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Latecomer Entrepeneurship: A Policy Perspective

Mike Hobday and Fernando Afonso de Barros Perini

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LATECOMER ENTREPENEURSHIP: A POLICY PERSPECTIVE[1]

Mike Hobday
SPRU, Freeman Centre, University of Sussex

Fernando Afonso de Barros Perini
SPRU, Freeman Centre, University of Sussex

Introduction

This paper examines the nature and dynamics of entrepreneurship in developing countries (DCs). It also asks if and how government policies can stimulate, shape and foster the development of entrepreneurship. In the context of continuing technological progress in the advanced countries, it seems clear that entrepreneurship should play an important role in business growth and the wider processes of keeping up or catching up with the currently developed countries. But what precisely is the role of entrepreneurship in the catch up context?

The dominant 'Washington Consensus' policy approach to entrepreneurship is to recommend that DCs adopt the policies of the most advanced and successful countries.[2] For example, based on de Soto's work, policy analysts argue that entrepreneurs in DCs suffer from too much bureaucratic 'red tape', poor access to finance, unclear property rights and excessive informality and illegality. If only these barriers could be removed and firms could be made legal, then innovation and development would follow, so the argument goes.[3] Similarly, because of the perceived role of small and medium sized enterprises (SMEs) as a source of entrepreneurship and as a carrier of new skills and capabilities in the advanced economies, there are many programs to increase the rate of small firm start-ups in DCs.

To assess these issues, the paper proceeds as follows. Part 1 reviews the various definitions and functions of the entrepreneur. It shows that the Schumpeterian model of the entrepreneur as a high technology risk taking innovator has been highly influential and argues that this perspective underpins many of the policies towards entrepreneurship in DCs. Part 2 examines recent research from both developed and DCs concerning the motivation and nature of entrepreneurs, the evolution of entrepreneurial networks and the role of SMEs. Part 3 provides a critical assessment of current policies towards entrepreneurship, especially those which attempt to counter bureaucracy, reduce informality and support the fostering of SMEs.

Part 4 examines recent evidence on successful firm-level growth within East and South East Asia, touching on the roles of large firms, SMEs and the subsidiaries of transnational corporations (TNCs). Part 5 discusses policy directions arising from the above, while the conclusion briefly summarizes the main points.

One important point to note is the lack of data on entry and exit (or 'churn') patterns of entrepreneurial firms in both developed and DCs. The broad statistical evidence presented by Bartelsman et al (2004) shows that in all countries productivity growth is largely driven by within-firm (i.e. incumbent firm) performance. However, contributions to productivity caused by entry and exit are also highly significant, accounting for between 20% and 50% of total productivity growth. For all countries, this occurs *via* the reallocation of resources towards more productive uses and the increase in market contestability caused by entry of new firms. Nevertheless, for the DCs, in particular, aggregate data on new entrants probably hides fundamental differences between (a) basic SME entrants (e.g. the self-employed) oriented towards subsistence or survival and (b) SME entrepreneurial entry, focused on innovation, learning and the development of new skills. Therefore, in the analysis of entrepreneurship it is essential to distinguish between innovation carried out by incumbents *versus* innovation carried out by new entrants (including SMEs). For policy purposes, it is also necessary to distinguish between survival-based SME entry (e.g. in very poor countries) *versus* genuine entrepreneurial entry. As we argue, the failure to make these basic distinctions leads to highly questionable entrepreneurial policies in DCs.

Definitions and Functions of the Entrepreneur

Definitions

The study of entrepreneurship crosses a large number of different disciplines, including

economics, development economics, psychology, sociology, business and innovation studies. Clearly, any review of entrepreneurship requires a definition of both the subject ('the entrepreneur') and the processes undertaken ('entrepreneurship'). Even within disciplines, there is little agreement on a precise definition. Over the past two hundred years or so, observers have adopted their own definitions according to their particular objectives and approach (see Table 18.1).

In 1971, Kilby (2003), in his seminal paper "Hunting the Heffalump" proposed seven theories about entrepreneurship: four theories based on psychological constructs and three based on sociological constructs. He concluded that none of them could be validated or falsified empirically. He reaffirmed this recently (Kilby, 2003, p16): 'we still cannot quantify entrepreneurial services, but only infer them from their consequences; investigators improvise proxies drawn from their disciplines, assert that motivating appetite is the maximand of that discipline and then claim to a somewhat skeptical audience that they have captured the determinants of entrepreneurial performance'.

Table 18.1: Definitions of Entrepreneurs and Entrepreneurship

Author	Definition
Richard Cantillon (circa 1730)	Entrepreneurship is defined as self-employment of any sort. Entrepreneurs buy at certain prices in the present and sell at uncertain prices in the future. The entrepreneur is a bearer of uncertainty (Cantillon, 2001).
Jean-Baptiste Say (1816)	The entrepreneur is the agent 'who unites all means of production and who finds in the value of the products...the reestablishment of the entire capital he employs, and the value of the wages, the interest, and rent which he pays, as well as profits belonging to himself' (Say, 1832).
Frank Knight (1921)	Entrepreneurs attempt to predict and act upon change within markets. Knight emphasizes the entrepreneur's role in bearing the uncertainty of market dynamics. Entrepreneurs are required to perform such fundamental managerial functions as direction and control.

Joseph Schumpeter (1934)	The entrepreneur is the innovator who implements change within markets through the carrying out of new combinations. The carrying out of new combinations can take several forms; 1) the introduction of a new good or the same good with improved quality, 2) the introduction of a new method of production, 3) the opening of a new market, 4) the conquest of a new source of supply of new materials or parts, 5) the carrying out of the new organization of any industry. Schumpeter equated entrepreneurship with the concept of innovation applied to a business context. As such, the entrepreneur moves the market away from equilibrium. Schumpeter's definition also emphasized the combination of resources. Yet, the managers of an already established business are not entrepreneurs according to Schumpeter.
Penrose (1963)	Entrepreneurial activity involves identifying opportunities within the economic system. Managerial capacities are different from entrepreneurial capacities.
Harvey Leibenstein (1968)	The entrepreneur fills market deficiencies through input-completing activities. Entrepreneurship involves "activities necessary to create or carry on an enterprise where not all markets are well established or clearly defined and/or in which relevant parts of the production function are not completely known.
Israel Kirzner (1978)	The entrepreneur recognizes and acts upon market opportunities. The entrepreneur is essentially an arbitrageur. In contrast to Schumpeter's viewpoint, the entrepreneur moves the market toward equilibrium.
Rothwell and Zegveld (1982)	Intracorporate entrepreneurship (sometimes called 'intrapreneurship' is related to the creation of a new business inside the large corporation, a phenomenon that increases in importance along with degree of concentration of industry, and particularly of the science intensive industries.

Source: Summarized and amended from http://www.westaction.org/definitions/def_entrepreneurship_1.html

As Cantwell (2001) and many other show, according to Schumpeter (1934) the 'Mark I' (or heroic) individual entrepreneur establishes a temporary monopoly in an output (product) or input (process) markets and obtains 'super' profits from innovation, typically associated with higher output prices and lower input costs. In Mark II, recognizing the role of large firms, Schumpeter (1943) emphasized the corporate research and development (R&D) laboratory. Here, innovation occurs in a routine fashion. Cantwell (2001, p13) argues that Penrose (1959) offers a neo-Schumpeterian theory of innovation, profits and growth. Penrose saw the entrepreneurial function as one dispersed within the organization and focused on innovation as a source of profits, achieved through learning to develop new applications based on a firm's specific resources. Penrose also argued that innovative profits

should not be understood as returns to temporary positions of monopolistic market power, enjoyed by first movers, but as a return on the capability that enables firms to experiment with new technological combinations and the problem solving abilities which enable firms to innovate successfully.

Freeman (1994) argues that Schumpeter's early theory over-emphasized the central role of exceptional individuals in technical and organizational innovation and that Schumpeter tended to ignore the changing nature of the entrepreneurial function in subsequent phases of business development which focus on incremental innovation and learning-by-doing in the innovation process.

Contemporary research supports the view that innovation often occurs in an organized manner within large integrated firms. As Pavitt (2004) argues, professional education, the establishment of corporate R&D laboratories, and improvements of techniques of measurement and experimentation have increased the efficiency of discovery, invention and innovation within large firms allowing increasingly difficult problems to be tackled and solved. Pavitt (2004) contends that at least three forms of corporate specialization have supported innovation: the growth of R&D laboratories specialized in the production of knowledge for commercial exploitation; the growth of many small firms providing the large firms with specialized capital goods; a growing division between private business knowledge and public knowledge developed and disseminated by universities and other publicly funded institutions. Nelson and Winter (1982) and Dosi et al (2000) also illustrate the importance of the gradual accumulation of capabilities through specific technological paths and learning mechanisms within large firms and in industrial and technological networks. Despite the oft-cited Mark 1/Mark 2 distinction, Mark 2 activities often proceed hand-in-hand with Mark I processes especially when the latter are undertaken by spin-offs from larger incumbent organizations and managers who leave large firms to 'try their luck' in the marketplace.

