do not usually engage in daily management. Furthermore, since they raise their capital from investors that do not abstain from taking risks and expect high returns within a relatively short time period, VCs operate on a relatively short-term basis. The life of a venture-capital fund averages 10 years, while the funding of a projects usually extends over a 3-7 year period (Tykvová 2007, p.80). That contributes to explaining why their investments tend to concentrate in high-tech sectors.[13] And also why VCs tend to disregard large firms, where structural change occurs more slowly and/or with greater difficulties, where assessing the personal qualities of the entrepreneurs and the potential of their ideas in terms of profits is more complex; and where monitoring could be considerably more expensive.[14] Not to mention that if VCs concentrated on large firms and wished to acquire control, each VC would be obliged to concentrate resources on a very small number of enterprises, thereby reducing the benefits of diversification. Surely, large firms might offer the opportunity to exploit some economies of scale in contracting and monitoring. But these are more likely to be reaped by other actors in the financial markets, such as investment funds and merchant banks, which could do the same without suffering neither from the lack of diversification, nor from the time constraints imposed by those who finance VCs.

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incentives to cooperate with the founders and do not reduce the founders' motivation. See also Gompers and Lerner (2001), who provide information about the operational features and history of venture capitalists in the US; as well as Carpenter and Petersen (2002), who document the role of new equity for small, high-tech companies.

[12] Not necessarily brand-new firms, though. As reported in Denis (2004, pp. 307-310), start-ups are financed by "angel investors", while VCs are more likely to intervene at a later stage. Each venture capitalist follows some eight, nine companies at the same time, which allows him to attend periodical, non-technical meetings with the management, study the reports and occasionally sit on the board of directors.

[13] This also matches the founders' needs of course. For risky, high tech projects presented by young firms with little tangible collateral are unlikely to be financed by debt (see for instance Carpenter and Petersen 2002).

[14] The cost and the effectiveness of monitoring are indeed crucial (Gompers 1995): VCs know that most companies they are involved in will not produce the expected results. In fact, the difference between a good and a bad VC ensues both from his ability to select potential winners and from his talent to drop losers before too much money has been disbursed.

On the other hand, founders appreciate the contribution of venture capitalists, since they provide capital and often contribute also by reducing the cost of risk. Unlike banks, they do not require collateral, and unlike public providers of equity funds they do not force the founders to disclose their plans to a wide public (including potential competitors). In addition, VCs usually offer an extensive network of contacts, which in many cases represents a welcome contribution to the marketing opportunities of the founders. Perhaps even more important, venture capitalists fulfill an important signaling function. For instance, most recently-born companies, especially if started with limited financial resources, find it difficult to persuade potential customers about the quality of their products and suppliers about their creditworthiness.[15] Similarly, VC support makes it easier to approach additional funders (e.g. banks) or qualified workforce, for under such circumstances the presence of VCs certifies the producer.

Of course, from the VC standpoint the ideal partnership with a founder is a situation where competitive pressures reduce the cost of monitoring – the size of the profits (or of the losses) will signal whether the company is badly managed – and the personal role of the founders is limited, so as to make sure that the value can be transferred with the company, rather than with the founders. For although VCs risk their resources along with the founders, founders and funders do not always share the same preferences and behavioral patterns: the potential for conflict on strategic decisions looms high (Kaplan and Schoar 2005).

In fact, the founders-funders relationship presents a number of problems, most of them typical of the principal-agent literature. The agent/founder may fail to disclose relevant information about the company and the industry (or the market niche) where it operates; by managing daily business he has opportunities to siphon off company profits into his own personal accounts; by having a smaller and time-constrained stake in the company the founder might reduce his entrepreneurial efforts and possibly deploy them somewhere else. On the other hand, the founder might be persuaded that the short-run strategies enacted by VCs ultimately damage the company, and that his increased accountability reduces his degrees of freedom, his willingness

[15] See Gompers (1995, p.1403), Cable and Shane (1997, p.171), Hellmann and Puri (2000, p. 960).

to experiment, his ability to create a suitable environment within the firm. Not to mention the risk of being replaced by outside CEOs (Hellmann and Puri 2002).

