A NOTE ON ENTREPRENEURSHIP, SMALL BUSINESS AND ECONOMIC GROWTH

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Abstract	The aim of the present short paper is to show that since the 1970s the world has changed considerably, and that this change has had consequences for the current policy debate on the determinants of economic growth. Our paper deals with some aspects of the recent scientific literature on the relation between entrepreneurship and small business, on the one hand, and economic growth, on the other. In particular, it gives a summary of some work of the EIM/CASBEC research group in the Netherlands. It refers to scientific analyses showing that countries that are lagging behind in the process of restructuring will pay a penalty in terms of forgone growth. It also pays attention to the Global Entrepreneurship Monitor (GEM), a new and large multinational project focusing on the collection and analysis of internationally comparable data on the rate of entrepreneurial activity.	
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A Note on Entrepreneurship, Small Business and Economic Growth

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Entrepreneurship and small business matter

Entrepreneurship and small business are related but certainly not synonymous concepts. On the one hand, entrepreneurship is a type of behavior which concentrates on opportunities rather than resources (Stevenson and Gumpert, 1991). This type of behavior can happen in both small and large businesses but also elsewhere. On the other hand, small businesses can be a vehicle for both Schumpeterian entrepreneurs introducing new products and processes that change the industry and for people who simply run and own a business for a living (Wennekers and Thurik, 1999). The latter group includes many franchisees, shopkeepers and people in professional occupations. They belong to what Kirchhoff (1994) calls 'the economic core'. That both entrepreneurship and small businesses matter is not a new observation. In particular, they are important where they overlap. This is in the area of new small and often fast growing businesses. However, the way in which they matter has evolved over time. During the first decades of the last century, small businesses were both a vehicle for entrepreneurship and a source of employment and income. This is the era in which Schumpeter (1912) conceived his *Theory of Economic Development*. Here Schumpeter emphasizes the role of the entrepreneur as prime cause of economic development. He describes how the innovating entrepreneur challenges incumbent firms by introducing new inventions that make current technologies and products obsolete. This process of creative destruction is the main characteristic of what has been called the Schumpeter Mark I regime.

During the post-war years small business still mattered, but increasingly less on the grounds of economic efficiency, and more for social and political purposes. In a time when large firms had not yet gained the powerful position of the 1960s and 1970s, small businesses were the main supplier of employment and hence of social and political stability. Scholars, such as Chandler (1977), Galbraith (1967) and Schumpeter (1942), had however convinced the economists, intellectuals and policy makers of that era that the future was in the hands of large corporations and that small business would fade away as the victim of its own inefficiencies. Policy in the United States was divided between allowing for the demise of small business on economic grounds, on the one hand, and preserving at least some semblance of a small-enterprise sector for social and political reasons, on the other. Small business, it was argued, was essential to maintaining American democracy in the Jeffersonian tradition. Certainly, passage of the Robinson-Patman Act (Foer, 2001), which has been accused of protecting competitors and not competition (Bork, 1978), and creation of the United States Small Business Administration were policy responses to protect less-efficient small businesses and maintain their viability. These policy responses are typical for a Schumpeter Mark II regime. In *Capitalism, Socialism and Democracy*, Schumpeter (1942) focuses on innovative activities by large and established firms. He describes how large firms outperform their smaller counterparts in the innovation and appropriation process through a strong positive feedback loop from innovation to increased R&D activities. This process of creative accumulation is the main characteristic of what has been called the Schumpeter Mark II regime.

The aim of the present short contribution is to show that since the 1970s the world has changed considerably, and that this change has had consequences for the current policy debate. Our paper deals with some aspects of the recent scientific literature on the relation between entrepreneurship and small business, on the one hand, and economic growth, on the other. In particular, it gives a summary of some work of the EIM/CASBEC research group in the Netherlands. It refers to scientific analyses showing that countries that are lagging behind in the process of restructuring will pay a penalty in terms of forgone growth. It also pays

attention to the Global Entrepreneurship Monitor (GEM), a new and large multinational project focusing on the collection and analysis of internationally comparable data on the rate of entrepreneurial activity.

The world has changed

In today's world small businesses, and particularly new ones, are seen more than ever as a vehicle for entrepreneurship contributing not just to employment and social and political stability, but also to innovative and competitive power (Wennekers and Thurik, 1999). In short, the focus has shifted from small businesses as a social good that should be maintained at an economic cost to small businesses as a vehicle for entrepreneurship. With this shift came the renewed perception of the important role of entrepreneurship. Indeed, recent econometric evidence suggests that entrepreneurship is a vital determinant of economic growth (Audretsch and Thurik, 2000; Audretsch, Carree, van Stel and Thurik, 2002; Carree and Thurik, 1999; Carree, van Stel, Thurik and Wennekers, 2001; Audretsch, Carree and Thurik, 2001). According to Audretsch, Carree, van Stel and Thurik (2002), a cost in terms of forgone economic growth will be incurred from a lack of entrepreneurship. The positive and statistically robust link between entrepreneurship and economic growth has now been verified across a wide spectrum of units of observation, spanning the establishment, the enterprise, the industry, the region, and the country.