In relation to DCs, as we show below, its is important to recognize that the new skills, capabilities, combinations and industries which entrepreneurs create may well not be new to the world, but only new to the local economy. Indeed, as we argue, entrepreneurs in DCs perform highly specialized 'latecomer' functions different, in many respects, from the conventional Schumpeterian entrepreneur which tends to emphasize the development of new products and technologies. In DCs, entrepreneurs often have to acquire the capabilities for 'behind the frontier' catch up innovation. Also, it is quite probable that the character of latecomer entrepreneurship will vary according to the stage of development and the particular development path of the economy in question. Therefore, this paper adopts a very broad understanding of entrepreneurship, including technology but not excluding other managerial and social dimensions. For DCs the Schumpeterian vision of the entrepreneur as an innovator whose actions lead to creative destruction needs to be supplemented with an awareness of the latecomer context, both for analytical and policy purposes.

Insights from Recent Research on Entrepreneurship

Recent empirical research challenges mainstream interpretations of entrepreneurship in various ways, pointing to important non-pecuniary motivations of the entrepreneur and showing how entrepreneurship is frequently embedded in social and economic networks which span international boundaries, acting as major forces for national and regional economic development over time. Studies also highlight ethnic and class determinants of entrepreneurial behavior which run contrary to the strictly economic interpretations of the entrepreneur.

Motivations and functions of entrepreneurs

Much of the classic entrepreneurship literature starts from the principle that a considerable supply of entrepreneurs is required to generate capitalist growth. Entrepreneurs are seen as people and/or groups of people willing to take investment risks and capable of organizing others. In a highly influential paper, McClelland and Winter (1969) proposed a direct positive relationship between entrepreneurship achievement and economic growth, based on empirical evidence from the US and North Africa. These types of arguments appeared logical and led to the creation of a large number of centers and educational curricula designed to create an entrepreneurial achievement culture among students in DCs. This line of thought is still prevalent in the DC literature on the psychological traits of the entrepreneurs and in entrepreneurship training and education in DCs (Dana, 2000; Gupta, 1990). However, McClelland and Winter's results were contested from an empirical point of view. Recent studies show (e.g. in India) that entrepreneurship programs have little if any effect on the rate of start ups. Poojary (1999) shows that entrepreneurs tend to come from traditional trading communities and tend to have little formal training and education. Instead, they are typically indoctrinated in the importance of economic success within their communities. Research in the farm equipment industry in the Punjab in Pakistan reveals that most entrepreneurs lack formal education and instead rely on each other for market and technical information (Romijn, 1999).

Part of the classic interpretation of the entrepreneur is the 'risk taking' function with respect to investment. Entrepreneurs have long been assumed to be more risk-tolerant than the general population and profit, as the reward of risk taking activities, is often part of the definition of entrepreneurship (e.g. Knight, 1921). However, this view has been challenged by empirical evidence in the US. Xu and Ruef's (2004) statistical analysis of the financial risk taking propensity of business founders, using a representative dataset of 1261 nascent entrepreneurs and comparison groups in the US consistently shows that nascent entrepreneurs

are more *risk-averse* than non-entrepreneurs. They argue that the motivations that individuals have for founding business ventures are often non-pecuniary and that in order to obtain non-pecuniary benefits, they need to be risk-averse in pursing profits, so that they can lower the risk of business closure. Drawing on concepts from organizational sociology and social psychology, they identified two classes of non-pecuniary motivations which often contribute to business formation: (a) autonomy, involving the avoidance of relationships that restrict an individual's actions in professional and personal life; and (b) identity fulfillment, including the need to develop and challenge themselves and establish an enduring personal legacy. In short, companies are often set up to enable personal and financial independence and the freedom of owners to make their own decisions. Instead of assuming that entrepreneurs are profit-maximizing agents, research needs to identify the motivations that entrepreneurs have in founding business ventures. In addition, Xu and Ruef argue that low risk tolerance and non-pecuniary motivation can impact on business strategy. For example, firms may restrict the potential growth of the firm in order to achieve the personal goals of the founder. This may explain why many small firms remain small and want to remain small.

Non profit motivations are also identified in DCs. In Kenya, Nelson and Mwaura (1997) analyzed 30 fast growing SMEs of between 10 and 100 employees, identifying the strategies of these entrepreneurs through the various stages of growth of their firms. They observed that firms strongly valued personal and financial independence and the ability to make their own decisions without interference from a higher authority. They were also very much concerned with the economic well-being of the family. However, these very motives, sometimes prevented the infusion of further resources for expansion and led to managerial problems such as a reluctance to delegate responsibilities to subordinates.

In DCs, the analysis of entrepreneurial profiles varies greatly in terms of background, self-confidence, creativity, independence and literacy. Relations with economic growth are

complex and sometimes contradictory. Kilby (2003) argues that the identification of a unique set of entrepreneurial activities or psychological characteristics, irrespective of time or place, was always misconceived and posed a barrier to improving entrepreneurial practice. For example, the skills and personality attributes required in Schumpeterian (or technology leadership) entrepreneurship is at odds with the adaptive and imitative behavior frequently observed in successful DCs (see Part 4 below).

The embeddedness of entrepreneurship (in social and economic networks)

Research shows how entrepreneurship is often associated with class and ethnic background and embedded in close social networks. According to Leff (1978), the concentration of economic power in ethnic minorities is a frequently observed characteristic in DCs. Focusing on small scale entrepreneurship, Sverrisson (1993) attempted to explain why industrial development has proved to be so difficult in sub-Saharan African economies. Sverrisson (1993) analysed small scale carpentry enterprise in two African towns, Nakuru (Kenya) and Mutuare (Zimbabwe). He showed that small firms are embedded in rigid production, social and political networks and alliances which can sometimes retard local innovation and adoption of new and even relatively mature, simple technologies. In line with other studies on Africa, this research shows that within these networks particular social classes take an entrepreneurial lead and, in some cases, arrest the development of other classes by preventing entry. Also, typically, the broad range of customer categories served by each enterprise led to a lack of specialization and division of labor, and a failure to exploit economies of scale and scope. Local firms tended to turn to customers, with whom they had close personal alliances for production finance, rather than formal financiers or banks so that the majority of the enterprises were not fully integrated into the formal economy and the laws regulating it.

The collective, embedded, informal nature of entrepreneurship is illustrated by research on Pakistan.[4] In a study of the Punjab farm equipment industry Romijn (1999) shows how hundreds of firms progressed from simple fixed structures in the 1960s such as moldboard ploughs and ridges to relatively complex devices such as rotary cultivators with internal power transmission systems. Small-scale farm equipment manufacturers lacked formal technical education and worked closely together to develop and improve on technology. Similarly, Chan (2001) shows how China's entrepreneurial networks share common values and unwritten codes of conduct, firmly embedded in strictly enforced social norms which function to reduce risk and uncertainty. In South India, research shows the importance of social networks of entrepreneurs in the information and communication technology cluster (Taeube, 2004). Membership of these networks can be very useful. According to Schak (2000), Taiwanese SMEs started to operate in networks in response to governmental bias in favor of big business, providing new enterprise with a sense of purpose and direction and formal and informal reward systems.

Evolution of informal networks into formal business activity

Research on both China and India shows that, informal entrepreneurial networks can sometimes evolve into highly successful formal centers of regional and national economic growth. An anthropological analysis of the South Indian software cluster indicates that values and casts are closely associated with successful economic behavior. According to Taeube (2004) the software industry is dominated by South Indian Brahmins (traditionally the priestly and knowledgeable cast group), despite the entrepreneurial tradition of the Vaishyas (the merchant or trader cast). This study suggests that a process of social networking among these groups, which started at university and college at home and abroad,

was important to the growth of the software cluster.

Recent studies on overseas Chinese networks shows how these informal networks evolved over the centuries to manage and mitigate ever more complex risk-taking activities (Chan 2001, Chan and Chiang, 1994). Formal overseas Chinese businesses now dominate many branches of the South East Asian economy, controlling more than two-thirds of the region's retail trade and large proportions of the shares of listed equity in South East Asia (see Table 18.2). These formal networks co-exist with informal practices. So-called *Guanxi* (or bamboo networks), for example, continue to link together ethnically homogeneous and disciplined groups of entrepreneurs. These networks are formed on the basis of shared social attributes such as family, kinship, schooling and friendship. G*uanxi* places considerable emphasis on unwritten codes of conduct to guard against opportunistic behavior of its members. Chan (2001) argues that *guanxi* functions to minimize risk and reduce uncertainty. However, there is a thin line between *guanxi* as an informal mechanism of exchange and as corrupt practice, given its uncodified and cryptic nature. Many of these networks may well have started out as informal, small scale endeavors, but, as Table 18.2 confirms, by the early 1990s they represented a large proportion of formal listed equity in the five South East Asian countries mentioned.

Table 18.2: Overseas Chinese Holdings in Listed Companies in South East Asia

	Ethnic Chinese in 1991 (millions)	Percent of population	Share of listed equity
Indonesia	5.81	3.5	73%
Malaysia	5.33	29.0	61%
Philippines	1.2	2.0	50%
Thailand	5.57	10.0	81%
Singapore	2.14	77.0	81%

Note: Chinese holdings in listed companies not under state or foreign control, as percentage of market value of all shares in such firms.

Source: Sakura Bank, Nomura Research Institute, in *Asiaweek*, October 20, 1993

As Chan (2001) and others argue, overseas Chinese practices should be viewed as a entrepreneurial approach that has proven economic value under particular, often difficult, circumstances. Overseas Chinese business networks, through large scale migratory movements, have enabled large numbers of entrepreneurs to engage in investments in increasingly large scale, high technology activities upon a basis of trust which is highly valuable in an uncertain and rapidly changing environment.