According to this (widely accepted) version of the principal-agent problem, there are three ways to mitigate the conflict. First, the investor (principal) can collect information about the entrepreneur before funding the project with the intention to screen out bad undertakings. Second, the investor can write an elaborate contract with the entrepreneur. This contract will allocate the benefits of the real investment – cash flow, control and termination rights – between the two parties so as to provide incentives to the entrepreneur, while defending the interests of the VC. Third, during the contract the VC can monitor the entrepreneur in order to ascertain that the project is run properly. All three, of course, require additional costs, which can further increase if VCs choose to intervene under syndicated forms.

In general, however, tensions between the two groups remain frequent. Sophisticated contracts and effective enforcement might reduce the cost of opportunism when entrepreneurship is entirely productive. Still, if the incentives to engage in defensive entrepreneurship are significant, the role of personal relations and informal routines can become very important, especially when the original founders and managers are few, often times close relatives to each other or at least long-time friends (Faccio and Lang 2002). Under such circumstances company loyalty and personal loyalty are one. Transparency and accountability need to be replaced by trust, formal procedures by informal dealings. As a whole, entrepreneurial specificity increases, in that the success of a firm engaged in defensive activities depends more and more on the characteristics and personal contacts of the founding entrepreneurs, on whom most informal contracts are built. Obvious examples in this direction are tax evasion and tax avoidance (both require several people turning a blind eye, or both), underreported work performances (they involve side payments to the worker), dodging regulation, coordinated access to government procurement (whereby different companies take turns and decide ex ante each time who the winner is going to be).[16]

Within this (defensive) framework venture capitalists are still an attractive possi-

[16] Entering a cartel that distributes rents (government procurement) can be necessary – and thus qualify as a defensive move – when staying out and trying to outcompete the cartel may lead to violent retaliation by cartel members. Of course, in this case the border line between defense and destruction can become very thin, for a defensive decision might easily degenerate into a destructive activity.

bility for the founders (and vice versa) if they are friends or relatives. But they tend to become a questionable choice otherwise. In the end, outsiders feel uneasy, as they remain unwilling to invest in enterprises that might be profitable, but require substantial investments in the enforcement of informal contacts.[17] Eventually either funding partners become founders themselves, or VCs prefer to move out and founders increase their dependence on personal or family funds, bank loans guaranteed by personal asset.

5 Venture Capitalisms and Institutions

The previous sections have outlined the elements of the relation between funders and founders. This section develops those insights by focusing on two institutional categories: property rights and regulation. For each category different situations will then be evaluated in order to assess how the role of VCs is affected, to what extent the presence of VCs is necessary, how companies are likely to evolve.

5.1 Property rights: Weak Enforcement and Discretionary Assignment

Today much of the academic debate about property rights regards the principles underlying their assignment and the incentive structure that those principles imply. However, it is often overlooked that the main problem with private property rights is not their theoretical regime as defined – say – in the constitution. Stability and credibility are far more important. Property rights may be clearly defined, but they are of little relevance if they can frequently be altered by ordinary politics, or 'interpreted', bypassed, watered down by the judiciary.[18] That explains why, when enforcement is

[17] See Hart (2001), Cable and Shane (1997) and Kaplan and Strömberg (2004) on the design of optimal contracts that would reduce conflicts of interests between VCs and entrepreneurs. Contrary to this (prevailing) literature, we claim that VC contracts do not break down when badly specified. Instead, they break down because they are no longer suitable when informal agreements become more important. Informal agreements are reliable when they are the result of repeated interaction over a long period of time among individuals that share the same time horizons and the same structure of accountability. This is not what happens in the VC framework.

[18] For instance, Opper (2008) notes that the success of transition in the former Soviet-bloc countries does not depend on the quality of institutions (assignment), but rather on the degree to which they can be put into effect (enforcement).

weak or inconsistent, efforts are generally devoted to protecting existing assets from outside aggression, or to joining the aggressors. As a result, entrepreneurship is likely to present a high degree of defensive or even destructive elements. Instead, productive activities are limited to short-term initiatives and VC funders are likely to shy away: profits tend to be hidden, personal relations and possibly some forms of corruption become critical, accountability to outsiders turns out to be a heavy liability. In a word, tackling institutional transaction costs raises the cost of monitoring in the founders-funders interactions and easily becomes intolerable for the latter.

On the other hand, when property-right enforcement is credible, but assignment is unstable (discretionary), rent-seeking activities at a national or super-national level are encouraged. Thus, in large countries destructive entrepreneurship pays off for large-size companies that stand a chance of internalizing a significant share of their rent-seeking efforts. Once again, these are not an ideal target for VCs, though. In addition, smaller companies can be successful only by engaging in defensive activities, which also cuts down VC presence. To conclude, VCs are unlikely to be numerous in this institutional environment.

