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Entrepreneurship in Developing Countries

by

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Entrepreneurship in Developing Countries

March 2009

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Abstract

This paper reviews the literature on economic development from import substitution to export promotion. It then examines the literature on entrepreneurship and economic development creating a framework for promoting development through demonstration effects, knowledge and information externalities and network externalities. It finished with an examination of public policies.

JEL-classification: L26 O10

Keywords: Development, export substitution, export promotion, public policy

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I. Introduction

Between 1945 and 1980 nearly 100 colonies in Africa, Asia and the Caribbean gained their independence and began the process of initiating a development strategy for their citizens. Sadly, many of those countries experienced neither significant per capita growth nor economic development ([1], pp. 141-143). Indeed, moderate and extreme poverty remains a significant concern for many developing countries ([2], pp. 22-23).

While developing countries have used a number of policies and strategies in their development pursuits, two forms of industrial policy were particularly prominent. The first was import substitution - a process of industrialization by producing previously imported goods for the country's domestic market. However, by the 1980's, in the face of economic crisis, many developing countries then turned to a second strategy – export promotion. However, with the exception of some countries in East Asia, neither industrial strategy has resulted in meaningful economic development. Both development approaches relied on strong state intervention and persistent market distortions to sustain their viability – thus often crowding out or thwarting altogether the traditional and important role of the entrepreneur.

Hence, after failed attempts at development through import substitution and infant industry protection programs and somewhat mixed results from export promotion strategies, developing countries are beginning to focus on their business environments and creating an economic space which is conducive to private enterprise – both domestic (i.e. local entrepreneurs) and foreign (i.e. foreign direct investment). Indeed, the promotion of

entrepreneurship and the promulgation of small and medium sized enterprise (SME) policy has become an important development prescription in recent years ([3]). Entrepreneurship policy, then, joins a list which includes reforms to countries' macro-economic, exchange rate, trade and industrial policies and improvements in governance ([4]).

Both national governments and the major international organizations, as part of their poverty reduction, growth and economic development programs, are beginning to focus on improving countries' business and investment environments for entrepreneurship. The World Bank and United Nations Industrial Development Organization (UNIDO), for example, have each established units to promote private sector development in developing countries and to provide technical assistance in the formulation of SME and entrepreneurship policy. In 2003, the World Bank began an initiative to measure and rank countries' business sectors and investment environments ([3]). Additionally, a number of developing countries have recently drafted SME legislation and launched programs to assist small businesses and domestic entrepreneurs.

While a focus on entrepreneurship for development may appear to be a separate approach to development, this study offers that it is consistent with and even complementary to the older and more traditional development strategies. We survey the literature on entrepreneurship in developing countries which, admittedly, is wide and covers a range of issues from culture and values; institutional barriers such as financial sector development, governance and property rights; to the adequacy of education and technical skills. A broad literature has also developed on foreign direct investment and its positive and negative effects on technology transfer and entrepreneurship. After the

collapse of the Soviet Union, a number of studies examined the development of small and medium sized enterprises in transition economies. As these economies moved from centralized economies to market economies, enterprise and entrepreneurship became important ([5]). Yet, other studies examine the effects infrastructural development and the macroeconomy on entrepreneurship. With such a wide scope of issues, a framework for synthesizing the literature is needed. This study offers that the identification of the externalities which affect entrepreneurship provides a useful framework to examine the literature on entrepreneurship in developing countries ([6]). These externalities have resulted from and have become embedded in countries' institutions and help to explain the level of entrepreneurship in an economy.

This survey proceeds as follows. First, we examine the evolution of development policy – beginning with the colonial period and the immediate post colonial era. In both of these periods there was strong government intervention and a heavy emphasis on government planning for development. An important cornerstone of the post colonial period was the use of import substitution programs. Import substitution was an attempt by developing countries to industrialize by producing goods which had been traditionally imported. Second, with the failure of import substitution, many developing countries then switched to outward oriented strategies, beginning with many of the Asian economies. Again, export promotion relied on strong government intervention.

Third, we set out a framework to explore the literature on entrepreneurship in developing countries based on the existence of network, knowledge and demonstration and failure externalities. Each of these types of externalities is discussed in greater detail in the

following sections. Fourth, this review identifies the core policy issues to address these externalities. Internalizing these externalities, it is argued, by finding mechanisms to reward and encourage the firms and people which produce them, should increase the level of productive entrepreneurship in developing countries.

II. The Evolution of Development Policy

The search for policies to bring about both growth and development has been the focus of economic discovery since the very beginning of the science. While economic growth relates to the expansion of an economy based on its current structure, economic development implies “a process of structural transformations” leading to an overall higher growth trajectory ([7], p.1183). Lewis, in an essay outlining the importance of development economics, points to at least fourteen formal development models, including two-sector and unbalanced growth, technology-based and surplus labor models which have been used since the 1950’s to account for economic stagnation and the abysmal development trends of many less developed countries ([8], p.3). Harris and Todaro, in their two-sector model of economic growth show that labor is induced to move from the rural (agriculture) sector to the urban (industrial) sector based on the higher “expected earnings’ in the modern sector ([9], p.126). Wages in the modern sector are usually higher, not necessarily only because of higher productivity (i.e. in the usual case where wage is equal to the marginal product of labor) but also because of the imposition of social policies such as a minimum wage ([9], p.129). While governments may attempt to control the

growing unemployment problems in the cities caused by the excessive migration by either increasing employment in the public sector ([9], p.132). or by imposing direct restrictions on the movement of labor to the urban sector ([9], p.135), economic development through industrialization can only be sustained by concurrent investments and productivity improvements in the agricultural sector ([10], pp.386-400). Continuous investments in the agricultural sector during the development process are also important so as to achieve a more “balanced” development ([11], pp.566-93).

Other studies have tried to distill patterns of economic growth. Rostow, for example, outlined the “stages of economic growth” ([12], pp.4-5). In this model, nations, beginning from a “traditional society” stage, pass through at least three additional stages of development: the pre take-off stage; the take-off stage; and then to maturity. The development process occurs as technology, transportation and trade deepen and improve and as societies evolve to become more tolerant of change ([12], pp.4-5). These changes gave rise to tensions which emerge because of the “institutional and ideological adjustments” which were necessary to facilitate economic development ([13], p.247 and p.253). There are societal conflicts as industrialists and the skills they possess gain more influence and importance over the agricultural sector and as workers migrate from rural to urban areas during the transition from the traditional to the mature economy ([13], pp.251-254). In the take off stage, the economy could be characterized as *resilient* such that,

...the corps of entrepreneurs and technicians must be enlarged, and the sources of capital must be institutionalized in such a ways as to permit the economy to suffer structural shocks; to redispense its investment resources; and to resume growth. ([12], p.7)

Finally, in mature economies, there is a process of innovation and displacement (*a la* Schumpeter) within the industrial sector leading to a dynamic growth process ([12], p.8).

A final set of studies have tried to determine the variables which affect growth and development. Lewis, for example, identified capital formation through national savings, foreign investment or foreign aid; policies which encourage entrepreneurship and skill development; the increase in international trade; and the introduction of market distortions through social policy as important factors which affect economic development ([14], pp.1-16). Indeed, these factors are consistent with the set of policies which came to be known as the “Washington Consensus” in the late 1980’s. However, the Washington Consensus also includes measures to address fiscal discipline and a range of liberalization measures for capital flows, trade policy and interest rates ([15], pp.251-264).

II.1 Colonial Origins of Development Policy

Notwithstanding the formal theories of development discussed earlier in this review, it is important to remember that a country’s development policy does not emerge in a vacuum and therefore a review of pre-independence development policy is essential. The colonial periods in Africa, Latin America, the Caribbean and Asia, generally established a center-periphery economic system of state-led extraction and primary production for export with little benefits accruing to the colonized populations ([16],p.251). Storr finds that,

That colonialism on net “benefited” the colonized is a myth. A myth that has roots in the same logic that was used to “justify” colonialism in the first place and that has “legs” only because of the existing poverty of information about the extent of development the first colonialist encountered. Colonialism, it should not be forgotten, was conquest – economic, social, political, religious and cultural conquest – that was attended by the destruction of whole societies, the enslavement, dislocation and/or disenfranchisement of millions, the theft of land and the pirating of resources. ([17], p.11)

International trade, based on extraction and forced production, was one of the driving forces behind colonization ([18], p.319). It is, therefore, not surprising that trade policy features prominently in any discussion of the colonial period. Another important aspect of the period was the development of large state bureaucracies to manage colonial production and trade. Acemoglu et al, for example, offer that, “the Spanish crown....set up a complex mercantilist system of monopolies and trade regulations to extract resources from the colonies.” ([19], p.1375) Similar controls were placed on African colonies by the French, British, Belgian and Dutch [19], p.1375). In the Belgian Congo, “tax rates on Africans...approached 60 percent of their incomes during the 1920’s and 1930’s” [19], p.1375) in order to compel Africans to provide their labor on the colonial plantations. In South East Asia, “the centralization” of taxation was an important focus of colonial policy to fund the large infrastructure projects which were needed to support the production and export of agricultural goods ([20]); however, with this policy also came a burgeoning of the public sector ([20]). In Kenya, because of a complex licensing system, African farmers were generally prevented from competing with colonial coffee exporters ([21], p.35).

Additionally, some colonial industrialists were granted the right to exist as monopolies - further reducing competition in the local markets ([21], p.34).

These colonial institutions were found to continue well after the end of the colonial period ([19], p.1376). The longevity of colonial institutions could be related to the high financial and opportunity costs of changing them and whether there was a potential for the large gains associated with these systems to be appropriated by the new “ruling elite” ([19], p.1376). Fahnbullen concluded that,

The colonial economy not only created a weak socio-economic base from which post-independence states could launch their development projects, but it also sowed the roots of socio-economic problems that would prove decisive in shaping the patterns of development after Independence. ([21], p.35).

Colonial economic policies, therefore, set an important platform for the economic policies which followed in many developing countries.

II.2. Import Substitution

A primary goal of developing countries immediately after independence became *industrialization* as a means to *economic development*. The first major attempt at industrialization in developing countries was through import substitution programs – producing goods that were imported to the local market. Raul Prebisch, a key promoter of import substitution, found that “industrialization is an inescapable part of the process of change accompanying a gradual improvement in per capita income” ([16], p.251).

Prebisch sets out a two-country model consisting of an advanced country specializing in industrial goods and a periphery country producing primary goods. The economy of the periphery is characterized by surplus labor and “disguised unemployment” in the traditional sector from which the modern, industrial sector can draw its labor ([16], p.252). Finally, the income elasticity of demand for imported industrial goods is higher in the periphery country than in the advanced country ([16], p.253).