The role of SMEs and business start-ups

SMEs are often treated as synonymous with entrepreneurs and there are many SME policies to stimulate entrepreneurship in both developed and DCs (see Part 3.2 below). However, Evidence from both OECD countries and DCs is ambiguous on the role of SMEs in economic growth. SME advocates such as Audretsch and Thurik (2001) strongly associate entrepreneurship with the participation of SMEs, based on research in OCDE countries. They argue that an increase in SME activity tends to result in higher subsequent growth rates and a reduction in unemployment. They contend that entrepreneurship generates growth because it serves as a vehicle for innovation and change. The proxies they use for entrepreneurship are the relative share of economic activity accounted for by small firms and the self-employment rate. Economic performance is then measured by economic growth and any reduction in unemployment.

The global entrepreneurship monitor (GEM) (Reynolds et al 2004) of the London Business School purports to provide an authoritative empirical basis for understand the effects of entrepreneurial activity in the economy. The annual GEM assessment involves surveys of a representative sample of the adult population. In 2003 more than one hundred thousand interviews were completed in 37 developing and developed countries using a

standardized methodology. The GEM database provides comparative data on entrepreneurship, which is used to calculate the total entrepreneurship activity (TEA) index which refers to working-age adults in the population who are either involved in the process of starting-up a business or are active as owner-manager of enterprises less than 42 months old.

However, as noted in the introduction, empirical evidence reviewed by Bartelsman et al (2004) on entry and exit patterns indicates the need to distinguish between (a) small firm, basic entrants including the self-employed (perhaps resulting from structural adjustment programs or recession and mainly oriented towards subsistence or survival) and (b) classical entrepreneurial entry, focused on innovation, learning and the development of new skills. In the DCs, in particular, the role of new entrants as carrier of technological advance cannot be captured by aggregate data on entry (or exit) or business start-up participation.

Because of the mistake of conflating start ups with entrepreneurial activity, the results of the GEM analysis are not credible. Countries such as Taiwan and Hong Kong which have demonstrated their entrepreneurial capabilities find themselves at the low end of the scale. Conversely, countries with poor development records (e.g. Uganda, Mexico and Venezuela) are right at the successful end. This is because the TEA figures simply report on the numbers of people involved in the creation of new companies as a proportion of the population. They do not reflect on whether these firms are actually engaged in entrepreneurial activity as defined in Part 1 above. Indeed, far from being an entrepreneurial index, a high TEA may reflect highly undesirable social characteristics, such as rising unemployment, economic decline and a lack of educational opportunities. As Reynolds et al (2004) admit, factors which influence a high rate of entrepreneurial activity include low growth in national wealth, a higher prevalence of young adults in the workforce, a larger agricultural sector, reduced social and economic welfare benefits and less participation in secondary and postsecondary education. This implies that the rate of entrepreneurship is a function of external

developmental circumstances rather than *vice versa.* High rates of entrepreneurship as measured, can reflect extremely undesirable economic conditions rather than any potential for innovation and growth.

This is a serious issue in many DCs. In Latin America for instance, since 1980s, the number of micro enterprises expanded significantly throughout the region. In Mexico, for example, whereas firms with fewer than 15 employees accounted for 84 percent of all manufacturing firms in 1985, they accounted for 93 percent by 1998. Similarly, in Brazil, in just five years, from 1994 to 1999, the percentage of industrial firms with fewer then ten employees increased from 75 to 80 percent. This is hardly a measure of burgeoning entrepreneurship but an indication of economic recession and industrial decline.

The argument that small firms do not necessarily play an important role in entrepreneurial activities is supported by Fehr and Nils Henrik (1995) in their in-depth analysis of entrepreneurial activity and firm formation in Zambia, based on a survey of 215 firms in manufacturing. They show that small firms, albeit large in numbers, were relatively unimportant in Zambian manufacturing, both with regard to output and employment and as a source of future growth. The survey concentrated on four manufacturing industries namely food, textiles, wood products and fabricated metals industries. Enterprises were chosen randomly and covered tiny, informal sector workshops, SMEs and large, parastatal and foreign owned companies. The study gathered information on the owner's personal history (including education, experience and wealth), the start up of the firm (including financing, investments and employment) and the firm's development and performance. The study showed that firms which were established at a small scale tend to stay small. Although most surviving firms do grow over time, the smallest entrants very rarely grow to become more than small or moderately sized. The majority of African firms did not grow out of the group of tiny firms; 71 of the 80 firms that were founded by an African entrepreneur started out

with less than 10 employees, and of these only 3 (4.2%) eventually employed more than 25 people. Consequently, the small entrants contributed only modestly to manufacturing industrial activity, both with regard to employment, capital and output. Regarding the smallest African firms, while the few that grew made a useful contribution to growth, Fehr and Henrik argue that from a strictly economic perspective, the small entrants were largely irrelevant, representing only 'noise in the fringe'.[5]

In summary, what recent research indicates for both advanced and DCs is that the capitalist entrepreneur does not have a stable or 'best practice' face represented by the classic individual 'heroic' Schumpeterian entrepreneur. On the contrary, modern entrepreneurship is highly diverse in its nature, embedded in social networks and stimulated by many diverse factors. Interestingly, some of these networks inhibit while others promote innovation and economic growth. Therefore, one cannot assume that entrepreneurial groups are always positive in relation to economic development. In addition, the tendency to conflate start-ups and SMEs with entrepreneurs fails to distinguish between low productivity non-entrepreneurial firms and genuine innovative entrepreneurial firms. Unfortunately, these confusions sometimes spill over into policy making, an issue to which we now turn.

Policies for Entrepreneurship in DCs

This section provides a critical examination of three sets of modern policies towards entrepreneurship: (a) policies to reduce government bureaucracy; (b) policies to increase the rate of start ups; and (c) policies to encourage venture capital. Implicitly, and sometimes explicitly, each of these sets of policies is based on the conventional Schumpeterian view of the entrepreneur. As such, they identify 'best practices' in the now advanced countries and apply them directly to today's DCs.

Policies to Reduce and Reform Government Bureaucracy

Some influential policy research is highly critical of the nature and impact of government bureaucracy in DCs. In particular de Soto's writings on poverty, property systems and capital accumulation, highlight government obstructions and impediments to market developments and entrepreneurship in DCs (de Soto, 2000). He identifies explicit obstacles (e.g. excessive state bureaucracy and poor property rights) that increase transaction costs and prevent scale and scope from emerging from basic entrepreneurial activity.[6]

As a typical example, to license a small garment shop (with one worker) in Lima Peru, de Soto's team attempted to legalize the operation by registering the business according to existing law (de Soto, 2000, p28). It took the team of well educated researchers six hours a day for 289 days. It cost US$1,231 in total (31 times the monthly minimum wage) and required 207 administrative steps, involving 52 government offices. To obtain legal title for the small piece of land took a further 728 steps, a total of 26 months of red tape. De Soto provides many similar examples for the Philippines, Egypt, Haiti, Mexico and other DCs.

De Soto (2000) argues that most DCs lack a clear and enforceable property system which is one of the important foundation stones of capital accumulation. He concludes that many entrepreneurs and businesses are forced to operate outside the formal capitalist system because of government bureaucracy and inefficiency. Entrepreneurs stand no chance of obtaining loans against their homes, land or business assets for capital investment. As a result, he contends that a huge amount of 'dead capital' exists in the developing world which is excluded from legal structure of capital accumulation.

De Soto (2000) argues that the total value of real estate held, but not legally owned, by the poor of the Third World and former communist nations is at least US$9.3 trillion. He contends that there would be major benefits from the reform of public bureaucracy and

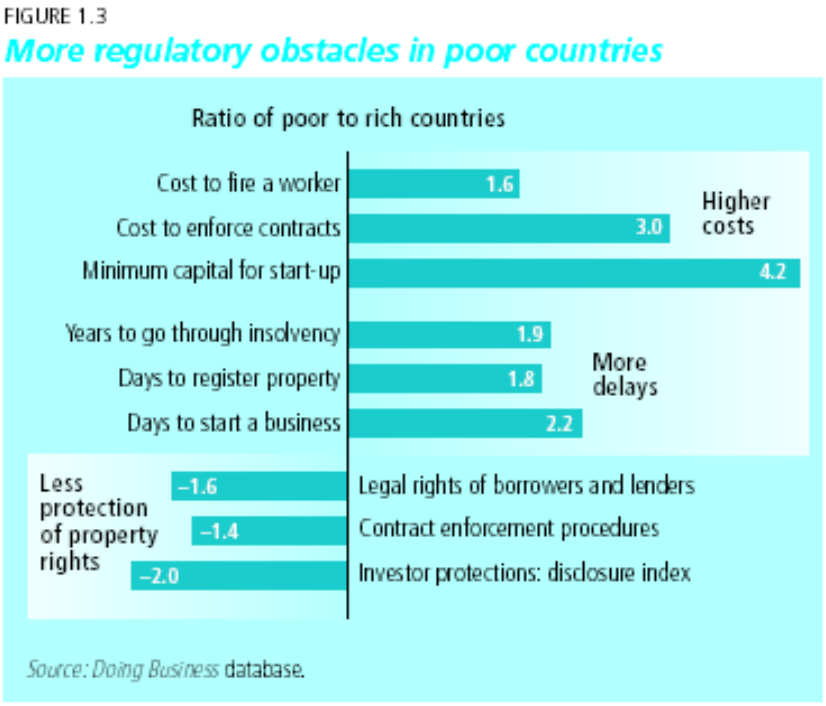
proposes that government should recognize the economic value of assets and make public sector property officials more accountable. One of de Soto's reform projects was carried out in Peru. According to de Soto, between 1982 and 1996, a relatively small investment (US$17 million by USAID and US$1.2 million from the ILD) managed to incorporate US$9.4 billion into the formal system between 1991 and 2002. As a result 6.3 million Peruvians below the poverty line legally owned their real estate assets. The value of these formalized real estate assets increased by US$2.2 billion and the income of formalized real estate owners increased by US$3.2 billion; 380,000 business enterprises belonging mainly to the poor were formalized, representing 560,000 additional legal jobs and increased tax revenue by US$300 million a year (source: ILD Website http://www.ild.org.pe/). However, other observers question the gains from this and other projects (e.g. Calderon, 2004; Rossini and Thomas, 1990) arguing that household access to formal credit has been disappointing and that the title deeds to property do not necessarily lead to a rise in real credit.