Thus, while small business has always mattered to policy makers, the way in which it has mattered has drastically changed. Confronted with rising concerns about unemployment, job creation, economic growth and international competitiveness in global markets, policy makers have responded to this new evidence with a new mandate to promote the creation of new businesses, i.e., entrepreneurship. See Reynolds, Hay, Bygrave, Camp and Autio (2000). Initially, European policy makers were relatively slow to recognize these links but since the mid-1990s have rapidly built momentum in crafting appropriate approaches. See EIM/ENSR (1993 through 1997) and Audretsch, Thurik, Verheul and Wennekers (2002). Yet, without a clear and organized view of where and how entrepreneurship manifests itself, policy makers are left in unchartered waters without an analytical compass. This explains the variation in their responses (European Commission, 2000 and 2001).

Evidence of the change

There is ample evidence that economic activity moved away from large firms to small firms in the 1970s and 1980s. The most impressive and also the most cited is the share of the 500 largest American firms, the so-called Fortune 500. Their employment share dropped from 20 per cent in 1970 to 8.5 per cent in 1996 (Carlsson, 1992 and 1999). European data dealing with the size distribution of firms were not available in a systematic manner until recently. However, Eurostat has begun publishing yearly summaries of the firm size distribution of (potential) EU-members at the two-digit level for the entire business sector. The efforts of Eurostat are supplemented by the European Network of SME Research (ENSR), a cooperation of 19 European institutes. This organization publishes a yearly report of the structure and the developments of the small business sectors in nineteen European countries. See EIM/ENSR (1993 through 1997) and European Commission (2000). Additionally, the annual GEM project mentioned before will contribute to our view on the size and significance of the change because it assembles unique data on new business start-ups in a large and increasing number of countries across various phases of economic development. See Reynolds, Hay, Bygrave, Camp and Autio (2000).

Lastly, there is the COMPENDIA data set of EIM of business ownership rates of 23 OECD countries in the period 1974-1998 (Audretsch and Thurik, 2000 and Audretsch, Thurik, Verheul and Wennekers,

2002). It shows that there has been considerable disparity among OECD countries in business ownership rates both across countries and over time. It also shows that the countries with the lowest rate of business ownership are Luxembourg, Denmark, Norway, Austria, Sweden and Finland. For these countries, several of which are Scandinavian, the rate of business ownership is below 8.5% in 1998. By comparison, the weighted sample average in 1998 is approximately 11%. By contrast, in four countries, Greece, Italy, Portugal and Australia, the business ownership rate exceeds 15%. Note that the majority of these countries is Mediterranean. Taken as a whole the number of business owners in the 23 countries grew from about 29 million in 1972 to about 45 million in 1998. The proportional growth of the labor force has been lower in this period so that the rate of business ownership increased from 10% to 11%. Clearly, the United States is the country with the highest number of business owners: about 32% of the total 45 million business owners in the 23 countries in 1998 are situated within the United States, about the same percentage as in 1984. Countries that increased in business ownership rate by more than 3 percentage points in the period of 1984 through 1998 include Ireland, Canada, New Zealand, Portugal and Iceland. The former three countries experienced a growth of the business ownership rate in the period prior to 1984. There are four countries suffering a decline in the business ownership rate in both periods: Denmark, France, Luxembourg and Norway. Although Japan only had a decline in business ownership in the second period (1984-1998), this decline is particularly noteworthy since its share in total business owners dropped from more than 20% in 1972 to 15% in 1998.

Causes of the change

Acs and Audretsch (1993) and Carlsson (1992) provide evidence concerning manufacturing industries in countries in varying stages of economic development. Carlsson advances two explanations for the shift toward smallness. The first deals with fundamental changes in the world economy from the 1970s onwards. These changes relate to the intensification of global competition, the increase in the degree of uncertainty and the growth in market fragmentation. The second explanation deals with changes in the character of technological progress. Carlsson shows that flexible automation has various effects resulting in a shift from large to smaller firms. The pervasiveness of changes in the world economy, and in the direction of technological progress result in a structural shift affecting the economies of all industrialized countries. Also Piore and Sable (1984) argue that the instability of markets in the 1970s resulted in the demise of mass production and promoted flexible specialization. This fundamental change in the path of technological development led to the occurrence of vast diseconomies of scale.

This shift away from large firms is not confined to manufacturing industries. Brock and Evans (1989) show that this trend has been economy-wide at least for the United States. They provide four more reasons why this shift has occurred: the increase of labor supply leading to lower real wages and coinciding with an increasing level of education; changes in consumer tastes; relaxation of (entry) regulations and the fact that we are in a period of creative destruction. Loveman and Sengenberger (1991) stress the influence of two trends of industrial restructuring: that of decentralization and vertical disintegration (the breaking up of large plants and businesses) and that of the formation of new business communities. These intermediate forms of market coordination flourish owing to declining costs of transaction. Furthermore, they emphasize the role of public and private policies promoting the small business sector. Audretsch and Thurik (2000) point at the necessary shift towards the knowledge based economy being the driving force behind the move from large to smaller businesses. In their view globalization and technological advancements are the major determinants of this challenge of the Western countries. See Loveman and Sengenberger (1991), Acs, Carlsson and Karlsson (1999) and Carree et al. (2001) for a further documentation of industrial changes and their causes.