The periphery economy has a choice of how to industrialize by either increasing its production for export or for domestic consumption. Import substitution was thought to be the most efficient way for developing countries to achieve industrialization and income growth ([16], p.253-54). Indeed, even if a developing country chose to increase its exports and experienced an increase in income, because of its relatively high income elasticity demand for imports, there would be a large corresponding increase in import demand. Therefore, domestic production of the imported good (i.e. import substitution) would still be required ([16], p.254). Among the policy recommendations to maintain import substitution programs were high tariffs, export taxes and production subsidies to domestic producers ([16], pp.256-57). While countries could have chosen to increase exports to produce the foreign currency to import these industrial goods, Singer opined that industrializing developing countries “would find it initially easier to produce for an existing and known domestic market than for an unknown global market.” ([22], p.911)

Bruton offered that import substitution was a necessary strategy for developing countries because these economies needed to provide protection to their new “infant” industries ([23], p.904). Even more recently, it was also generally thought that developing

countries needed to produce the goods that advanced countries produced in order to avoid the “poverty trap” of continuously producing low value goods with volatile prices ([23], p.905, [24]). To achieve industrialization through import substitution, countries used a number of market distorting tools such as overvalued exchange rates and policies which raised the cost of imports ([23], p.908). Summing up nicely the motivation for import substitution, Bruton states that,

To industrialize, given the existence of already industrialized and highly productive economies (the North), the countries of the South must protect their economies from imports from the North and concentrate on putting in place new activities that will produce an array of manufactured products currently imported. ([23], p.904)

An analysis of the experiences of countries which pursued import substitution strategies reveals the absence of a space for the entrepreneur. First, it is important to examine how the questions of *what to produce and for whom* were answered. In market economies, these decisions are left largely to enterprises and entrepreneurs who are guided by prices and profits. However, for countries pursuing import substitution, there was strong government intervention. In the 1960's, for example, when Zambia pursued its import substitution program, its newly created manufacturing sector focused production on luxury goods which had previously been imported for the countries' elite ([25], p.606). In a poorly-planned joint venture between the Zambian Government and the automaker Fiat, the contracted number of automobiles to be produced annually was almost as great as the total number of vehicles in Zambia at the time ([25], p.607). Production under import

substitution was also heavily skewed by the “demand profile” of the wealthy in Latin America ([26], p.108). As Baumol, Litan and Schramm points out,

Governments that guide their economies and attempt to pick “winners” (firms or industries) in the process often get it wrong....the firms in the industries chosen by governments practicing state guidance may prove unable to turn their state-advantage into commercial success because their activities are constrained by bureaucrats with little market experience. ([27], p.24)

Second, the *guiding forces* for production were quite different. While distortions are a by-product of errors in market economies and provide opportunities for correction by entrepreneurs, import substitution required long-lasting distortions. Tariffs and other types of government interventions were used to ensure that production took place in import competing industries while also protecting those domestic manufacturing firms ([16], p.256). However, these policies were often ineffective, as the tariff structure distorted price signals and actually provided incentives for firms to produce the high-priced consumption goods, rather than desired capital goods ([28], pp.220-21). Steel adds that,

Distortions introduced or maintained by the structure of protection and other policies...make prices poor indicators of opportunity costs, and high effective protection creates profit opportunities in final-stage industries regardless of their social productivity. ([28], pp.220-21)

Countries which used import substitution also had to maintain inflated exchange rates to ensure that domestic manufactures could afford the needed capital inputs ([23], p.908).

Indeed, as countries switched to the importation of capital goods, import demand actually

became more inelastic as the importation of capital goods was no longer a choice, but a necessity ([16], p.268). Krueger points out that import substitution policies also negatively affected the country's exports, "especially when they include[d] overvalued exchange rates and quantitative restrictions on imports" – further reducing foreign exchange earnings ([29], p.289). Given these severe market distortions which existed under import substitution regimes, it would have been difficult for the entrepreneur to discover or act on socially optimal opportunities.

Finally, the enormous bureaucracy which had to be constructed to support import substitution lent itself to the perpetuation of *permanent inefficiencies* in industry and corruption in government – both important barriers to productive entrepreneurship. Government policies which actively encouraged new entry often led to markets with many small and inefficient firms ([26], p.103). Many of these firms were operating with excess capacity, high labor costs relative to productivity and foreign exchange shortages which impacted their ability to obtain necessary inputs - resulting in further slack ([23]). The complex import licensing systems also created crippling mismatches between the time that capital investments were actually required and the times that import licences were obtained – again resulting in underutilization ([23], p.914). In the case of Ghana, companies often chose suppliers based on the ability of the foreign company to offer flexible financing options rather than the most efficient ones ([28], p.218). Additionally, because of the Ghanaian government's outright or joint ownership of many of these firms and the high unemployment rates in the countries, factories continued to operate even when they were inefficient for political reason ([28], p.228). Krueger points out that import substitution,

result[ed] in a dilemma: either the number of firms producing a given good must be very small, or the size of individual plants may well be below minimum efficient size. If the number of firms is very small, the absence of competition results in low-quality high-cost production.... ([30], p.1515)

The complex bureaucracy also supported corruption. For example, the import licensing process facilitated dishonest business dealings as “licence allocation decisions came to be dominated more by corruption and personal favour than by evaluation of economic viability.” ([28], p.222) Indeed, the complex bureaucratic systems which had been created to support import substitution encouraged “expeditors” whose incomes were derived from facilitating the process of approvals and paperwork.” ([31], p.353) Additionally, the supplier credit approval process, opened new avenues for corruption ([28], p.218). Haggard et al, referring to a 1962 US Government Accounting Office report on South Korea, found that the import licensing system used during the country’s import-substitution program, “led to collusion between supplier and importer, shipment of defective merchandise, kickbacks, and overpricing.” ([32], p.854). Given the inefficiency of the import substitution strategy and the complexity of the bureaucracy created by import substitution, this review offers that entrepreneurs would be more likely to engage in rent-seeking, evasive and “unproductive” entrepreneurial activities rather than in socially “productive” entrepreneurship ([33]).

Import substitution was not successful. Indeed, the expected productivity and technology improvements and the “indigenous learning processes” needed to sustain high incomes did not emerge ([23], pp.919-20). Baldwin points out that the infant industry

argument for protection often fails because even when a “protective duty” has been provided, there is “no guarantee that individual entrepreneurs will undertake greater investment in acquiring technological knowledge.” ([34], p.298) As such, firms often operated with excess capacity, offering too much variety ([28], p.108). Indeed, an unintended consequence of import substitution programs was the existence and persistence of inefficient industries and market distortions ([34], p.298, [28]). Additionally, the large bureaucracies which had to be created to support the import substitution programs often lent themselves very easily to corruption.

This discussion of the colonial and immediate post-colonial experience with import substitution shows that many developing countries’ markets became severely distorted by industrial policies. Economies were characterized by overvalued exchange rates, import and foreign exchange controls, and large inefficient monopolies. Business regulations associated with the import substitution programs were often complex and supported the growth of corruption. As economies performed worse, more distortions were created, leading to Krueger’s “virtuous and vicious” cycle ([31], p.352). Given these government failures it is easy to see why import substitution failed to achieve meaningful growth for the countries which used this strategy and created an environment which was poorly suited to promoting productive entrepreneurship.

II.3 Outward Orientation

With the failure of import substitution and the success of the newly industrializing Asian countries, the “conventional wisdom” changed to the promotion of exports and an

acceptance of international trade as a means of development ([35], p.725). International trade is generally viewed to have positive effects on economic performance. Helleiner, for example, touted the benefits of not just an export orientation, but more specifically, the export of manufactures in developing countries as a means to growth ([36]). Data on Asian manufactured exports show a significant association between exports and economic growth ([37, 38]). Krueger acknowledges that “trade liberalization is...associated with more rapid growth than the final phases of IS [import substitution] which precede it.” ([30], p.1514) Sachs et al find a significant and positive association between growth and the degree of trade openness ([39], p.22 and p.36).¹ However, Rajan cautions that,

trade liberalization must be accompanied by a milieu of other policies to ensure that a country is successful in integrating more intensively with the world in a manner that is favorable to growth and poverty reduction. ([40])

Like import substitution, the discovery of the export promotion strategy appeared to have occurred accidentally. Haggard, Kim and Moon, for example, point to the effects of the “poor harvests” combined with “the expectations of devaluation and rumors of a U.S. cutoff” which could have led to food and foreign exchange shortages may have been the genesis of South Korea’s export promotion strategy in the early 1960’s ([32], p.863). By 1965, the export promotion strategy was formalized within South Korea’s Ministry of Commerce and Industry’s Export Promotion Subcommittee ([32], p.865). South Korean export promotion policies included the establishment of subsidies and access to cheap

¹ The degree of trade openness is measured by an index of factors including tariff and non-tariff barriers, a comparison of official and non-official exchange rates, the economic system and government involvement in the export sector.

credit for exporters ([32], pp.867-67) which were tied to export targets for firms in each sector ([32], p.866). The South Korean government also concentrated on maintaining the quality of exports and on marketing efforts to US companies([32], p.866) Comparing the successful Asian economies with flagging Asian export promoters, Amsden reveals that in the successful East Asian economies, subsidies were linked to “concrete performance standards with respect to output, exports, and eventually, R&D.” ([41], p.284) Glick and Moreno, in their review of government policies used by the Asian miracle countries, also found that,

Government support was by and large given to firms according to their success in the market place, particularly world markets. Somehow East Asian policymakers avoided the temptation to direct most resources to subsidize loss-making firms or to benefit well-connected rent-seekers. ([42], p.23)

Krueger points out that the “experience has been that growth performance has been more satisfactory under export promotion strategies” ([29], p.288). Indeed, because open economies are exposed to world prices derived from global productivity differences, domestic resources can be more efficiently allocated compared to countries where distorted domestic prices are the main guide for a country’s production mix ([29], p.289).

There were, however, significant barriers to developing countries’ manufactured exports. These included high levels of protection within developed economies ([36], p.35), the additional transportation costs associated with producing offshore ([36], p.36), and the effects of political instability on production ([36], p.40). Additionally,

technology, training and experience in marketing their products to the final markets also constituted major internal barriers to export production for many African countries ([43], pp.226-27). For these reasons, it was often offered that “foreign firms” would be better suited to produce export goods in developing countries([36], p.27). Foreign firms would wish to expand production into overseas markets to access “new opportunities” ([44]). Additionally, Penrose, offered that from the perspective of the host country, foreign direct investment was more advantageous compared to other forms of private investment flows because it came with the,

Resources and experience of the parent concern, including not only managerial and technical personnel but also that indefinable advantage in its internal operations which an efficient going concern usual has over a new one. ([44], p.225)

There are also political economy considerations associated with moving production to developing, low income countries. However, despite the potential for political protests within developed countries as a result of the labor dislocations, it was anticipated that this phenomenon – the vertical integration of production across countries – would be a lasting phenomenon ([36], pp.32-34).