De Soto's arguments and proposals have been highly influential in policy circles such as the World Bank, IMF, UNDP, International Finance Corporation and International Bank for Reconstruction and Development. For example, they are explicitly referred to in the World Bank's 'Doing Business' database (World Bank, 2004). This aims to provide comparable objective measures of the state of business regulations and their enforcement across 145 economies. The 2005 database (the third edition) argues that poor and DCs impose far more obstacles to entrepreneurship and business development than do more developed economies, involving greater costs, delays and barriers to owning property, starting-up businesses, declaring bankruptcy, protecting investors, enforcing contracts and legal rights and in laying off workers.

Djankov and McLiesh (2005), leaders of the Doing Business project, argue that there is straightforward, positive relationship between the 'ease of doing business' and the human

development index, suggesting that reforms could have a positive and widespread impact in developing economies. They contend that more than two percentage points could be added to the growth of the 'most difficult countries to do business' if they adopted the regulations that exist in the least difficult ones (Djankov and McLiesh, 2005).

Figure 18.1: Regulatory Obstacles in Poor Countries

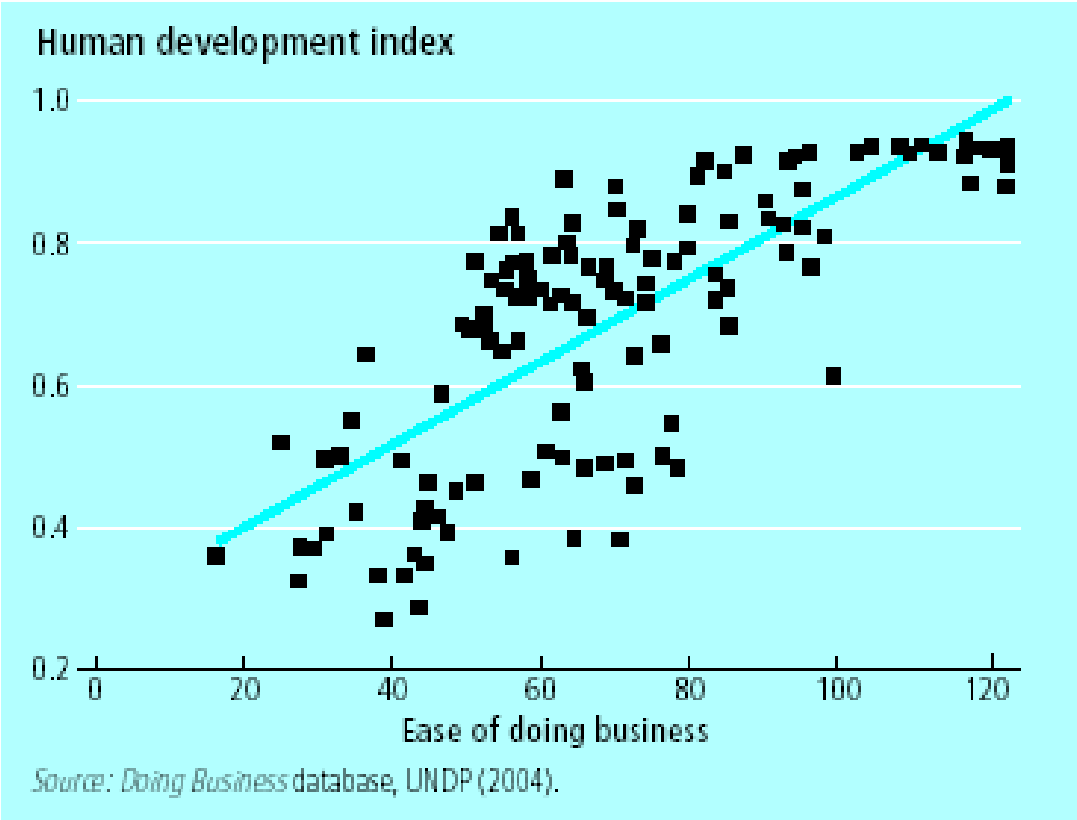


Source: Djankov and McLiesh (2005); http://rru.worldbank.org/DoingBusiness/

Figure 18.2: Simple Business Regulation, More Human Development

FIGURE 1.6

Simpler business regulation, more human development

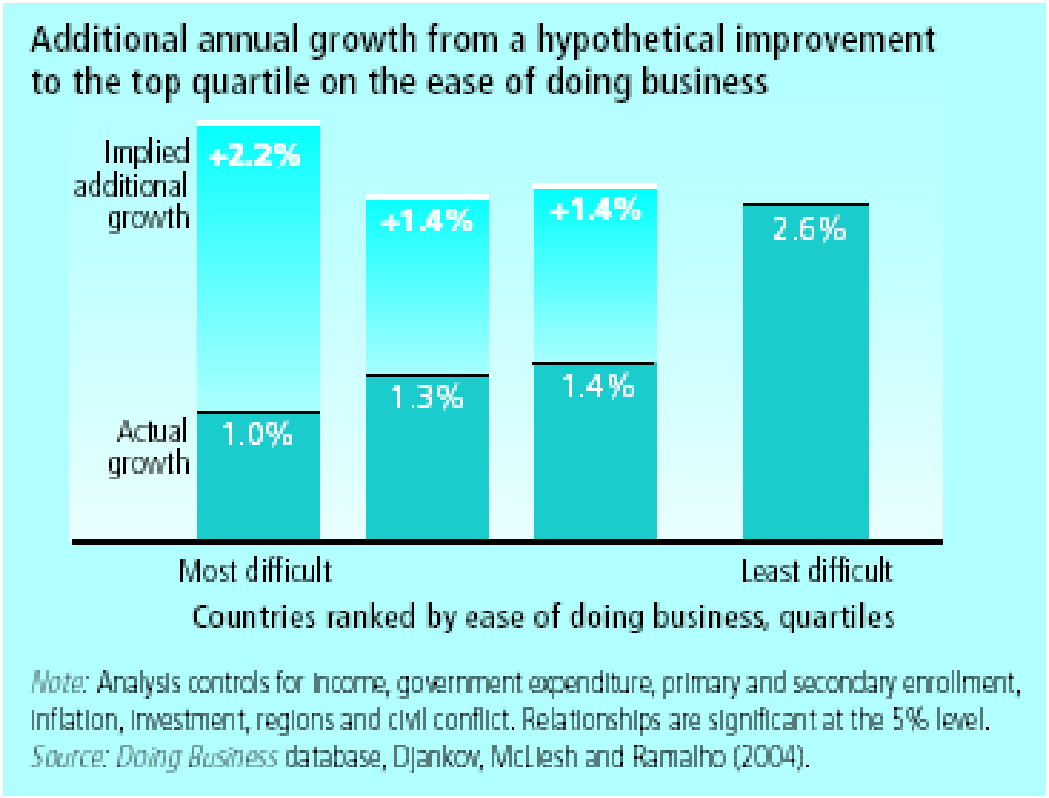


Source: Djankov and McLiesh (2005). Available at: http://rru.worldbank.org/Documents/DB-2005Overview.pdf

Figure 18.3: Ease of Doing Business is Associated with More Growth

FIGURE 1.5

Ease of doing business is associated with more growth



Source: Djankov and McLiesh (2005); http://rru.worldbank.org/DoingBusiness/

According to Djankov and McLiesh:

> It takes 153 days to start a business in Maputo, but two days in Toronto. It costs $2,042 or 126% of the debt value to enforce a contract in Jakarta, but $1,300 or 5.4% of the debt value to do so in Seoul. It takes 21 procedures to register commercial property in Abuja, but 3 procedures in Helsinki. If a debtor becomes insolvent and enters bankruptcy, creditors would get 13 cents on the dollar in Mumbai, but more than 90 cents in Tokyo. Borrowers and lenders are entitled to 10 main types of legal rights in Singapore, but only 2 in Yemen. In Nigeria and Senegal the property registration cost amounts to about 30% of the property value. And even when a formal title is well-established, it will not help to increase access to credit if courts are inefficient, collateral laws are poor and there are no credit information systems, because no one would be willing to lend. Add to this rigid employment regulation, and few people will be hired. Arguably women, young and low-skilled workers are hurt the most: their only choice is to seek jobs in the informal sector.