5.2 Regulation

Venture capitalists' attitudes are also influenced by regulation, which generates two sets of consequences. By interfering with individual decision making, regulation reduces efficiency and productivity overall. As a result, profit opportunities are also less attractive. Furthermore, the weight of regulation is not uniform across industries, size, production techniques and classes of actors. Hence, in regulated environments some categories of firms can do better than others; and some defensive strategies are more profitable than others. For instance, if compared with a large-company manager, the owner-manager of a small company appropriates a larger portion of the residual created by successful defensive entrepreneurship. Thus, when it comes to defensive entrepreneurship, competitive selection is likely to reward small companies with respect to large firms. On the other hand, large companies might be favoured when engaging in destructive activities, since a large company enjoying political connections and affection may be able to drive the regulatory bodies to their own advantage and be more profitable than smaller companies open to competition, but without appropriate contacts.

True enough, VCs are not necessarily deterred by regulated environments, as long as transparency is satisfactory and the rules are enforced consistently, so that monitoring costs do not become prohibitive. It is however important to observe that the demand for VC funders is going to remain modest. As emphasized in section 2, within a regulated environment part of the profits are in fact either established rents guaranteed by normative barriers to entry, or the reward to defensive entrepreneurship, hard to monitor, heavily characterized by intangibles (trust) and by asset specificity (high dependence on the founder). Thus, VCs' hopes to make profits are realistic only for incumbents who might have dissipated the rent through bad management, rather than for newcomers competing for market shares and possibly displacing obsolete or inefficient producers.

In regulated environments venture capitalists will therefore be eager to provide financing to companies that had been poorly-managed and where the incumbent management can be easily replaced. Under such circumstances the VC profit would amount to the previously dissipated normative rent. Still, why should founders need venture capitalists to get rid of the (bad) incumbent management and replace it with new staff? In fact, they often don't, to the advantage of headhunters as well as of prestigious consultants that take the responsibility of the changes that the owners alone wouldn't have been able to enforce.

6 Growth and Structural Change

Surely, growth with modest venture capitalism is possible, as the European experience has shown. Still, the absence of VCs is important in two respects. VCs are a tell-tale sign about the prevailing institutional conditions (low institutional transaction costs) and the incentives to concentrate entrepreneurial talents on productive ventures. Hence, they act as some kind of 'entrepreneurial multiplier' by motivating other categories of funders with an interest in productive projects. In addition, growth without VC often implies the presence of undesirable path-dependence processes. As noted previously, when companies grow by carrying out substantial destructive and defensive activities, financial sources tend to be provided by banks or personal funds. In particular, banks are relied upon when founders exhibit long-time horizons,[19] or wish to supplement or replace personal funds (personal collateral is however required to cover risk). Put differently, the banking sector plays an important role either in order to manage the rent-seeking economy, thereby signalling some forms of crony-capitalism; or to provide support to small, flexible companies, possibly in the presence of substantial personal assets (family capitalism). Such companies solve the private property right problems – poor enforcement and/or instability – by shortening their time horizon, whereas flexibility allows them to reduce the cost of regulation.

As a result, the absence of VCs reveals property-right and/or regulatory features that drive the economy towards a structure characterized by a few large companies engaging in destructive entrepreneurship and a substantial number of small firms engaging in defensive entrepreneurship. The former are unlikely to expand and display a propensity to collude with the banking sector. Lack of transparency scares stock-exchange investors to a larger extent than (domestic) bankers familiar with relationship lending.[20] The latter are family funded. They are seldom based on high-tech breakthroughs, for this area is too risky and usually requires considerable investment in R&D. In addition, they are unable to increase in size. They would be beyond reach for family financing and too vulnerable to regulatory authorities to be profitable.

In the end, one might speculate that an economy that does without venture capitalism is characterized by relatively high barriers to entry (otherwise rent-seeking would be eroded or deeply resented) and a somewhat inadequate framework for impersonal trade to take place satisfactorily. Product innovation does remain attractive, especially if conceived by small-size companies that subsequently sell their rights to larger firms interested in further development for commercial purposes. Nonetheless, in a regulated economy where personal networks play a significant role a large

[19] Family loans are usually short term. Otherwise they tend to become semi-gifts: they are paid back if and when possible, but if the debtor is in trouble it is unlikely that the credit is terminated, or that the creditor is taken to court.