Given the importance of the outward orientation strategy, an important question became - How do exports affect growth? First, export orientation is associated with growth through its impact on foreign exchange earnings. Export orientation also generated needed foreign exchange to fund capital investments thereby eliminating the need for excessive government intervention as required under import substitution ([30], p.1516).

Indeed, Keesing had previously pointed out those inward-looking strategies “permit[ed] a high degree of government intervention” compared to outward oriented economies ([45], p.303) Balassa finds that export growth is associated with “raising national income” and greater foreign exchange earnings ([37], p.180). Dollar offers that as export companies operate in foreign currency earning sectors, they can more readily and effectively utilize foreign currency debt compared to those companies which produce for the domestic sector ([46], p.523). Indeed, Sachs et al suggests that, “[t]he outward orientation of the East Asian economies had saved them from the developing country debt crisis that ravaged Latin America.” ([39], p.55)

Export orientation is also associated with structural changes within an economy which can have positive effects on economic development ([30], p.1515). Indeed, export promotion could become a catalyst for these structural changes ([29], p.288). Additionally, export promotion strategies allow for economies of scale in industry as production is targeted to a much larger market compared to production for only the domestic market ([37], p.181). Outward oriented trade policies also allowed for the generation of scale economies, without the use of monopolies ([30], p.1515). Even for small countries, Keesing found that “the severe handicap of smallness cannot be abolished; but it can be minimized under an outward-looking strategy” because of the economies of scale associated with exporting to a larger market ([45], p.314). Balassa, for example, points out that,

Exports make it possible for developing countries to overcome the limitations of their domestic markets in exploiting economies of scale and ensuring full capacity utilization. ([38], p.S280)

International trade can have a positive effect on economic growth, and therefore on poverty, because trade allows for a more efficient use of resources and exposes domestic producers to larger, more competitive markets which encourages productivity improvements ([47], p.1577). Exporting can also generate important productivity spillovers ([48], p.9). Akyuz and Gore conclude that development requires the production of increasingly more complex exports and states that,

Rapid and sustained economic growth in the most successful developing countries have involved a process of late industrialization in which the production structure has shifted from the primary sector to manufacturing alongside a progressive move from less to more technology- and capital intensive activities both within and across sectors, allowing countries to build competitiveness in a range of activities established in more advanced countries. ([49], pp. 266-67)

Hausmann, Hwang and Rodrik construct an index of countries' exports and rank them based on the income level of the countries which produce them ([24]). They find that there are important similarities between the products that wealthier countries export and those which poorer countries export ([24], p.3). In their analysis, they find that countries, which have shifted to the production of goods which are associated with high productivity, also have experienced high levels of growth ([24], p.9 and p.17). Although, they acknowledge that the ability to switch to more productive goods is limited by human capital factors ([24], p.14), they find that,

...anything that pushes the economy to...specialize in good(s) with higher productivity levels-sets forth a dynamic (if temporary) process of economic growth as emulators are drawn in to produce the newly discovered high-productivity good(s). ([24], p.9)

Indeed, they conclude that countries should attempt to correct the market failures which reduce the incentives for entrepreneurs to enter new markets and produce new products which are associated with higher productivity ([24], p.17). The increase in product varieties across Latin America has generally been beneficial for reducing the economic instability associated with “excessive export specialization.” ([50], p.476)

Outward strategies were also more likely to restore market efficiencies. Export promotion was associated with less distortionary and bureaucratic policies compared to import substitution which could have a positive effect on growth ([29], p.291; [31], p.352). This is consistent with the finding that GDP growth was significantly and negatively associated with real exchange rate distortions – a measure of inward-oriented policies ([46], p.535).

Finally, production is also more likely to occur along a country’s comparative advantage under an outward-oriented strategy ([38], p.S281; [37], pp.180-81). As exporters compete against an international market, there is an incentive to improve productivity and technology compared to producers who compete in protected domestic markets ([37], pp.181-183). Asian export-oriented countries, for example, experienced increasing levels of total factor productivity with increasing levels of exports ([38], S281). Productivity growth and government intervention were important for explaining the

region's 'miracle' growth ([30], p.1514). However, Rodrik contends that "there is virtually no evidence that exports or outward orientation were associated with technological externalities." ([51], p.69) While Rodrik admits that there are correlations between exports and technology spillovers, he argues that causation cannot be determined ([51]). Instead, another explanation may be that productive firms simply export more ([51]). Indeed, perhaps the growth in the East Asian miracle countries was more related to an increase in investments and capital accumulation which was facilitated by export earnings ([51], p.97).

Lucas' explanation of the Asian miracle growth offers some insights for this debate. For Lucas capital, specifically, human capital was the important factor in explaining growth differentials ([52], p.270). It was recognized that human capital could be acquired "in the course of producing goods and engaging in trade." ([52], p.270) However, it is not sufficient to simply increase the volume of exports. Instead, the increase in exports must also be accompanied by an increase in the variety and complexity of goods produced ([52], p.269) through ongoing innovation, or more likely, ongoing imitation ([53]; [54], p.577).

III. Entrepreneurship and Development

Given the poor experience with import substitution and export promotion, countries have begun to examine the role of entrepreneurship in development. With this shift in development policy came a greater focus on the role of the private sector as an important engine for economic growth and a de-emphasis on the role of government planning.

III.1 Why is Entrepreneurship Important for Development?

Brinkman points out that economic development implies “a process of structural transformations” leading to an overall higher growth trajectory ([7], p.1183). For Leibenstein,

Per capita income growth requires shifts from less productive to more productive techniques per worker, the creation or adoption of new commodities, new materials, new markets, new organizational forms, the creation of new skill, and the accumulation of new knowledge...the entrepreneur as gap filler and input-completer is probably the prime mover of the capacity creation part of these elements in the growth process. ([55], p.77)

Again, economic development involves change and the entrepreneur becomes the best agent for this change. Indeed, entrepreneurship matters for developing countries because markets matter. Hayek recognized that knowledge was “dispersed” throughout society ([56], p.520) with each person having a unique stock of information ([56], p.521).

However, the market, through its frequent *adjustments* in response to the “separate actions of different people” and “the conditions of supply of various factors of production”,

communicated new information through prices which enabled the efficient allocation of resources ([56], pp.526-30). With the collapse of centrally planned economies it has been seen that governments cannot allocate resources efficiently and that markets are, indeed, necessary.

The empirical evidence is also strong in support of a link between entrepreneurship and economic growth. Studies have found that regional differences in economic growth which are correlated to levels of entrepreneurship. The recognition of the importance of the entrepreneur and the necessity of the markets for the entrepreneur to operate has led many countries to begin to work on perfecting their markets by eliminating barriers to entrepreneurship and other market failures. However, policy makers must also take the additional step to ensure that the positive externalities – knowledge, network, and demonstration and failure externalities – can assist in the growth of entrepreneurship and economic development. As Leff concludes, entrepreneurship is essential for development because in developing countries entrepreneurs fill in important gaps² left by incomplete and underdeveloped markets ([57], p.46-47). He states,

Indeed a key function of entrepreneurship in developing economies is precisely to mobilize factors such as capital and specialized labor which, being imperfectly marketed, might otherwise not be supplied or allocated to the activities where there productivity is greatest. ([57], p.48)

However, even when market imperfections are severe, entrepreneurs still exist. Indeed, entrepreneurs respond to these market imperfections by using various *gap-filling*

² For a discussion of the “gap-filling” role of entrepreneurs see Leibenstein 1968.

and, perhaps, second best solutions. In extreme cases, where market and non-market failures are pervasive, entrepreneurs are pushed out of the formal sector into the informal sector. In less severe cases, large diversified indigenous business groups have formed in many developing countries in response to market failures ([58]). The “group...is thus an intrafirm mechanism for dealing with deficiencies in the markets for primary factors, risk and intermediate products in the developing countries.” ([58], p.667) Many of these groups were found to combine both banking and industrial operations ([58], p.664) and account for large portions of business activities in many developing countries ([58], p.665). Large groups were formed in India to correct the information and capital market deficiencies ([59], p.39). Importantly, these groups engage in entrepreneurial behavior ([58], p.669) while also “provid[ing] the capital and the technical and managerial resources” ([58], p.670). In this way, the “group” economizes the entrepreneurial efforts necessary in developing countries ([58], pp.669-72). Nevertheless, these groups are not the optimal structure for entrepreneurship in developing countries as they result in “a special form of monopoly capitalism” which can be disruptive to overall long-term economic development. ([58], p.673) It is therefore, still necessary to continue to perfect markets in developing countries rather than only relying on second-best options.

III.2 The Entrepreneur in Economic Theory

The entrepreneur had been ignored in economic theory. Cole offers that despite Jean-Baptiste Say’s analysis of the entrepreneur in the early 1800’s, economists often

overlooked the entrepreneur as a source of economic change ([60], p.3) and paid little attention to the essential characteristics of their economic period – the “disruptive, innovating energy” – which resulted from the activities of the entrepreneur ([60], pp.2-3). Schumpeter also lamented that the entrepreneur was a “sadly neglected” actor in economic development theory despite his central role in market processes ([61] p.149). Soltow offers that although economic historians often told the tales of “businessmen and firms”, they failed to examine the importance of his presence ([62], p.84). Kirzner argues that neoclassical economics’ focus on perfect information ([63], p.62), perfect competition ([63], p.64) and general equilibrium theories failed to explain how markets really worked ([63], p.61) and that “entrepreneurial activity [had] no place at all in neoclassical microeconomics” ([63], p.67). Hayek also criticized many of the assumptions of perfect information ([56], p.527). While Hayek does not specifically refer to the entrepreneur, his focus on the actions of individuals in the market is consistent with entrepreneurship theory.

Recognizing these deficiencies in neoclassical economics, Austrian economics, in particular, offered alternative views on the functioning of the market and the role of the entrepreneur in economic growth ([63], p.70). Kirzner states that,

From Mises the modern Austrians learned to see the market as an entrepreneurially driven process. From Hayek they learned to appreciate the role of knowledge and its enhancement through market interaction, for the equilibrative process. ([63], p.67)

One of the earliest descriptions of the entrepreneur is by Jean-Baptiste Say. Say’s entrepreneur performed a specific role in the economy by co-ordinating other factors of

production (i.e. labor, capital etc) with his knowledge in order to “meet the demands of the final consumers” ([64]p.272). Say’s entrepreneur assumed risks ([64], p.273) and employed judgment in his entrepreneurial activities ([64], p.275). Finally, an important contribution of Say’s entrepreneur to the concept of entrepreneurial profits which were comprised of wages for the entrepreneur’s labor, interest for the capital used and pure profit – above that normally provided in the market ([64], p.278).