The overall position in terms of regulatory obstacles is presented in Figure 18.1. The benefits of simple regulations in terms of human development (see Figures 18.2 and 18.3)

according to Djankov and McLiesh (2005) are immense. They also produce figures which suggest a strong positive correlation between the size of the informal sector and regulatory procedures (p4). This approach, and the reforms adopted, are best viewed as a subset of the wider range of economic and business reforms contained in the 'Washington Consensus', referred to recently by Rodrik (2004) as the 'augmented Washington consensus' (see Annex A for a detailed discussion).

Although superficially these types of arguments may appear plausible, there are at least four sets of problems with them. First, the policy assumption that there is a linear causal relationship between excessive regulation and low rates of development is questionable. It may be that the economic environment causes low rates of entrepreneurial activity and high rates of bureaucracy, rather than *vice versa*. Indeed, there is evidence to show that the external environmental in terms of innovative demand and opportunity exerts a significant impact on the emergence and development of entrepreneurship (Reynolds et al, 2004, see Part 2 above). If this is the case, then regulatory reform alone is unlikely to produce much entrepreneurial activity. At the very minimum wider economic improvements which lead to more business opportunities would need to precede or accompany regulatory reforms for the latter to be successful. Such economic improvements might require new macroeconomic policies and an entirely different national development strategy.

Second, as Amin (2002) argues, de Soto and similar analyses fail to appreciate the economic functions of the informal sector. Informality is simply treated as a 'problem' to be solved. Amin (2002) argues that informal activities can stimulate growth of the formal market economy by keeping down urbanization costs, contributing to competitiveness and promoting recycling through buying and selling of waste. In addition, the informal sector constitutes a flexible labor market which absorbs labor from the formal sector in the face of new trade regimes and structural adjustment policies which increase unemployment in the

formal sector.[1] As Moore (1997) shows, many thousands of formal sector jobs have disappeared in DCs and the growth of the informal sector is rising rapidly as a result. Amin (2002) illustrates the sheer scale of the informal sector labor force (including self employed workers, unpaid family labor and hired labor employed by informal sector enterprises). In many countries this varies between 50% to 60% of total non-agricultural, urban employment. If extended to include the agricultural sector, the size of the informal sector rises to 90% of total employment in India, Bangladesh and Nepal.

Third, it may well be that informal systems develop and grow and during the development process become increasingly formalized and legal (as has been the case of the overseas Chinese investments which now dominate the listed stock market in South East Asia; see Part 2 above). In which case, informality can be a 'stage of development' issue, rather than a problem to be solved. If government attempted to legalize and register informal activity in advance of the formalization stage, this would probably have very little effect on productivity and income growth.

Fourth, de Soto (2000), and Djankov and McLiesh (2005) do not examine cases of success (e.g. in East Asia and South East Asia) where development has widely occurred. So it is not possible to say whether property rights and bureaucracies were any better in these cases than in the cases of failure studied. In fact, if we look at the position of two of the most successful larger developing nations in the past decade, China and India, we find them very low down on the World Bank's 'doing business' 2006 data base (India at 115 and China 91 out of 155 countries; World Bank 2005). This also suggests there is little correlation between the doing business rankings and economic success.

Nor is there much explanation of why high levels of bureaucracy exists. It may be

[1] Under these conditions informality can be seen as a rational and socially responsible response to harsh economic reality and falling opportunities in the formal sector.

that the style, stage and level of late development has led to high regulation and bureaucracy, as DCs imitate more developed countries and attempt to implement 'good regulatory practices' established by the now developed countries. Or expanding government bureaucracy may be a response to unemployment and low growth. Alternatively, as Krueger (1974) argues, excessive government regulation and intervention (e.g. *via* the granting of licenses) can function as a means of rent extraction by particular groups in society. The granting of licenses by government officials can lead to competition for very large rents, encouraging bribery and, in the extreme, diverting entrepreneurs into rent seeking away from innovative activities. If this is a cause, then deep political and institutional changes are needed, which would probably conflict with powerful vested interests. Superficial reform programs merely scratch the surface of the problem and could provide a breathing space for officials to avoid economic restructuring around genuine innovative activity.[8]

The modern policy approaches to bureaucracy are therefore highly dubious and lacking in analytical and historical insight. The policy reforms suggested do not necessarily follow from the problems identified, causation is not established or considered, and the method of calculating benefits (comparing advanced with developing countries) is naïve in the extreme.

SME Policies as Entrepreneurship Policies

Policies to encourage entrepreneurship often take the form of SME promotion and micro-finance programs, arguing that the latter contribute to employment growth and that high-tech SMEs in new economic sectors promote new growth opportunities and enable innovation (e.g. Audretsch and Thurik, 2001). The latter argue that policies for encouraging R&D, venture capital and new-firm start-ups, lead to greater entrepreneurship *via* SMEs as well as higher economic growth and reduced unemployment. In their words: "as the evidence shows,

just as countries reluctant to shift their industry structures towards smaller entrepreneurial enterprises will be penalized by lower growth rates and higher unemployment, those nations able to harness the forces of technology and globalization by facilitating entrepreneurial activity are rewarded by growth dividends and reduced unemployment" (Audretsch and Thurik, 2001).[9]

However, as we have argued above, there is a major difference between starting a business of whatever form and being an entrepreneur in the sense of being a carrier of new technology, skills and capabilities. In fact, self-employment, particularly in the informal sector is often the mark of backwardness and not of dynamism. This point has led to deep misunderstandings concerning the levels and growth of entrepreneurship in DCs.

Overall, the evidence on SMEs calls into question not only the entrepreneurial indices but also policies which aim to increase start-up entrepreneurship in order to generate innovation and development. Indeed, development, historically, has entailed the reduction in the levels of the self-employed (pseudo-entrepreneurial) part of the economy. Furthermore, other evidence questions the role of SME creation in employment and poverty reduction, which is another important argument for SME promotion policies. Using data on SME participation in over 70 developing and developed economies and growth rates during the 1990s, Beck et al (2003) argue that cross-country comparisons do not indicate that SMEs exert a particularly beneficial impact on the incomes of the poor. Nor is there any significant relationship between SME growth and measures of the depth and breadth of poverty. Beck's statistical evidence does not support pro-SME policies in DCs. Rather, the results show the importance of creating a business environment that fosters competition and commercial transactions for all firms, large, medium and small.

Nevertheless, SME and microenterprise policies are widely supported by international institutions, donor governments and nongovernmental organizations. For example, the World

Bank Group approved more than US$10 billion in SME support programs over the five year period ending in 2002 (Beck et al, 2003). Shadlen (2004) argues that there is a danger that further microenterprise promotion will allocate scarce public resources in a way that prioritizes SMEs over industrial integration and dynamism. Shadlen contends, convincingly, that small business policies are best viewed in terms of their contributions toward industrial transformation and economic development in general.

Venture Capital Policies

As in the case of SME policies, support for venture capital markets is put forward as a means for increasing entrepreneurship in both developed and DCs. These measures are often based on the notable successes of US high technology firms. However, the data show that even in the case of high-tech start-ups in the developed countries, venture capital is only ever a very minor source of funds for start-up investments, apart from notable cases in the US and Israel (Reynolds et al, 2004). The formal venture capital market is often overestimated in its importance, as a large proportion of investments for start-ups comes from other sources. Instead, informal investments are far more important in start up and expansion than venture capital.

The availability of venture capital is concentrated in a few developed countries. Overall, fewer that 0.01% of nascent entrepreneurs launch their new ventures with formal venture capital or 'business angel' investments. The US accounts for a large proportion of total venture capital (80% of all venture capital worldwide, Reynolds et al 2004) where it has helped support innovative high growth firms, including Intel, Microsoft, Apple, Dell, Genentech, FedEx, Cisco, Netscape, Google, Ebay, and Amazon.com.

Increasingly though, high technology start-ups are receiving less support from venture capital even in the US. In the US, speculative capital has shifted away from start up/early

stage investments to acquisition of shares in existing companies (i.e. buy outs), where it now represents more than 80% of total funds. Early stage investment accounts for only 4% in 2003. The European venture capital market, especially the UK, was quite significant during the 1990s. However, it reduced dramatically after 2001 (Earley, 2004).

Successful Firm-Level Growth in East and South East Asia

As Amsden (1989), Amdsen and Hikino (1994) and Amsden in Chaper XXX in this volume, show, large locally-owned firms, often conglomerates, are a frequent element of successful latecomer economic development. In contrast to de Soto (2000) and other studies cited in Part 1, which focus on the failure of entrepreneurship in DCs and barriers to progress, Amsden points to numerous examples of successful firm-level growth in support of national economic development.