[20] This may be typical of areas where capital market globalization is not welcome. If so, by restricting competition established rents are protected and producer's profits are high enough not to require external financing. Following this insight, Johnson et al. (2002) have observed that local companies in the former communist bloc were not suffering from significant financial constraints during transition.

part of technological growth is likely to be imported from outside. New technologies are bought, imitated and/or adapted, for the domestic rewards to the search for potential technological breakthroughs would be rather modest, as VCs know all too well. Surely, despite disregard for significant and systematic product or process innovation (supplanted by imitation), productive entrepreneurship is not necessarily absent. For instance, one can devise new or more effective organizational structures, discern new sources of latent demand or conceive new ways to reach that demand. Still, once the potential for catching-up has been exploited, growth prospects are going to be constrained by the unwillingness to take risks on a large scale or – more precisely – to share risk and thus allow productive entrepreneurs to pursue their intuitions. Sometimes the constraint is severe, e.g. in Italy and France; sometimes its bite is minimal, as in China or India.

7 Summary and Conclusions

The previous paragraphs have suggested that venture capitalism is just one among the various possibilities of transforming founders into successful producers of goods and services. The appeal of this form of financing depends on many variables that can be summarized by referring to the institutional features within which entrepreneurs operate. In particular, venture capital tends to be a poor choice when informal rules are at odds with the formal institutional framework; or when productive entrepreneurship is stifled by violations in property rights, regulation, privileges. In the end, either the time horizon becomes very short – intangibles and asset specificity are dominant – and the outcome depends on the founders' action; or uncertainty prevails and decision-making becomes some sort of systematic groping. Both scenarios imply high institutional transaction costs and thus high monitoring costs. Often times too high for VCs' tastes.

Indeed, the need to allocate efforts across productive and unproductive activities creates an extra dimension of asymmetry between the two parties. Because of the asymmetric information between founders and funders, the founders fid it cheaper to raise capital from family and friends, whereby the cost of trusting is lower than the cost of monitoring.

Bottazzi and Da Rin (2004) rightly note that European venture capitalists fund less than one third of the projects financed by their American counterparts. Contrary to common beliefs, however, this does not imply that Europe is lacking entrepreneurship or that free enterprise in Europe is about to die. For different capitalist practices are just one of the consequences of the deep institutional disparities between – say – Continental Western Europe and the US. Indeed, differences in financing, formal and informal company structures and industrial specialization are the logical responses to diverse incentive structures. By developing Baumol's original insight, this paper has claimed that such responses can be framed and understood according to the features of entrepreneurial efforts. One way or another, individuals that engage in productive efforts frequently – perhaps always – engage in some kind of destructive and/or defensive activity as well. And the presence of venture capitalism depends on the mix of the varieties. Put differently, institutional features affect agents' behaviour, which in turn determines to what extent cooperation with VCs is mutually profitable. As a result, institutional incentives and financing options lead to alternative structures of development and different potential feed-back effects upon the institutional context.

Further insights on the nature of the interaction between venture capitalism and entrepreneurship can be produced by testing the implications of the arguments outlined in the previous sections and developing the work pioneered by Jeng and Wells (2000). For instance, the presence of entrepreneurship could be further explored by comparing the dynamics and features of newly-formed companies with the prevailing rules of the game (institutions). The role and industrial concentration of VCs across countries could be explained by referring to the formal and informal institutional features of each area, as hinted in section 5. In this light the nature of regulation, the role and effectiveness of the judiciary system, informal contracting, the extent of corruption are all obvious explanatory variables. The indirect causal links between VC intervention and family business (size, funding, informal networks) is an additional area where the theoretical instruments proposed in the previous pages could be applied.

More challenging from a speculative viewpoint is however the analysis of the eventual feedback mechanisms, which also lies beyond the scope of this work. Still, one normative clue of some consequence seems apparent at this stage already. In partial contrast with the recent literature – see for instance Antonelli and Teubal (2007) – venture capitalism *per se* is not the solution to stagnant growth, in Continental Europe or elsewhere. But it does signal the presence of a healthy business environment where entrepreneurial energies are more likely to be channeled towards productive purposes.

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