While Say’s entrepreneur emerged earlier, Schumpeter’s entrepreneur is perhaps better known. The Schumpeterian entrepreneur is characterized by his creative and disruptive response to external shocks ([61], p.150). Innovation, for Schumpeter, was central to entrepreneurial activity and included the discovery of new products, new processes and the discovery of new markets ([61], p.153) in response to exogenous shocks of new information ([65], p.171). However, as the potential gains of these discoveries, “[could not] be proved at the moment at which the action has to be taken” ([61], p.157), the entrepreneur assumed the risks of his actions and received the “surplus gains” ([61], p.155) or profits if he was correct. Schumpeter (2002) also recognized that development was a process of “disturbance” and change instigated by the entrepreneur ([66], p.97).

Juxtaposed against the disruptive nature of the Schumpeterian entrepreneur, was the Kirznerian entrepreneur ([67])³. A central feature of Kirzner’s entrepreneur was the he restored a market to equilibrium ([63], p.68). Kirzner found that markets were often in disequilibrium due to previous errors made by entrepreneurs ([63], p.71) and that this

³ For a synthesis of Kirznerian and Schumpeterian entrepreneurs see Israel M. Kirzner, "Creativity and/or Alertness: A Reconsideration of the Schumpeterian Entrepreneur," *The Review of Austrian Economics* V11, no. 1 (1999).

disequilibrium generated new “profit opportunities” ([63]). However, “alert, imaginative entrepreneurs”, imbued with superior knowledge, were able to exploit these “profit opportunities” by recognizing or “discovering” these errors and by taking action to correct the market ([63]). The market would also be brought into equilibrium by new entrants who would drive down entrepreneurial profits ([63], p.72).

How does the entrepreneur become alert to and discover profit opportunities? First, Hayek (1945) recognized that knowledge was “dispersed” throughout society ([56], p.520), while also understanding the importance of the uniqueness of each individual’s stock of information ([56], p.521). Additionally, the market, through its frequent *adjustments* in response to the “separate actions of different people” ([56], p.526) and “the conditions of supply of various factors of production”, communicated new information through prices ([56], pp.526-30). While Hayek suggests that this new information would be communicated to everyone ([56], p.526), and used correctly ([56], p.527), the Kirznerian and Schumpeterian models demonstrate that mistakes and misallocations do occur and provide new opportunities for the entrepreneur. Therefore, it is only the alert entrepreneur, drawing on his unique knowledge set, who is able to use this new information in innovative ways. Hayek’s theory, therefore, emphasized a *knowledge-opportunity matching process* of entrepreneurial discovery. Knowledge accumulation, in a sense, expands the realm of ‘surprises’ that an alert entrepreneur is able to spot and act upon. Knowledge accumulation is thus an important limiting factor for entrepreneurship.

III.3 What Does Entrepreneurship Look Like in Developing Countries?

It is important to clarify what is meant by entrepreneurship in developing countries. A number of terms are used interchangeably to describe entrepreneurial activities. For example, entrepreneurship and small and medium enterprises (SMEs) have been used synonymously. Discussions of entrepreneurial activities in developing countries have also included the informal sector and petty capitalism ([68],). Many African manufacturing firms, for example, had fewer than 150 employees ([69], p.114) and therefore would fall into the SME sector. Fafchamps writes that “market intermediation in Africa is characterized by a plethora of small traders, seldom exceeding a handful of employees and family helpers.” ([69]) The World Bank, in its efforts to target entrepreneurship, has focused on both the small business and the informal sectors. In 2003, the World Bank released a new database on the SME sector and the accompanying study found that when both the SME and the informal sectors are considered, “the joint contribution...to GDP remains approximately constant across income groups at around 65-70 percent. As income increases however, there is a marked shift from the informal to the SME sector.” ([70], p.11) This finding indicated that the informal sector in developing countries is an important source of economic activity. Another concept is petty capitalists, or small businesses which employ relatively few employees and rely heavily on their owner’s and the owner’s family’s labor, include a wide spectrum of entrepreneurs – from the numerous export enterprises of Hong Kong (See also [71]), the maquila workshops in Mexico which produce garments for export, the furniture manufacturers in Italy, to Taiwan’s integrated

circuit producers ([68]). In developed economies, however, scholars have argued for a distinct concept of entrepreneurship. Carland et al, for example, writing on the American economy, make a strong distinction between the SME sector and entrepreneurship ([72]). They find that,

Although there is considerable overlap between small business and entrepreneurship, the concepts are not the same. Entrepreneurial firms may begin at any size level, but key on growth every time.....The entrepreneur is characterized by preference for creating activity, manifested by some innovative combinations of resources for profit. ([72], p.357)

However, while SMEs and entrepreneurship have different meanings, both are important in an economy ([73]). Indeed, the small business sector may serve as a “vehicle both for Schumpeterian entrepreneurs introducing new products....and for people who simply run and own a business for a living.” ([73], p.140) Similar distinctions have been made between survival or necessity entrepreneurs and opportunity entrepreneurs.

Do these distinctions matter for developing countries? As the major share of firms in developing countries are small, in terms of the number of employees and assets; and many operating in the informal economy using family labor, this review’s distinction of entrepreneurship cannot, therefore, be based on size. Any distinctions drawn in this review between entrepreneurship, the small business sector, petty capitalism and the informal sector will be based on the Schumpeterian concept of innovation– new products, new markets and new processes. However, as Schumpeter pointed out, that “the “new thing” need not be spectacular or of historical importance....To see the phenomenon even in the

humblest levels of the business world is quite essential though it may be difficult to find the humble entrepreneurs historically.” ([61], p.151) Therefore, this study adopts the widest possible definition of entrepreneurship.

III.4 An Externalities-based Framework

This review introduces an externalities-based framework to examine the literature on entrepreneurship in developing countries because of the breadth and scope of the subject. What are the relevant externalities in the case of entrepreneurship? Audretsch, Keilbach and Liemann, writing on the Knowledge Spillover Theory of Entrepreneurship ([74], [75], [76]) in developed countries identify *network, knowledge, failure and demonstration* externalities as reasons for government intervention into entrepreneurship ([6]). First, they find that dense networks of entrepreneurial firms are beneficial to entrepreneurial activity ([6]). Hansen (1992) had previously pointed out the importance of co-operative networks and how industry clusters could be facilitated by a region’s social capital ([77]). Acs also offered that regional clusters and networks “foster fast learning” ([78], p.171) and perpetuate spillovers ([78]).

Second, Audretsch, Keilbach and Liemann find that there is an inherent tendency to under-produce knowledge ([6], p.174) because it is a “non-rival, partially excludable good” ([78], p.9). Knowledge expansion results in productivity improvements within the firm which created it and other proximate firms and thus promotes economic growth ([78], p.10). Indeed, the under-production of knowledge and education can be particularly problematic in developing countries as “a low level of human capital accumulation will slow down technological change.” ([79], p.21) Additionally, for developing economies,

knowledge is important in the product and production discovery process. ([80]) Knowledge and information spillovers will be particularly helpful where there are high transactions costs to discovery or large information asymmetries.

Finally, Audretsch, Keilbach and Liemann point to failure and demonstration externalities ([6], p.174). New firm creation, firms' life cycles and even firm failures are found to be beneficial for other entrepreneurs ([6]). Entrepreneurs learn from examples around them. An important element, therefore, is market entry. In fact, for Kirzner, market entry was essential. Kirzner states,

To induce dynamic entrepreneurial competition we require the fulfillment of only one condition: guaranteeing free entrepreneurial entry into any market where profit opportunities may be perceived to exist. ([63], p.74)

While the Knowledge Spillover Theory of Entrepreneurship ([75]) was intended for developed economies, the externalities identified by Audretsch, Keilbach and Liemann (2006) are valid for developing countries. The major themes which appear in the literature on entrepreneurship in developing countries relate to one or more of these failures. Each set of failures and the issues which contribute to them will be explored in the next few sections. While not tested in this review, our hypothesis is that economies which are able to generate more of these positive externalities through its institutions and policies will produce greater levels of entrepreneurship.

The idea that examining market imperfections provides insights into understanding entrepreneurship is by no means a completely new one. However, it may have been overlooked. Leibenstein, after all, pointed out that,

For policy purposes...development economists [should] focus their attention when concerned with specific countries on studying the gaps, obstructions, and impediments in the market network of the economy in question and on the gap-filling and input-completing capacity and responsiveness to different motivational states of the potential entrepreneurs in the population. ([55], p.83)

It is, therefore, important to study how markets function and how they fail in order to discover how to expand entrepreneurial activities in an economy.

Buchanan and Faith had also examined the effects on entrepreneurship of different methods of internalizing negative externalities ([81]). They examine Coase's property rights theorem which requires an *ex ante* resolution (i.e. the assignment of property rights and thus a payment for potential damages before the transaction) compared to a liability rule which results in an *ex post* payment in the event of damages resulting from negative externalities from entrepreneurial activity ([81], p.97). They conclude that there has been a shift from using the law to recognize liabilities (an *ex post* solution) to a greater emphasis on *ex ante* internalization of externalities through regulation ([81], pp.103-04). This new approach can be seen in the increase in regulatory activities which, "in effect... becomes the institutional equivalent of a modified "property rule"" ([81], p.106). Furthermore, if the "public interest agent" or the regulatory authority becomes politicized,

entrepreneurship can be severely curtailed, even though market and legal solutions to remedy the negative externalities are available ([81], pp.108-11).

Hupp, in an examination of ways to internalize and encourage positive land use spillovers, offers useful insight on the effects of positive externalities on entrepreneurial activities. While research has generally usually focused on approaches to internalize negative externalities and has neglected beneficial externalities ([82], p.457), in many instances assigning property rights or implementing the liability rule is not effective in the case of many positive externalities ([82]). Instead, she proposes the establishment of an “administrative agency” that would reward the generators of positive externalities. This approach should result in the socially optimal solution being implemented ([82], p.472). The argument presented by Hupp would appear to work best where there is a public good and thus would provide a way of encouraging the private provision of public goods and other goods with positive spillovers where user fees cannot be assessed. Such an approach may be useful in fostering the positive spillovers which encourage entrepreneurial activity.

III.4.1 Demonstration and Failure Externalities

The relatively small number of examples of successful entrepreneurship renders demonstration and failure externalities extremely important in developing countries. King and Robson described a similar effect as “learning by watching” where “new investment projects in one sector of the economy have a demonstration effect on the efficiency of other sectors.” ([83], p.449) An important aspect of their model is that the spillovers are

generated by the act of investment itself and do not depend on the actual outcome of the project ([83]). Therefore, each new investment yields productivity spillovers. However, the model assumes that the positive externalities to observing new projects (i.e. the increases in productivity) gradually decline over time ([83]) and that the productivity growth rate (defined as the technological progress frontier) eventually levels off ([83], p451). In a similar way, there are important spillover effects from having examples of business formation and from entrepreneurs observing successful going concerns. Potential entrepreneurs observe the strategies and business operations of existing entrepreneurs and gather information about potential markets, input suppliers and production techniques. As such, market entry becomes increasingly important for generating these externalities. Additionally, potential and existing entrepreneurs also learn from failing and failed businesses. They learn what not to do or what to do differently. Markets must, therefore, be free from excessive interventions which do not allow firms to fail for these failure externalities to be effective.