While there can be no doubt that in South Korea, India and other fast growing economies, large domestic firms play a significant role, there are at least three areas of interest from the perspective of 'latecomer entrepreneurship' (as distinct from 'normal' or advanced country entrepreneurship) which are important from a policy and analytical perspective.[10] First, what is the nature and path of technological progress of domestically-owned, indigenous firms and does this differ from advanced country enterprise? Second, what is the entrepreneurial role of TNCs, especially in South East Asia, where they dominate exports. As Amsden argues in Chapter XXX, TNC investments cannot always be relied upon for development and therefore it is interesting to ask whether there are any lessons from the successful South East Asian cases of TNC-led export development for other developing economies. Third, how important are small firms for entrepreneurial development? Clearly, in the case of Korea and India, small firms appear not to have played a leading role. However, the cases of Taiwain and China suggest there may be a role for SMEs both in

support of larger enterprise and as a source of larger firms to emerge. The case of electronics, the largest export sector in East and South East Asia, provides interesting evidence on each of the above questions.

The nature of latecomer technological progress

First, regarding the nature of latecomer technological progress, one very important mechanism for exporting electronics producers over the past 30 years or so, was the original equipment manufacture (OEM) system, where large TNCs based in the developed economies sub-contract production to local Asian firms. The OEM system evolved and expanded through time, functioning both as an institutional mechanism for acquiring technology and for gaining access to export marketing channels (see Table 18.3). The system began experimentally in fairly small ventures in the 1950s and early 1960s, pioneered by US semiconductor assembly producers (e.g. Texas Instruments and IBM). Local firms gained economies of scale and learned basic production operating techniques. Factory workers, technicians, engineers and managers were trained in what was then modern technology as well as new management techniques, by the large TNCs who wished to gain the advantages of low cost labor.

Table 18.3: Technological Development of Korean and Taiwanese Firms: from OEM to ODM to OBM

	Technological Transition	Market Transition
1960s/1970s OEM *Original Equipment Manufacture*	Local Firm learns assembly process for standard, simple goods	Foreign TNC/buyer designs, brands and distributes/gains non manufacturing value added
1980s ODM *Own Design and*	Local firm learns process engineering and detailed product	As with OEM, TNC buys, brands and distributes. TNC gains

Manufacture	design skills	non-manufacturing value added
1990s OBM *Own Brand Manufacture*	Local firm conducts manufacturing, product design and R&D for new products	Local firm has own brand, organizes distribution and captures all value added

Source: Amended from Hobday (1994)

In the 1980s, OEM began to be called own design manufacture (ODM) in Taiwan (Johnstone, 1989). Under ODM, the domestic firm carried out most of the detailed product design to an overall design layout from the TNC customer. The TNC continued to carry out the marketing and distribution under its own brand name, thereby continuing to gain most of the value added. However, the local firm was expected to contribute minor product improvements and had to set up the manufacturing processes.

In the 1990s, some of leading firms began own brand manufacture (OBM), competing directly with international suppliers from Japan, the US and Europe. Under OBM, the domestic firm carries out all of the stages of production and innovation, including manufacturing, new product design, and sometimes R&D for new materials and products. At this advanced stage, the local firm would typically have developed its own brand and organized its own distribution abroad, capturing all of the value added associated with production, branding and distribution. The evidence indicates the progressive move from simple to more complex, technology-intensive tasks. Case studies of firms engaged in OEM show that firms gained technology in a gradual step-by-step incremental manner over periods of 20 or even 30 years and there were often difficulties and set backs along the way (Cyhn, 2002; Hobday, 1995).

As far as entrepreneurial lessons are concerned, this pattern of development is extremely interesting. What it shows, is that the core technological activity involved was not, in the main, a Schumpeterian, R&D-centered innovation (e.g. for new products or processes)

or radical innovation. Instead, successful firms caught up gradually through small, incremental improvements to existing products and processes using engineering and technician skills rather than R&D. The traditional view of entrepreneurship (Part 1) involving technological innovation and introducing new or improved products to the marketplace or to the world, is replaced by a catch-up model involving behind the frontier incremental innovations, including improvements to products and processes, and the introduction of new types of product based on the designs of leading firms.

It should be emphasized that these catch up processes did not occur in every firm. Nor did they occur without great effort and difficulty. Also, the OEM model applied mainly to low cost, relatively simple electronics goods, at least until recently. There were also significant differences between exporters. For example, major Korean firms such as Samsung began investing in R&D very early on, and, in some product areas (e.g. microwave ovens) as early as the 1960s, long before they progressed to own brand manufacture. Many firms (e.g. in Taiwan) failed and went bankrupt and some developed financial problems and were taken over by other firms (e.g. Daewoo in Korea).

The role of small firms

The second question relates to the role of small firms in these developments. While in South Korea large firms dominated exports, in Taiwan there was a pluralistic industrial structure which included not only large firms but also SMEs. As Hobday (1995) shows, in contrast with the large industrial groups, such as Tatung, many of Taiwan's start-ups entered in the late-1970s and early-1980s with product innovation/ODM capabilities, often gained by individuals with overseas experience in US firms or universities.

Of these companies ACER is perhaps the best known outside of Taiwan. However,

many other highly fast growing firms emerged during the 'take off' phase of growth in the 1980s and early 1990s. First International Computer Inc., became the world's largest producer of circuit boards for PCs in the early-1990s. First International formed joint product development ventures with leading US firms such as Intel, TI and Motorola to add to its technical abilities. Datatech Enterprises Co., became one of the largest international motherboard producers, selling more than US$200 million in 1993. Another entrant, Elitegroup Computer Systems Corporation, claimed a 10 percent world market share in motherboards in 1993 (Electronics, 1993).

It is impossible to mention all the firms which began small and became large. In computers, around 20 firms produced 54 percent of Taiwan's output in the late-1980s, leaving the other 46 percent to hundreds of SMEs, many of them newly formed, focusing on specialist niches. In 1989 alone at least 30 new firms began laptop production, adding to the rivalry and dynamism of the industry. One of the larger latecomers was Mitac, ACER's arch competitor in computers. Mitac achieved an annual PC turnover of more than 200,000 units in the latter part of the 1980s.

Another latecomer firm Cal-Comp, virtually unknown in the West, became the largest producer of calculators worldwide in 1992 and Taiwan's largest fax machine maker (*China Post*, 1992). Under OEM/ODM arrangements, it produced roughly 80 percent of Japanese Casio calculators. Many of Japan's leading fax machine makers established business links with Cal-Comp to benefit from its high quality, low cost mass production capabilities. Another barely known was Twinhead, which sold around US$160 million worth of notebook computers in 1992, some under its own brand name.

Not only in Taiwan, but also Hong Kong (see Berger and Lester, 1997; Hobday, 1995) and increasingly in China, new start-ups play an important role in each economy's dynamism, both as a source of larger firms and as sub-contractors to large local and foreign

firms. Later entrants, such as ACER, were able to enter at a level closer to the technology frontier set by leading TNCs, avoiding the 1970s phase of consumer electronics. These small firms were carriers of capabilities new to the economy, and complemented the entrepreneurial role of large firms in the region.

Entrepreneurship within TNC subsidiaries

Table 18.4: Technological Progress in Southeast Asia

	Singapore	Malaysia	Thailand	Indonesia	Vietnam
1960s	Assembly				
1970s	Process Eng*	Assembly	Assembly		
1980s	Product Dev**	Process Eng	Assembly	Assembly	Assembly
1990s	R&D	Product Dev	Process Eng	Process Eng	Assembly

Notes: *Process Engineering; **Product Development

Source: based on empirical research (see text for references)

Regarding the role of TNCs, while Amdsen (Chapter XXX) is correct to question the developmental role of TNC subsidiaries with their HQ and R&D functions typically located in advanced countries, under some circumstances TNC subsidiaries can play an important part in entrepreneurial development and economic development more generally. For example, South East Asia has depended heavily on TNC subsidiaries for exports of electronics, the largest industrial and export sector in Singapore, Malaysia, Thailand and a rapid growth export industry in Indonesia, Philippines and Vietnam. This also applies to recent Chinese exports. Gaulier et al (2004) show that FDI conducted by foreign affiliates is responsible for a large and growing share of export growth. In 2003 FDI accounted for more that 55% of total exports compared with only 20% in 1992. Within processing zone activities

(e.g. electronics), FDI accounted for around 80% in 2003.

Table 18.4 presents a simple stages model of the processes of technological advance in electronics based on research in the region (see below). TNC subsidiaries in Singapore, the first developer, gradually learned assembly technology in the 1960s, progressing to process engineering in the 1970s and minor product improvements in the 1980s (Hobday, 1995), rather similar to the path of development of the locally owned East Asian firms. Recent research shows R&D increasing during the 1990s as wages rose and skills improved in Singapore (Wong, 1992; 1998).

TNC subsidiaries in Malaysia began assembly production in the 1970s. Technology transfer from parents enabled the rapid start up of new export factories, the expansion of existing investments and a progressive upgrading of the type of products being exported. While there was nothing especially new in TNC investments in these countries, in the past TNC investments had been carried out mainly to serve domestic markets or to engage in tariff hopping, rather than technology transfer to enable exports.

Technological learning continued and successively higher levels of technology were attained in Malaysia and the other South East Asian economies. However, these remained somewhat behind Singapore through the 1980s and 1990s, lacking in R&D and new product development capabilities (Ariffin and Bell, 1998; Bell et al, 1996; Rasiah, 1994). Nevertheless, assembly personnel, technicians, engineers and managers within the TNC subsidiaries in Malaysia and Thailand, as in Singapore before them, acquired useful manufacturing process skills and some limited product design capabilities and, in some cases, R&D skills.[11] A similar pattern also appears to be beginning in Indonesia and Vietnam but the TNCs have yet to achieve the levels of capability development of earlier entrants.[12]

From an entrepreneurship perspective, the role of staff members, particularly managers, within the subsidiaries was not to directly risk their investment capital or to

develop technology new to the world or the market. Instead, it was to increase the skills, capabilities and efficiency of local plants so that managers could bargain with the parent HQs for further investments. This latecomer 'intrapreneurial' role involved ingenuity and, some would say, creativity in developing new 'behind the frontier' improvements to existing manufacturing processes.