We identify four core themes in the literature which affect demonstration and failure externalities through their effects on entrepreneurial entry, business operations and entrepreneurial exit: (1) culture, values and norms; (2) views on outsiders and inclusiveness, (3) the level of economic freedom and (4) an economy's fundamentals including its macroeconomic stability, infrastructure and the level of development of its financial markets.

(a) Culture, Values and Norms

Geertz describes culture as the “webs of significance” that man has “spun” for himself ([84], p.5). Culture, therefore, provides the framework within which individuals make sense of their lives and live in and adapt to their worlds. It is, consequently, not surprising that culture, values and norms can have an effect on entrepreneurial entry and general business culture and thus on demonstration and failure externalities. Lavoie and Chamlee-Wright offer that one cannot study economic development without exploring culture ([85], p.17). Indeed, a number of studies on entrepreneurship in developing countries have focused on the issue of culture as a source of entrepreneurial advantage or disadvantage in an economy.

An important question which has been explored in the literature is whether there are similar traits which exist between entrepreneurs across all cultures. Is there an “ideal” entrepreneur type? Thomas and Mueller, for example, point out that, “the term entrepreneur implies a configuration of psychological traits, attributes, attitudes, and values of an individual motivated to initiate a business venture.” ([86], p.291) Thomas and Mueller’s study finds that personality traits considered relevant to entrepreneurship such as having a high energy level, feeling personally in control of one’s own destiny (internal locus of control) and having a high risk tolerance were significantly negatively associated with entrepreneurs’ cultural distance from American culture ([86]). In their study, therefore, entrepreneurs from countries which were more culturally similar to the United States were more likely to possess these qualities. However, innovation, which is perhaps

the prime driver of entrepreneurial activity, was found to be unrelated to having a cultural similarity to the United States ([86]).

One *ideal entrepreneur type* portrayed in the literature is that of an entrepreneur who possesses the Protestant Ethic. Writing on African entrepreneurs, Elkan finds that among indigenous Africans, “there is one quality that most successful African businessmen have in common. They share the local (and often Muslim) equivalent of the Protestant Ethic.” ([87], p.173) In a study of The Bahamas, Storr identifies a cultural trait termed the “Junkanoo Ethnic” which embodies Weber’s “spirit of capitalism” as an explanation for the existence of entrepreneurship in that country and also as a cultural trait of successful Bahamian entrepreneurs ([88]). This “ethic” is important for the development of “modern capitalism” ([89], p.11). Thomas and Mueller (2000) offer that, “the ideal profile of the entrepreneur continues to reflect the characteristics of Protestantism and achievement.” ([86], p.290) Hoselitz (1952) also points to traits oriented towards “productivity, working and creative integration” and leadership and innovation ([90], pp.106-08). There, therefore, appears to be some evidence that some personality traits are common among entrepreneurs.

In addition to those studies focused on commonalities between entrepreneurs, other studies have discussed whether some cultural traits will need to adjust as entrepreneurship becomes more prevalent in developing countries. Zapalalska and Edwards, for example, offer that “culture is a dynamic factor in regional development in the context of reforming the Chinese economy” ([91], p.286). They propose that while some aspects of Chinese culture are conducive to entrepreneurship ([91], p.289), other cultural traits are changing to

adapt to a market economy ([91], p.290). Dana found that the “combination of social structure and cultural values has constrained entrepreneurship in India.” ([92], p.86). Specifically, it was suggested that India’s caste system and the passive nature associated with some aspects of Indian culture may not be as well suited to the “creative destruction” needed for entrepreneurship ([92], pp.87-88). On some of the cultural barriers to entrepreneurship, the 2001 Global Entrepreneurship Monitor (GEM) report on India stated that,

Sociocultural rigidities persist. In addition, there are several inhibiting factors such as custom and tradition, low status given to businessmen, the high risks involved in enterprise, absence of vertical mobility on the social ladder, market imperfections and arbitrary changes in the laws of the land and their administration. ([93])

Cochran performed a study in Latin America and concluded that “certain characteristics of Latin American culture have been relatively unfavorable to economic development” and, therefore, to the success of entrepreneurship ([94], p.517). It was observed that entrance into the professions was more socially respected than becoming a business owner. In Botswana entrepreneurship was generally shunned by younger Batswana in favor of government employment ([95], p.6). While, the country’s educational system and “socio-cultural” factors were cited as explanations for these views on entrepreneurship ([95]), it is also important to question why public sector employment appears more attractive. Finally, the business culture which developed in the former Soviet Union under socialism was thought to “stifle independent innovative culture.” ([96], p.13)

However, it is not clear how binding culture is on entrepreneurship and how much depends on reinforcing economic and social systems. First, entrepreneurs in India, China and transition economies have responded quickly as liberalization occurred. Indeed, Chinese and Indian entrepreneurs are key participants in the world economy as the globalization phenomenon opens up new opportunities ([97]). Additionally, Chinese and Indian immigrants, in particular, have played an important role as entrepreneurs in entrepreneurial countries such as the United States ([98], p.22) and in developing countries such as Mauritius and developing Asian countries. In a study of Cuba, one of the last remaining centrally planned economies, it was noted that, “Cuban immigrants in Miami established a thriving Spanish-speaking enclave economy that offers entrepreneurs substantial profits.” ([99], p.950)

It would therefore appear that entrepreneurial opportunity allows those individuals who possess an entrepreneurial “spirit” to transcend any cultural boundaries. However, culture and opportunity appear to re-enforce each other. Acs et al sum up nicely that, “a strong cultural context that supports entrepreneurial activity” is one which “will lead to more individuals perceiving entrepreneurial activity as a desirable economic choice.” ([100], p.124) Indeed, Hoselitz noted that countries need to create a climate which allows entrepreneurs to pursue opportunities, while also encouraging the personality traits which leads to entrepreneurial activities ([90], p.108).

(b) “Outsiders” and Inclusiveness

A country's acceptance and tolerance of “outsiders” and its levels of inclusiveness can impact entrepreneurial entry. Here, the concept of social capital - “an instantiated set of informal values or norms shared among members of a group that permits them to cooperate with one another” ([101], p.98) – becomes important. The “trust”, engendered by social capital enables members of a society to coordinate their activities with lower transactions costs ([101], p.99). A society's level of inclusiveness determines how large its radius of trust extends. Elkan finds, for example, that there is a “distrust of outsiders” which has limited the growth of firms in many African economies ([102], p.177). More generally, in developing countries entrepreneurs have often utilized their extended families as these “kinship relations” are the extent of the radii of trust in these societies ([55], p.81). However, this close control of business operations can negatively impacts business success ([102], p.172), as outside managerial and technical talent is often excluded.

The high level of ethnic fragmentation in many developing countries is also important for explaining entrepreneurship. For example, that “outsiders” such as ethnic minorities in developing economies often move into entrepreneurial activities because they are excluded from other types of employment ([55], p.81). This exclusion, therefore, lowers the “opportunity costs” of entrepreneurship ([55]). Elkan, for example, finds that ethnic Asian and Lebanese minorities in African countries were prominent enterprise owners ([102], p.185) and that “their feelings of insecurity [as minorities] may have encouraged them to seek economic success” as business owners ([102], p.171). While some cultural groups do appear to be more entrepreneurial as immigrants than others, in a

study of Australia, it was argued that the size of the immigrant group in the host country and the relative “linguistic isolation” of that group affect the likelihood of members of a particular immigrant group engaging in entrepreneurial activities in addition to other factors such as education and skills ([99], p.958). Similar conclusions have been made in studies of immigrants to the United States ([103]). While both of these studies relate to developed countries, the results could be useful for understanding the differences in entrepreneurship levels for some ethnic minorities in developing countries. Ethnic minorities which are relatively isolated from the indigenous population would be more likely to engage in high rates of entrepreneurial activity.

On the other hand, however, while some groups are often pushed into entrepreneurship, “restrictions” may be placed on ethnic minority and non-indigenous local entrepreneurs in many developing countries when they are perceived as being too entrepreneurial ([57], p.51). A study of SMEs in the South Pacific found that there were genuine differences between indigenous and non-indigenous entrepreneurs in the South Pacific Islands. More importantly, however, there was a perception among indigenous Pacific Islanders that “non-indigenous entrepreneurs...[had] ‘a depth of experience and resource to draw from’ which may have provided them with an advantage in their entrepreneurial activities ([104], pp.70-71). Indeed, it was found that government policies were biased against non-indigenous entrepreneurs to compensate for this “advantage” ([104], p.71).

The literature reveals that there is a push-pull effect to entrepreneurship in developing countries with deep ethnic fragmentation. On the one hand, ethnic minorities

may be pushed into entrepreneurship; while on the other hand barriers may constrain their activities. Where there are severe ethnic tensions, “outsider” groups may be excluded altogether such that the society loses the benefits of their business demonstration externalities.

(c) Economic Freedom – an Expansion of the Scope for Entrepreneurship

Economic freedom affects demonstration externalities by its effects on both entrepreneurial entry and activity. Mises finds that economic freedom “paved the way” for the substantial improvement in living standards in capitalist countries ([105], ch.6 xxix.16). For entrepreneurial activity to occur, potential entrepreneurs must be able to not just perceive an opportunity, but to also be able to legally act on it – to become an “acting man” ([105], ch.4 xiv.72). Hoselitz adds that a society’s “cultural norms” should allow persons to be free to choose their occupations ([90], p.109). Without this economic freedom, Mises (1949) points out that “then the market, interpersonal exchange, private ownership of the means of production, entrepreneurship, and private initiative, virtually disappear altogether.” ([105], p. ch.6 xxx.3.) Elkan finds that,

Giving the private sector a greater role in development has two facets: first, a change in policy regime that removes restrictions on the private sector; second, the divestiture of activities from the public sector – privatization. ([87], p.179)

Two strands of the literature are therefore explored. The first deals with excessive government involvement in the private sector and the second with the growing trend towards privatization.

First, some countries' governments "discouraged" entrepreneurship; while in others government activity is so pervasive that it "crowds out" private entrepreneurship opportunities ([87], p.177). Where government activity is pervasive, a managerial type of business culture is likely to prevail rather than one which supports innovative entrepreneurship([90], p.100). In China, although there has been some decentralization of economic activity, government officials interfered in the affairs of "enterprise managers" ([91], p.290). For example, Zapalska and Edwards find that,

Mobility of entrepreneurs seeking new opportunities is obstructed. Entrepreneurs wanting to retain the advice and expertise of foreign consultants are blocked by the fact that investment decisions are controlled outside the enterprise by higher authorities. ([91], p.291)

They offer that until a market economy is fully implemented, entrepreneurship will not reach its full potential ([91]). China's complex business environment may act as a barrier to private investment ([91]). A survey of 32 Nigerian SMEs respondents reported that there is "frequent harassment by government officials who extort money from businesses." ([106], p.59) An examination of post colonial Nigeria and Tanzania explored the role of socialist ideology and the strong negative views towards capitalism in strangling private enterprise and entrepreneurship ([107], p.146). Dana had similar findings in a study of India and notes that the post-independence strong state-led economy stifled opportunities

for entrepreneurship ([92], pp.87-90). Indeed, the strong hold of government over all spheres of economic life led to vibrant informal sectors in many African countries such that, “the informal sector and small scale income generating projects became a form of resistance to the state controlled economy which forced the government to tolerate and eventually encourage private sector activities.” ([107], p.159) A similar phenomenon was observed in former Soviet countries where the informal economy flourished in spite of their being a formal non-market economy ([96], p.15). However, through the work of business associations such as chambers of commerce, a new paradigm is being built with “a new relationship between the state and its citizens which encourages private sector activities and entrepreneurship.” ([107], p.155)

A second phenomenon which has led to new opportunities for entrepreneurship in many developing and transition countries is the wave of privatizations – generating new demonstration and failure externalities. The creation of markets, through privatization, provides the space for entrepreneurs to operate and to innovate, using prices and other information as a guide. The transition economies provide an interesting case for analyzing the importance of entrepreneurship. Like other regions, entrepreneurship is associated with economic growth. For example, although Russia has generally performed poorly in terms of the policy environment for entrepreneurship, Berkowitz and DeJong find that regions with higher entrepreneurial activity within Russia also experienced stronger economic performance ([108], p.25). They also find that,

The view that entrepreneurial activity is an important engine of growth emerges from the observation that post-socialist economies that have

experienced relatively robust patterns of entrepreneurial development have tended to enjoy relatively high rates of economic growth. ([108], p.26)

A review of the literature reveals that the key feature of the transition was the privatization of large government enterprises. Indeed, immediately after the collapse of the socialist system there were high rates of new firm start-ups ([109], p.154). While business formation proceeded at a rapid pace, the formal institutions which were needed to support increasing complex forms of enterprises were non-existent ([109], p.155) and informal institutions developed to compensate for the inadequacies of these new market economies ([109], pp.159-60). The creation of conditions which would assist in the development of entrepreneurship was not the focus of the reforming countries nor the international agencies initially ([110], p.52). However, this lack of formal institutions created high barriers to entrepreneurial activities in the years following the transition which has slowed the growth of new businesses ([96], p.2). McMillan and Woodruff point out that,

Entrepreneurs require more from the state, in the medium and long-run, than the absence of interference. If firms are able to grow to yield economies of scale, they need laws of contract so they can take on anonymous dealings and financial regulation so they can get bank loans and outside shareholding. ([109], p.165)

Indeed, a major issue for transition economies is the lack of formal institutions related to property rights, supervision of market activities, dispute resolution mechanisms and improved financial and accounting systems ([111], pp.29-30). Therefore, the transition to entrepreneurship in the formerly centrally planned economies of Eastern Europe is not

complete. While private enterprises are now the norm, thus expanding the scope for entrepreneurial activity, the business and regulatory environment does not yet address the imperfections in their new markets related to high transactions costs, information asymmetries and the missing markets for financial services in many countries.

(d) The Fundamentals – Financial Markets Development and Physical Infrastructure

Issues pertaining to a country's macroeconomic stability, the state of its financial markets and its infrastructure are pervasive in the literature on entrepreneurship in developing countries. A survey of Nigerian entrepreneurs, for example, finds that access to credit, poor transportation infrastructure and a lack of dependable utilities are a leading constraints to firm growth ([106], p.59, Table 1). In a study of firms in Romania, Brown, Earle and Lup find that "the availability of loans is an important factor in promoting the growth of small start-up firms" ([112], p.62). Yusuf and Schindehutte study the effects of macroeconomic performance on the types of entrepreneurial activity. They survey 160 entrepreneurs who had formed businesses during periods of economic decline in Nigeria ([113], p.45). This decline resulted from a number of poor policies ([113], p.43) such that despite Nigeria's considerable oil income, the government's reinvestment activities "did not accelerate growth." ([114], p.21). However, the authors point out that post colonial Nigerian government, unlike many other African countries, was not overly hostile to the private sector and had developed a number of programs to support the development of

indigenous SMEs ([113], p.44). The study revealed that entrepreneurs started businesses for a number of reasons during the period in review. However, “extrinsic rewards” related to securing income were more important than purer “Schumpeterian” type entrepreneurial motivations (i.e. innovation) ([113], p.49). It would therefore appear that in periods of economic hardship necessity entrepreneurship rather than opportunity entrepreneurship becomes more important ([113]).

The inadequacy, in terms of both quantity and quality, of infrastructure in developing countries is another important factor which limits successful business entry and growth and thus demonstration externalities. Writing on the Chinese economy, Liao and Sohmen find that,

Lack of infrastructure may limit areas of future entrepreneurial growth. Technology is a relatively labor-intensive and capital-unintensive industry. Likewise, service industries typically require little initial capital input. Yet other areas that will require privatization in the future may face obstacles due to the lack of an efficient credit system and lack of necessary infrastructure. ([115], pp.31-32)

In addition to physical infrastructure inadequacies, entrepreneurs in developing countries such as Cyprus also face the inadequacies of “policy infrastructure.” ([116], p.562) The Economic Commission for Africa (ECA), in their review of the effects of energy infrastructure on international trade, find that the low penetration of electricity in Africa limits the ability of countries to trade ([117]). Indeed, the scarcity of good infrastructure directly increases the costs of doing business and reduces the reliability of production, thereby increasing costs indirectly ([117]). The ECA also find that,

...small firms cannot afford to make costly investments to meet their power needs. Given that SMEs are greatly affected by unreliable power supply, the growth of these firms and the generation of employment are negatively impacted. ([117])

Similar conclusions can be drawn from the lack of infrastructure related to transportation (i.e. roads and ports), communication (i.e. telephones, internet penetration) and land improvement systems (i.e. irrigation).

IV.4.2 Knowledge and Information Externalities: What to produce and how to do it

Knowledge and information externalities affect entrepreneurship in developing countries in two important ways: these externalities affect the ability of entrepreneurs to discover what to produce and they impact the technology and processes used in production. Knowledge and information externalities are impacted by information asymmetries, transaction costs, education levels, research and development opportunities and foreign direct investment.

First, information failures regarding what to produce characterize markets in developing countries ([80]). Mambula points out that because of high discovery costs, entrepreneurs enter “well established sectors rather than seeking new production and new market niches.” ([106], p.63) There are also high costs to discovering *what to produce* and that these costs cannot be fully appropriated by an entrepreneur ([80]). Therefore, in a market situation without government intervention there is unlikely to be the socially

optimal amount of entrepreneurship and investment in business activities. Additionally, if entrepreneurs who enter the market are allowed to exist as monopolies, then again the market fails as there will be over-production of goods which do not embody the country's comparative advantage. Information and search costs, therefore, may lead to lower levels of entrepreneurship ([80]).

In addition to information failures, the paucity of available educational resources is a major limiting factor for knowledge spillovers in developing countries. In a study of African entrepreneurs, it was found that African entrepreneurs' ability to move into the formal industrial sector increased with education ([102], p.175). Additionally, persons with experience in "large expatriate or Asian-run businesses" ([102], p.174) and members of the educated political elite were more likely to become entrepreneurs ([102], p.175). Berkowitz and DeJong, in their study of the effects on entrepreneurship and economic growth find that education has a strong and positive effect on entrepreneurship ([108], p.27). Mambula points out that "most Nigerian SME owner/managers are not adequately organized, qualified or trained. This seriously hampers their performance and their international competitiveness." ([106], p.61). However, in a study of Zambian entrepreneurs, entrepreneurs generally had more years of formal education than employees (i.e. 16% of entrepreneurs held university degrees compared to 2% of employees) ([118]).⁴ The mix of educational attainment also revealed some important differences between ethnic groups. Indigenous African entrepreneurs were more likely to have a secondary or university education; Asian entrepreneurs generally attained secondary, university and

⁴ See table 2.4.

professional education; and entrepreneurs of European origin in Zambia generally had secondary school, university and technical training ([118], p.7). These differences may affect the types of entrepreneurial activities that are attempted by the different groups. Bell and Pavitt offer that,

It is widely recognized that education policy has a strong influence on the effectiveness with which technologies are assimilated and improved. Thus, literacy is advantageous in supplier-dominated technologies, and higher technical and graduate engineering skills are necessary in scale-intensive and specialized-supplier technologies. ([119])

The knowledge filter ([76], [75]) – the ability to transform knowledge created by firms and in laboratories into marketable products – is likely to be extremely dense in developing countries. A study of the biopharmaceutical industry in Nigeria acknowledged that there are many obstacles to knowledge transfer. First, knowledge and innovation policy had been very disjointed ([120], p. 7). For example, “national technological infrastructure tend to give little support to domestic firms that would benefit from the evolutionary process of technological deepening through learning that is the hallmark of dynamic latecomers.” ([120]) Innovation is further stifled because research organizations lack funding ([120], p.19), and fail to collaborate with each other ([120], p.23).

Finally, there is a large and well developed literature on the effects of foreign direct investment on development through its role as a transferor of technology. Buckley and Ruane point out that,

FDI may assist developing countries through: the provision of capital, the inflow of technology, the inflow of managerial know-how, and their impact on the creation of efficient markets. ([121], p.1612)

Ireland's miracle growth over the last 70 years can be an important example for developing countries. Indeed, Ireland's transformation is attributed to the country's ability to attract FDI inflows through its newly formed export processing zones beginning in the 1950's ([121], p.1613). However, the FDI was strategically attracted – leading to clusters of high skill activities in the electronics, chemicals and pharmaceuticals sectors. ([121], pp.1620-21). Buckley and Ruane also point out that the “Irish education and training policy was also coordinated to ensure that a supply of skilled labour suited to the sector, so that costs remained competitive.” ([121], p.1621) In this respect, comparisons have been made between Ireland's development and India's high-tech clusters. Finally, Ireland has been successful in forming those important backward linkages which transmit knowledge spillovers from FDI ([121], p.1623). However, it is recognized that “it takes time for MNEs to acquire local suppliers, and active policy that can reduce the ‘learning phase’ about local supply may increase the speed at which linkages can occur” ([121], p.1623; [122]).