As in the case of locally-owned firms in Korea and Taiwan, the main focus of TNC subsidiaries was technical and engineering skills aimed at assimilating and improving on existing technology, rather than R&D-based or radical innovation. Some studies (e.g. in Malaysia) show that the subsidiaries had to struggle for many years to overcome obstacles and acquire technology from their parents.[13] There is also abundant case study research in Singapore, Malaysia and Thailand which shows that some subsidiaries have learned to innovate over time and play significant roles within the TNC (e.g. in semiconductors and hard disk drives in Malaysia). Research also shows that are different propensities to innovate according to TNC corporate strategy, company culture and ownership (Guyton, 1994; Hobday and Rush, 2005).

Although there is little direct research on intrapreneurship within the subsidiaries of TNCs, it can be inferred from case research that TNC subsidiaries have contributed not only to the export-led growth of Singapore, Malaysia, Thailand, Philippines, Vietnam, Hong Kong and China but also to the growing levels of skills and capabilities in the electronics sector. An interesting question is whether or not the presence of intrapreneurship is a necessary condition for the rapid firm level growth witnessed. Or, alternatively, is it possible to have such growth with a 'passive' TNC subsidiary? The evidence suggests that the former is correct and that many of the subsidiaries have upgraded technologically through time by investments, technological efforts and growing managerial capability (Ngoh, 1994; Lim, 1991; Arrifin and Bell, 1998; Intarakumnerd and Virasa, 2002; Hobday and Rush, 2005).

Often this process is driven by competition with the subsidiaries of rival TNCs in the same country. In addition, it is driven by competition for investment by subsidiaries of the same TNC in other countries, particularly lower cost countries such as China.

The fact that many TNC subsidiaries take initiatives and learn to innovate should not come as a surprise. Research on TNCs in advanced countries shows how subsidiaries manage to distribute and integrate their global activities relying on their networks of subsidiaries to produce and, in some cases, to innovate (Bartlett and Ghoshal, 1987; 1987a; 1989; Ghoshal and Nohria, 1989).[14] Over time, some subsidiaries mature to become world product design centers and/or centers of excellence for particular technological activities (Kogut, 2002; Fratocchi and Holm, 1998) indicating that innovative capabilities have been acquired by the subsidiary. Technological improvements by subsidiaries can be an effective way to promote the overall competitiveness of the TNC (Egelhoff et al, 1998).[15]

Some research on subsidiary initiatives (e.g. Birkinshaw, 1997) goes further, arguing that subsidiary initiatives are, in fact, the normal manifestation of dispersed corporate entrepreneurship. The initiative process typically involves the identification of an opportunity at the subsidiary level, subsequent negotiations with the HQ and, finally, the commitment of resources to a new initiative by the HQ.

However, in the DCs, TNC learning and intrapreneurship does not necessarily occur, despite high profile and costly policies of encouragement, as in the case of TNC subsidiaries within the Brazilian telecommunications sector where results have been disappointing despite large subsidies from government to conduct R&D locally (Lacerda, 2003; Galina and Plonski, 2002; Galina, 2003; Perini, 2004a,b). In addition, even within the successful South East Asian cases, there are different propensities to innovate among TNC subsidiaries, with some failing to move to higher stages of technology over many years (Hobday and Rush, 2005). Therefore, one cannot assume that all TNC subsidiaries will automatically evolve to

higher stages of technological capability.

Policy Directions

There can be no simple 'blanket solutions' to the problems of entrepreneurship and development. As Gerschenkron (1962) showed, latecomer economies face very different external circumstances to now developed countries and have very different resources and institutional capabilities, precisely because they are latecomers. Therefore, each case must be considered on its own merits and one cannot simply transpose lessons from earlier to new developers, as occurs in the anti-bureaucracy and doing business 'best practice' recommendations. As Rodrik (2004) points out, DCs differ considerably in terms of causes of arrested development. In some cases, bureaucracy may be a factor, in others it may not. Even in cases where it is a factor, other problems (e.g. macroeconomic instability) may also be preventing development. Therefore, any program of DC reform must be tailored to the specific needs, problems and capabilities of the individual DC, taking into account the precise causes of arrested development.

Most mainstream, conventional, policy approaches towards entrepreneurship (implicitly if not explicitly) are based on a developed country 'Schumpeterian' notion of the entrepreneur and modeled on business and policy practices now carried out in highly advanced countries, and not oriented towards the needs of developing economies. Modern policies also exhibit a great deal of confusion, with new small start-ups being treated as synonymous with entrepreneurship when, in fact, a upsurge in numbers of small firms and self-employed in DCs is often a sign of development failure, rather than entrepreneurship.

Entrepreneurship policies which seek to increase the numbers of SMEs and self-employed are deeply flawed. These policies are unlikely to stimulate entrepreneurship and the development of new skills and capabilities unless the wider macroeconomic context

provides the demand conditions and business opportunities necessary for entrepreneurship to thrive.[16] These demand conditions have to be created through policies which stimulate industrialization, including trade, macroeconomic, industrial, technological and competition policies (see papers by de Castro, Singh and Palma in this volume XXX). In other words, integrated and effective overall development strategies need to be in place, as occurred in the successful export-led growth experiences of the East and South East Asian economies.

Regarding the removal of bureaucracy and other measures to improve the business environment, the conventional approach of applying policy measures based on best practices from the now advanced countries is inappropriate for DCs. As Gerschenkron (1962) showed, individual latecomer economies have limited resources and weak institutional capabilities compared with advanced countries. Therefore, they cannot (and should not), merely imitate the now-developed economies. Instead, they need to develop their own paths, based on their particular stage of development and institutional capacity. Excessive bureaucracy, for example, may be a symptom of much deeper political economic problems. If bureaucracy reflects corruption in firm-state relations, as some argue, superficial reforms might simply delay or obviate the need for the deep political changes required to address these difficulties. Alternatively, bureaucracy may be an employment creation mechanism in very poor countries, functioning as a social safety net, in which case policies would be needed to address this specific problem. Simply recommending the adoption of the best practices of the most advanced economies is highly unlikely to address or change the conditions which lead to bureaucracy.

Many of the problems underlying questionable SME policies arise from a misconception of the function of the entrepreneur in DCs. While the classical view of the individual heroic entrepreneur as the commercial exploiter of new technology has its place in the developing world, evidence from the successful Asian cases shows that the primary role

of the entrepreneur is to enable technology transfer, catch up, learning and 'behind the frontier' incremental innovation, rather than new product development or radical technological advance. 'Schumpeterian' technological development occurs mainly in the industrially advanced countries and this creates a flow of opportunities for the accumulation of technological capabilities in DCs. In Asia, entrepreneurs were the human agents responsible for acquiring this technology from abroad and creating learning mechanisms for technology transfer and business development. Entrepreneurs were responsible for integrating local production into international value chains and for continually upgrading domestic business and technology in order to keep up and, in some cases, catch up with the advancing technological frontier.

In Asia, this 'latecomer entrepreneurship' was embedded within existing firms and business networks which crossed international boundaries. Therefore, in formulating policy, it is important first to ask what precisely are the latecomer entrepreneurial functions required to support development in particular DCs, rather than assuming the Schumpeterian entrepreneur, as classically understood, should be promoted.

In non-Asian latecomer economies, business development is also likely to require highly specialized catch up entrepreneurial functions, capable of absorbing foreign technology and creating capabilities and industries new to the local economy, rather than the world. This latecomer function may be embedded in new start ups, but it is more likely to be a latent potential, embedded in large local firms (see Amsden in this volume XXX) and in large numbers of existing SMEs and, as in the case of South East Asia, the subsidiaries of foreign TNCs. By contrast, the Schumpeterian small firm entrant engaged in developing novel technology for new markets is likely to play a far less important role in DCs. While catch up may include some leadership entrepreneurial activities (e.g. new opportunity search and limited R&D) much of it will be typically concerned with improvements to existing

processes, products, organizational structures and ways of conducting business.

Finally, in cases where entrepreneurial failure (i.e. an insufficient supply of capable firms and managers) is a major barrier to development, the evidence from East and South East Asia suggests an important (often overlooked) if implicit role for policy. For example, in the case of South Korea, the government supported a 'big business' Japanese style *zaibatsu* model by financing and supporting the *chaebol* and, in doing so, created a class of latecomer entrepreneurs and managers capable of absorbing and improving on foreign technology. In the case of Singapore, the then Government, rightly or wrongly, believed that the entrepreneurial potential was inherently too weak to lead industrialization. It therefore sponsored and subsidized the entry of foreign TNC subsidiaries, and allowed them a degree of operational freedom which was highly unusual (and unpopular) at that time in the developing world. Malaysia and Thailand also enacted policies to attract exporting TNCs to lead industrialization from the 1960s onwards. In each of these cases, policies towards entrepreneurship were (usually implicit) parts of wider strategies towards industrialization, involving export-led growth, fierce internal competition, macro economic stabilization, basic education (to achieve high levels of numeracy and literacy) and technical education relevant to the stage of industrialization.