There is an important lesson to be learned from the case of Ireland: using FDI to achieve knowledge spillovers requires accompanying policy, including education policy. Therefore, policies to generate knowledge spillovers in developing countries require more than facilitating the flow of ideas and information between firms by reducing the “knowledge filter” ([76], [75]), but also facilitating the provision of basic and higher

levels of education, skills while also encouraging knowledge spillovers from FDI through linkages with the domestic economy and domestic entrepreneurs.

III.4.3 Network Externalities

Network externalities have emerged as a major theme in the literature on entrepreneurship in developing countries. There are a number of dimensions. First, there are networks between entrepreneurs within the country (i.e. domestic associations) and then there are networks which extend internationally. Much of the literature also focuses on the lack of indigenous business networks in some countries and the importance of ethnic minority networks in others. A second, but related, strand of the literature examines the development of industrial clusters between firms in developing countries and their links to international clusters. Indeed, network externalities of all types are important because the small size of many enterprises in developing countries often negatively affects transactions costs, scales of economies, and the consistency of production quality ([69], pp.114-18). Business networks and industrial clusters can assist in overcoming some of the disadvantages of smallness through their creation of positive externalities ([106], p.61). These networks may also help to overcome some of the information failures associated with markets in developing countries.

Networks of entrepreneurs within developing countries can have important impacts on shaping policy conducive to entrepreneurship in developing countries. Brautigam, Rakner and Taylor introduce the concept of “growth coalitions” or partnerships between

business networks and the government for the purpose of promoting economic growth and development ([123], p.520). They find that these groups are most successful where they consist of a wider cross section of businesses rather than only one specific industry ([123], p.522). This greater inclusiveness diminishes the possibilities for purely rent-seeking activities ([123]). Business networks should also be sufficiently organized and be able to “credibly engage the state in technical policy discussions.” ([123]) Business associations in Nigeria and Tanzania have made some important inroads in influencing public policy towards the private sector and private enterprise. These groups have recognized that change is necessary and coalitions have formed across ethnic groups and large and small capitalists to advocate for further liberalization ([107], p.155 and p.163). Heilman and Lucas conclude that,

In countries where the power of capital is not yet institutionalized, the fate of capitalism may well depend on the ability of capitalist social movements to promote the policies, institutions and reforms necessary to long-term growth. ([107], p.165)

Therefore, networks are extremely important in developing countries in ways which go beyond the traditional network externalities of connecting firms with information on suppliers, markets and production techniques.

Within country and external networks of firms are often ethnic-based. Brautigam defines ethnic business networks as “the professional and social relationships among entrepreneurs sharing a particular ethnic or cultural background.” ([124], p.449) These networks fill important gaps in underdeveloped market systems related to “finance,

technical knowledge, and marketing information.” ([124], p.447) Business networks were observed among non-indigenous entrepreneurs in the South Pacific where these networks offered “an established reputation, greatest access to capital and lines of credit.” ([104], p.1) Brautigam (2003) studied the business networks in two countries and found important differences between them and their ability to facilitate entrepreneurship ([124]). First, a dense network of business relations had been established in Mauritius around the country’s export processing zones linking local Chinese entrepreneurs with manufacturers in China, Hong Kong and Taiwan ([124], p.456). Many of these Sini-Mauritian networks were based on kinship and other personal ties which engendered a strong sense of trust ([124], pp. 456-57). However, an important feature of the Chinese networks was their role as “a gateway for overseas Chinese entrepreneurs interested in investing both in Mauritius and elsewhere in Africa”. ([124], p.460) Second, while indigenous Nigerian entrepreneurs in Nnewi, Nigeria, a town which manufactured spare auto parts also formed beneficial business networks with overseas Chinese manufacturers, Brautigam points out that “these overlapping networks did not lead to extensions of credit, something that is common in the internal operations of ethnic business networks.” ([124], p.464) While not as dense as the Chinese-Mauritius networks, the networks between Nigerian and Chinese entrepreneurs were useful for establishing access to inputs and technology ([124], p.464). It would, therefore, appear that the strength of social capital impacted the strength of these business networks.

There have also been a number of studies which have focused on industrial clusters in developing countries ([125], p.3). These clusters exist in both developed and

developing countries ([126]). Humphrey (2003) examined a number of clusters in developing countries and finds that competitive and successful clusters focus on continuous “innovation and upgrading” ([125], p.5). Writing on Brazil’s shoe manufacturing cluster, he finds that many developing country clusters have been poorly designed ([125], p.9) and have focused exclusively on production for the local economy ([125], p.7) and others many have been integrated into the global value chain ([127]) in disadvantageous ways ([125], p.10). In a study of Latin America, significant barriers to cluster formation are found to exist because of “scarcity of entrepreneurial spirit, barriers to information-sharing, lack of trust, and similar “soft” constraints” ([128], 1694). In Latin America three types of clusters have been observed: necessity clusters which often emerge in the informal sector; domestic enterprise clusters (often of mixed sized enterprises); and clusters of multinational firms conducting “complex activities” located within the country ([128], p.1695). The study reveals mixed effects for different types of clusters of entrepreneurial activity. Indeed, they find that the,

positive externalities of clustering reduce the barriers to entry for new firms, thus contributing to create an excess supply of the cluster’s main product. In a low-skill environment this leads to ruinous competition instead of giving rise to rivalry-driven upgrading as observed in innovative dynamic clusters. ([128], p.1697)

Both the socio-political and business networks of entrepreneurs and firms appear to be important in developing countries. The socio-political networks, which often take the form of business associations, including chambers of commerce, are vital agitators for change in

many countries; provided they can overcome the rent seeking tendencies associated with small, closed groups. Business networks of firms are also necessary to facilitate knowledge and demonstration spillovers.

IV. New Policy for Entrepreneurship in Developing Countries

This survey has reviewed the literature on the evolution of development policy from colonial-era policy to import substitution to export promotion and specifically the use of export processing zones. Given the failure or poor performance of some of these economies for many developing countries, entrepreneurship is being explored as an alternative approach. This research on entrepreneurship and development shows how demonstration and failure, knowledge and network externalities are affected by a range of issues in developing countries. Based on this review, the study hypothesizes that economies which are able to generate more of these positive externalities will produce higher levels of entrepreneurial activities.

IV.1 Demonstration Externalities

Encouraging demonstration externalities is perhaps the most important issue for developing countries. This study identified culture, values and norms, a country's views on inclusiveness; its degree of economic freedom and its fundamentals as having an impact on demonstrational externalities. The main goal is ensuring market access so that talented

potential entrepreneurs with good ideas are able to enter, set up businesses and thrive (or fail) without unnecessary barriers.

While culture is important in this analysis of entrepreneurship in developing countries, this survey also recognizes that culture is not static and therefore, the discussion of culture and entrepreneurship is not deterministic - with some cultures being forever ill-suited to entrepreneurship compared to others. Indeed, Lavoie and Chamlee-Wright, suggested that “cultural patterns conducive to economic growth may emerge from vastly different sources.” ([85], p.14). This review has shown that a society’s culture, values and norms can impact market entry in two main ways: by influencing the attractiveness of entrepreneurship and second, as a “barrier” to entrepreneurial activities. A third issue is the identification of common traits among entrepreneurs.

First, demonstration externalities and culture intersect and influence a society’s perceptions about entrepreneurship. In some cases entrepreneurship may be viewed as an unattractive occupational choice compared to other options. Although “socio-cultural” factors are undoubtedly important, this review posits that the incentive structures in the labor markets of many developing countries are another explanation. This is especially the case where there are strong labor unions and weak merit based institutions. Policy makers in developing countries should examine the risk-rewards pay offs to different sectors. While entrepreneurship will always involve more risk than wage employment, institutions such as bankruptcy rules lower the expected opportunity costs. Such changes may improve the cultural acceptance of entrepreneurship.

Developing countries should also address cultural barriers to entrepreneurship. Again Botswana is an interesting case study as the country has taken a direct approach to addressing some of its cultural barriers. For example, the Botswana government's efforts to address the biases against female entrepreneurs and other cultural obstacles which prevent certain members of society from engaging in entrepreneurial activity ([95], p.6). This will likely be a slow process. However, as the literature review revealed, cultures change and adapt in response to new information and opportunities. Schramm concurs, and offers an optimistic view that "developing countries and development agencies, then, should not worry too much about cultural intangibles...with the knowledge that culture can change as incentives and conditions change." ([129], p.5)

Finally, the literature reveals that there are some common traits across very different cultures which are found in entrepreneurs. While some research is focused on whether these traits are innate (nature) or whether they can be taught (nurture) – whether we can teach people to be more entrepreneurial – this review recognizes that entrepreneurs cannot flourish without an amenable institutional environment. Lavoie and Chamlee-Wright point out that,

The culture must be one that, in general, supports commerce and entrepreneurship, but the particular manner in which the spirit of enterprise can be encouraged will be culturally specific. ([85], p.13)

Therefore, policy makers should focus on creating an enabling environment in which persons who possess entrepreneurial personality traits can flourish.

Policy makers will also need to take the steps to ensure that their formal and informal rules do not discriminate against “outsiders”. The literature has shown that ethnic minorities, returning émigrés and expatriates can provide important entrepreneurial capital to developing economies. While building social capital is a slow process, requiring repeated interactions, there are compensatory policy measures which can be taken. For example, to encourage trust in business dealings, an economy’s legal system can become an important factor. An independent judiciary and enforceable contract laws facilitate impersonal transactions and replicate the assurances and trust gained from years of repeated dealings or through familial and kinship relations. Other institutions such as credit bureaus facilitate modern banking systems and provide the information needed to facilitate arms length transactions. The aim of policy makers should be to ensure a playing field where all potential entrepreneurs have an opportunity to generate and benefit from the demonstration externalities. Therefore, institutions which reduce information failures and protect property rights should be constructed and enhanced ([130]; [131]).

On the other hand, developing nations face important political economy considerations with respect to indigenous entrepreneurship. In many cases, indigenous groups have been the subject of previous discrimination. A study of a program to promote indigenous Malaysian Bumiputra entrepreneurship using a public contract farming scheme provides an example of an ill-fated attempt to create a “level-playing field” ([132])⁵.

⁵ The private contract farming system in Malaysia provides the important function of reducing uncertainty for local farmers and improves opportunities for credit as banks are aware that there is a guaranteed buyer for the farm produce, p.193. However, critics have also said that such programs transfer “the risk from the firm” which buys the farm produce “to the farmer”, p.198.

While the program provided important skills and training to the bumiputra and resulted in higher incomes, the program was conducted outside of the market and therefore became more of a welfare program than an entrepreneurial training program. Indeed, the program's participants rarely, if ever, moved on to become entrepreneurs in the private contracting sector. This lack of transition to the private sector indicates that while the program addressed important social concerns, it did not address genuine entrepreneurship ([132], p.200-01). A first-best approach, even where past discrimination is an issue, would have been to perfect Malaysia's markets while also improving the educational services provided to the bumiputra.

A third issue which affected demonstration externalities was economic freedom. Economic freedom encompasses a range of issues. However, the main point is that potential entrepreneurs should be able to act. Certainly, expanding the scope for their actions through privatization of the economy is important. But it is also important to ensure that government activity encourages rather than thwarts private enterprise. In many developing countries, government activity is too pervasive. There is overly excessive and complex regulation of business activities increasing the potential for rent seeking, on the part of firms, and corruption on the part of government officials ([133]). A review of the literature has shown that even where markets have been created, through privatizations (for example in the transition economies), the formal institutions are still necessary to enable entrepreneurship.

Finally, with respect to demonstration externalities, a country's fundamentals (i.e. its macro-economy, financial markets and infrastructure) matter. Countries in economic

turmoil have difficulties supporting innovative entrepreneurs. While not examined in this survey, the effects of physical conflicts and wars should also have similar effects. Second, this review has shown that entrepreneurs need good infrastructure and functioning financial markets. An important question arises: Does entrepreneurship require economic growth? Similar questions have been asked in the development literature related to poverty alleviation. In the case of the poverty literature, a growing economy means that there is a “growing pie” or increasing resources with which to deal with poverty. Economic growth is indeed a necessary precondition for addressing poverty ([134]). Poverty reduction strategies without growth would be merely redistributive. Similarly, promoting entrepreneurship by itself, without focusing on the macroeconomy may be redistributive – taking from some parts of the economy to support others. Therefore, a country’s entrepreneurship policy must evolve together with its pro-growth policies.

Policy Recommendations:

- 1. Assess which cultural traits within a country are barriers to entrepreneurship or to groups of potential entrepreneurs;*
- 2. Assess whether a country has institutions in place which support arm’s length transactions and reduce information and transaction costs;*
- 3. Assess whether a country’s business and regulatory environment acts as a barrier to entrepreneurial activities;*
- 4. Assess whether a country’s macro-economy, infrastructure and financial markets support entrepreneurship.*

IV.2 Knowledge and Information Externalities

This review has explored the question – how do developing countries generate knowledge and information externalities? We know that in all economies, there is a tendency to under-produce knowledge, particularly basic knowledge. However, in many developing countries, even basic education is inaccessible to a major share of the population. Technology, research and development is lagging, and in some cases, non-existent. Indeed, Elkan points out that, “As for making good technological choices, Africans are at a disadvantage simply through lack of experience.” ([102], p.176)

Oyelaran-Oyeyinka and Sampath offer that,

Translating research to innovation requires a system of knowledge infrastructure of certain quality. It provides the organizational incentive for the long and often complicated process of innovation. Knowledge infrastructure is required at the most basic level of education (training scientists and engineers), as well as at the level of public scientific research and development. ([120], p.22)

These knowledge institutions will need to be created, in some cases, or transformed (in terms of their goals and approaches to collaboration) in others to facilitate knowledge spillovers in developing countries. A second, but related concept was the considerable costs to discovering what to produce ([80]). These conditions limit knowledge spillovers and thus contribute to the underproduction of entrepreneurship in developing countries.

Innovative entrepreneurship requires a strong educational foundation. Human capital is needed to create ideas ([135]) and therefore as human capital expands through

education, so too will the realms of possibilities for innovation. Countries will need to refocus their educational policies along the lines of their industrial policies at the higher end, while also improving basic education. Schramm correctly pointed out that education, both at the primary and the tertiary levels is important for entrepreneurship in developing countries and provides the example of India's Institutes of Technology which have allowed "high-impact entrepreneurs [to] emerge" ([129], p.5). Further research will be necessary to examine the approaches which have been used by developing countries to align their educational systems with their overall development strategies. These reforms are expensive, but necessary undertakings.

Given the constraint on the domestic economy, a country's foreign investment and international trade policies are, therefore, useful tools for encouraging knowledge spillovers. Indeed, this review's analysis focused on the successful transformation of Ireland using the twin pillars of strategic FDI and a strong education policy. Both of these approaches assisted in the spillover of knowledge between entrepreneurs within Ireland and allowed Irish entrepreneurs to absorb spillovers from outside of the country. However, Ireland and the Asian miracle countries are outliers in terms of generating these positive knowledge spillovers. Even when FDI is present, linkages and spillovers are often weak – especially when EPZ type assembly FDI is used ([136]). The Irish model suggests that aggressive education upgrading must be combined with FDI policy in order to benefit from these knowledge spillovers.

Policy Recommendations:

1. *Address educational deficiencies at the basic and tertiary levels;*
2. *Assess whether current knowledge and innovation activities provide spillover opportunities;*
3. *Assess whether there are high costs to discovering what to produce;*
4. *Assess whether the country's FDI strategy promotes entrepreneurship.*

IV.3 Network Externalities

Network externalities in developing countries related to both associations of entrepreneurs and clusters of firms. Each had different purposes. This review explored the socio-political importance of groups in developing countries. Increasingly, these groups are powerful lobbyists for economic liberalization. However, it was acknowledged that these groups can be captured and engage in rent seeking behavior, especially when there are dominated by one industry. The formation of multi-industry business associations should be encouraged and facilitated.

Cluster formation, especially where there is international production should be encouraged. Humphrey offers a number of suggestions for policy to foster stronger industrial clusters. First, he points out that policy should be aimed at achieving “completeness” ([125], p.14) within the cluster. On the other hand, however, formally integrated clusters are not the only solution. Taiwan’s semi-conductor industry, for example, was dominated by a large number of “small firms that target certain market niches and collaborate under different roofs.” ([137] p.145) Developing countries,

therefore, should study their industries to see which clustering strategies are most successful.

LDCs will also need to improve infrastructure, remove barriers to imported inputs and immigration regimes will also need to be rationalized to allow access to “specialist foreign labor” ([125], pp.15-16). Education will be important to provide the necessary technical and managerial skills ([125], p.16). Additionally, FDI will need to be strategic to ensure that local entrepreneurs enter the global chain at the right place ([125], pp.16-17). This requires a better understanding of export markets.

Policy Recommendations:

1. *Encourage the involvement of multi-industry, multi ethnic business associations in public policy making;*
2. *Assess whether existing industry clusters are complete;*
3. *Assess export markets to determine whether clustering strategies are appropriate.*
4. *Facilitate the access to information to entrepreneurs so that they better understand their export markets.*

V. Conclusion

Developing countries have tried a myriad approaches to achieve economic development and growth. After gaining political independence, in many cases, turned towards planning and began to implement import substitution programs to jumpstart their industrialization processes. Indeed, at the time of independence, many of these policies

were supported by the major international development agencies and leading economic theorists. Krugman concludes that “35 years ago...the key elements of a successful development strategy were government planning and import substitution...it was widely taken for granted that centrally planned economies, whatever their other weaknesses, were very good at generating industrial growth.” ([35], p.718). Krugman further explained that, “almost all serious people endorsed the idea of development through import-substituting industrialization, so of course it had to be right.” ([35], p.729). However, the large government apparatus used to administer the import substitution system often created severe market distortions, some of which exist even today. These distortions included foreign currency controls, strong government intervention and ownership in the economy, high tariffs, and strong protection of inefficient firms, and complex bureaucracies which facilitated corruption.

As import substitution strategies failed, governments turned to greater export openness – many chose selective opening, through EPZs and other enclave measures to attract FDI. However, in many cases, these new strategies did not dismantle the wider institutions established for import substitution. The vestiges of the import substitution strategy, it is argued, continued to contribute to persistent market distortions. A central argument, then, is that given the current market conditions in many developing countries, it would be very difficult, though not impossible, for local entrepreneurs to function.

As in developed economies, entrepreneurship also has the potential to be the engine of economic growth through its impact on technology and innovation and the allocation and mobilization of the factors of production. However, severely distorted markets thwart

the proper functioning of the entrepreneur. Entrepreneurship, therefore, is being proposed as a policy goal where significant benefits to development also accrue during the process of moving to a more entrepreneurial economy. Some of these policies, for example, would be aimed at building better business environments and strengthening governance so that entrepreneurs, both domestic and foreign, can flourish. An entrepreneurship-based development strategy should also positively affect economic growth by creating an environment in which more firms enter markets, operate and fail, thus encouraging learning spillovers and demonstration and failure externalities. By allowing the market to function with fewer encumbrances and through the actions of alert entrepreneurs, it is expected that resources (capital and labor) in developing countries will be allocated more efficiently – leading to higher economic growth.

A development strategy which encourages entrepreneurship will also focus on education, skills improvements and innovation. Such a focus will have a lasting effect not only on economic growth, but also on economic development and poverty.

Entrepreneurship is also important for new firm creation, job creation in the private sector and legitimate wealth creation. In many developing and transition countries, the public sector is a major employer and public sector employment is often a drain on economic growth as scarce government revenue must be allocated to salaries rather than to other investments such as education and infrastructure. Entrepreneurial policy will, therefore, encourage private sector development and offer productive alternatives to public sector employment.

Finally, for many developing countries, entrepreneurship, albeit necessity entrepreneurship, is already important and prevalent in their economies. However, the forms of entrepreneurship and the volume may be problematic for growth. Additionally, in many developing countries, particularly in Latin America, another type of entrepreneur - the large diversified industrial group - has been identified and serves the “gap-filling” role as entrepreneur where traditional entrepreneurs do not exist. However, these large groups (which often form monopolies in developing countries) are not the optimal form of entrepreneurship and can be disruptive to long term economic development. In many developing economies foreign firms (through FDI) are the main sources of entrepreneurial activity. Also governments have tried (usually unsuccessfully) to be entrepreneurial. An entrepreneurship-based development strategy will, therefore, open new avenues for the currently dormant, potential local entrepreneurs (i.e. those people with the necessary skills and capital) to play a role in the economy and to create wealth throughout the economy.

Therefore, an entrepreneurship-based development strategy which creates the institutions and incentives for productive, innovative entrepreneurship can positively impact growth and development in developing countries by (1) removing many of the distortions currently present in their markets, (2) encouraging human capital development (3) better allocating scarce resources through market processes and (4) providing employment alternatives to the public sector. History has shown that governments, especially those in developing countries, are less efficient compared to the market in allocating resources. Indeed for developing countries which are rife with market distortions and uncertainty, the calculations and planning which would have to be

completed by governments would likely fail. Entrepreneurs, therefore, acting through markets and supported by market-friendly institutions, are the best agents to achieve economic growth and development.

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