Conclusion

This paper shows that the Schumpeterian notion of the entrepreneur as a high technology risk taking innovator has been highly influential in the formation of modern day policies toward entrepreneurship in DCs. This has led to dysfunctional policies towards entrepreneurship, particularly those which attempt to counter bureaucracy by adopting the practices of the highly developed economies. Polices of promoting SMEs and supporting venture capital are also unlikely to have much impact on the progress of entrepreneurship and productivity in

DCs. Indeed, ‘blanket policies’ aimed at the indiscriminate support for new entrants will do little to cope with informality but could well maintain and expand the low-productivity sector.

There can be no simple policy solutions or standard measures to address entrepreneurial problems or wider developmental failures. There can be many causes of arrested development and each strategy must address the primary causes of failure, taking into account the particular circumstances, resources and opportunities of the DC in question. Policies also need to be informed about the specific nature and role of latecomer entrepreneurship as distinct from ‘leadership’ or Schumpeterian entrepreneurship. Latecomer entrepreneurship is required to create local industries, generate new skills and capabilities, enable local technological learning and acquire and improve upon technology from abroad. All entrepreneurial policies should be carried out within, and as part of, a coherent national development strategy to stand any chance of success.

The East and South East Asian evidence of successful firm-level growth shows that large firms, SMEs and the subsidiaries of foreign TNCs all have a part to play in latecomer entrepreneurial progress. While governments may not wish to rely unduly on any particular industrial grouping, wherever possible, policies should stress the accumulation of technical and managerial skills in firms and industries linked into international value chains with high growth potential, in order to break free of low productivity activities and generate new opportunities for catch up growth.

Notes

[1] Paper Prepared for The Task Force on 'Industrial Policies and Development', within the Initiative for Policy Dialogue (IPD) directed by Joseph Stiglitz at Columbia University in New York. Incorporates comments from the Task Force Meeting in Rio de Janeiro, Brazil, March 17-19, 2005 and in Delhi, December 2006.

[2] For a discussion of the Washington Consensus, see Annex A.

[3] See de Soto (2000) for a highly influential book on bureaucracy and development.

[4] For a general discussion of embeddedness see Granovetter (1985).

[5] By contrast, small firms have played an important role in some parts of Asia (e.g. Taiwan and China, see Part 4) indicating that the context in which small firms operate is all important.

[6] Hernando de Soto is President of the Institute for Liberal Democracy (ILD).

[7] Under these conditions informality can be seen as a rational and socially responsible response to harsh economic reality and falling opportunities in the formal sector.

[8] Krueger (1974) argues that, in extreme cases, the perception that businesses become successful by exerting influence or bribing officials 'to do what they ought in any event to do' (p302) undermines the link between pecuniary reward and business efficiency as well as trust in the motives and actions of government. Favouritism towards certain groups can lead to the perception that government policy is a mechanism for rewarding the already rich and influential. In such cases, policies can divert the attention of entrepreneurs away from innovative activities towards capturing rents; the natural tendency is further expansion of bureaucracy and red tape, rather than a reduction. Unless the 'fundamentals' (i.e. the structures, incentives and interest groups which perpetuate the system) are understood and somehow addressed, reform is unlikely to work because bureaucracy is merely a symptom of deeper problems. Whether these extreme cases are widespread or important problems is not clear from the evidence and is an important area for further research.

[9] In fact, for European countries, Acs and Varga (2004) analyse the GEM database but find no significant support for the hypothesis that entrepreneurship facilitates a knowledge spillover mechanism leading to economic growth.

[10] For an explanation of the concept of the latecomer firm, see Hobday (1995).

[11] For stages in general in Thai industry, see Intarakumnerd and Virasa (2002); for firm-level development stages see Chairatana (1997); for electronics in Thailand see Poapongsakorn and Tonguthai (1998).

[12] See Ca and Anh (1998) for Vietnam and Thee and Pangestu (1998) for Indonesia.

[13] See Ngoh (1994) for the case of Motorola and Lim (1991) for the case of Intel.

[14] The use of foreign TNCs to lead industrial development occurs widely in the developed countries. For example, Scotland, Ireland and parts of England have benefited from large scale investments in electronics, semiconductor components and automobiles.

[15] These findings were developed mainly within Canada (Birkinshaw, 1997) and then expanded to other developed countries where subsidiaries have proved effective in promoting growth (Holm and Pederson, 2000; Delany, 1998; Egelhoff et al., 1998).

[16] Policies which encourage the start-up of SMEs and self-employment may have a beneficial effect on poverty, although even this is contested by some (e.g. Beck et al, 2003).

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Annex A: The Washington Consensus

Rodrik (2004) is highly critical of the Washington Consensus approach to DC reform put forward by the World Bank and other institutions. The 'Doing Business' reforms described in Part 3 can be viewed as a sub-set of the wider package of reforms which the current policy consensus regularly recommends to DCs. The Washington Consensus approach has now been augmented to include new 'rules of good behavior for promoting economic growth' as shown in Table 18.5. The 'Doing Business' reforms described in Part 3 are included in items 8 to 13 in the list below.

Table 18.5: Rules of Good Behavior for Promoting Economic Growth

Original Washington Consensus:	"Augmented" Washington Consensus: … the previous 10 items, plus
1. Fiscal discipline	11. Corporate governance
2. Reorientation of public expenditures	12. Anti-corruption
3. Tax reform	13. Flexible labor markets
4. Interest rate liberalization	14. Adherence to WTO disciplines
5. Unified and competitive exchange rates	15. Adherence to international financial codes and standards
6. Trade liberalization	16. "Prudent" capital-account opening
7. Openness to DFI	17. Non-intermediate exchange rate regimes
8. Privatization	18. Independent central banks / inflation targeting
9. Deregulation	19. Social safety nets
10. Secure Property Rights	20. Targeted poverty reduction

Source: Rodrik (2004)

Rodrik's main argument against any 'laundry list' of reforms is that the recommended reforms are based on what a rich country *already* looks like' which may have taken decades or even centuries to achieve. In addition, the agenda comes without any way of determining priorities and the amount of administrative capacity, human resources, and political capital needed to complete the vast agenda of institutional reforms simply does not exist in most DCs (Rodrik, 2004).

Rodrik's arguments are reminiscent of those made by Gershenkron (1962; 1963) in his debate with Rostow (1960) over the validity of deriving lessons from the stages of development of the now developed countries for DCs, which Gershenkron argued was intellectually flawed in the extreme. The modern Washington Consensus approach is actually even less valid than Rostow's approach, because at least Rostow recognized that DCs needed to progress incrementally through phases of development, whereas the Washington consensus reform ignore this, recommending the current policies of now developed countries and claiming that rapid growth will follow.

In his critique of the Rostow (1960), Gerschenkron argued that the study of industrial development of the past could not provide a model for today's policy makers wishing to promote economic development. He showed that the idea of identifying the preconditions which were 'missing' in a particular DC (e.g. in terms of investment, institutions and technology or today's "rules of good behavior") and then installing them was not a logical strategy for achieving a take-off to sustained growth, but was an example of historical determinism. Instead, he argued that each country needed to develop its own development agenda based on the institutional capacities, stage of development, problems and opportunities facing the particular country. Of course, some things could be learned from earlier industrializers but no direct model could apply (Gerschenkron, 1962).

Regarding the Washington consensus reforms as Rodrik (2004) puts it:

> Yet the agenda comes without a way of determining priorities. Too often, the result is that policy effort is spread too thinly over too many different areas: governments are overwhelmed with the range of things that need to be done, copies of Western legislation or "best-practice" codes are adopted without much consideration of their suitability and adaptability, and too little effort is made to render the reforms politically popular and ultimately sustainable……The implicit, and sometimes explicit, approach seems to be to say: "well, we know that all of these things cannot be done at once, but more is better than less, and the more countries can do the better." So they and the governments they advise proceed opportunistically, and try to complete the enlarged agenda as best as they can, as completely as they can, and as quickly as they can…….. After much effort, governments may find that economic performance has hardly improved……Finally, there is something intellectually worrisome about the Augmented Washington Consensus, in that it is entirely unfalsifiable. Such is the nature of the agenda that if a country adopts it and fails to grow, it is always possible to find something wrong with what the government did. So in the end it is the policymakers who end up being chastised for the "incompleteness" of their reforms. And if enough countries find themselves in this

predicament, then it must be time to augment the list further by adding yet other needed reforms.

Rodrik and colleagues' own historical study of spurts of growth during the last 50 years shows that the vast majority of growth takeoffs are not produced by significant economic reforms, and the vast majority of significant economic reforms do not produce growth take-offs (Hausmann et al., 2004). Like Gerschenkron (1962), Rodrik argues for a country specific 'diagnostic' approach to growth strategies which identify and address the 'binding constraint' or most significant bottleneck to growth. Rodrik cites as examples of such constraints a lack of investment funds, high costs of capital and the inability of firms to appropriate returns on investment. Other barriers to development might include macro-economic instability, political instability (including war and conflict), corruption and a lack of obvious investment opportunities for achieving dynamic comparative advantage through specialization.