Consequences of the change

The causes of this shift are one thing. Its consequences cover a different area of research. Acs (1992) began the discussion. He distinguishes four consequences of the increased importance of small firms: a vehicle for entrepreneurship, routes of innovation, industry dynamics and job generation. His claims are that small firms play an important role in the economy serving as agents of change by their entrepreneurial activity, being the source of considerable innovative activity, stimulating industry evolution and creating an important share of the newly generated jobs. Baumol (1993) amply deals with the role of entrepreneurial activities and the different effects it may have. The role of smallness in the process of innovative activities is investigated extensively by Acs and Audretsch (1990) and Audretsch (1995). The discussion of the relation between the role of small firms and industry dynamics is spread out: examples can be found in Audretsch (1995). Cohen and Klepper (1992) focus on the role of the number of firms and diversity for obtaining progress. Audretsch and Thurik (2001) observe that the change is of major importance and talk about the shift from the managed to the entrepreneurial economy.

Clearly, there are many more consequences of the increased share of small firms than the four mentioned by Acs (1992). For instance, an increase in the share of small firms may lead, ceteris paribus, to a lower orientation towards exports, a lower propensity to export employment, a qualitative change in the demand for capital and consultancy inputs, more variety in the supply of products and services or in the manner and aims of conducting research and development. The literature of the consequences of smallness is complemented by some empirical exercises by Carree and Thurik (1998 and 1999) for some European countries. They show that a rise in the share of smallness in a certain economy, respectively a high share of smallness in a certain industry generates additional output in the entire economy, respectively industry. Schmitz (1989) provides a theoretical model with a similar result. Audretsch and Thurik (2000) show that an increase of the rate of entrepreneurship (number of business owners per labor force) leads to lower levels of unemployment in 23 OECD countries in the period 1984 through 1994.

The relationship between growth and entrepreneurship has been shrouded with ambiguity. There is assumed to be a two-way causation between changes in the level of entrepreneurship and that of the level of economic development: a “Schumpeter” effect of entrepreneurship enhancing growth and a “refugee” or “shopkeeper” effect of low growth levels stimulating self-employment. Audretsch, Carree and Thurik (2001) try to reconcile the ambiguities found in the relationship between unemployment – as the inverse of economic growth - and entrepreneurship. In Reynolds, Hay, Bygrave, Camp and Autio (2000) a more direct approach is taken correlating growth and entrepreneurial activity. The latter approach is simpler in a methodological sense but more sophisticated in that a wider variety of countries is observed and that entrepreneurial activities are measured appropriately. Despite their entirely different approaches both studies show a positive correlation between entrepreneurship and economic growth.

The growth penalty

In short, a series of studies has identified that the industry structure is generally shifting towards an increased role for small enterprises. However, the extent and timing of this shift is anything but identical across countries. Rather, the shift in industry structures has been heterogeneous and apparently shaped by country-specific factors (Carree, van Stel, Thurik and Wennekers, 2001). Apparently, institutions and policies in certain countries have facilitated a greater and more rapid response to globalization and technological change, along with the other underlying factors, by shifting to a less centralized industry structure than has been the case in other countries (Audretsch, Thurik, Verheul and Wennekers, 2002). An implication of this

high variance in industry restructuring is that some countries are likely to have industry structures that are different from “optimal”.

But what determines this "optimal" structure? It is beyond the scope of this note to define or even discuss this (Audretsch, Carree, van Stel and Thurik, 2002). For an intuition we have to refer to the field of industrial organization. There is a long-standing tradition in this field devoted towards identifying the determinants of industry structure. As early as 1948, Blair(1948) stated that technology is the most important determinant of industry structure. Scherer and Ross (1990) and Chandler (1990) expand the determinants of optimal industry structure to include other factors as well as the underlying technology. Dosi (1988, p. 1157), in his systematic review of the literature in the *Journal of Economic Literature*, concludes that “Each production activity is characterized by a particular distribution of firms.” When the determinants of the underlying industrial structure are stable, the industry structure itself would not be expected to change. However, a change in the underlying determinants would be expected to result in a change in the optimal industry structure. Certainly, Chandler (1990) and Scherer and Ross (1990) identified a shift in optimal industry structure towards increased centralization and concentration throughout the first two-thirds of the previous century as a result of changes in the underlying technology along with other factors.

While the evidence suggests that the restructuring paths of industry vary considerably across countries, virtually nothing is known about the consequences of lagging behind in this process. Do countries with an industry structure that deviates considerably from the optimal industry structure forfeit growth more than countries deviating less from the optimal industry structure? This question is crucial to policy makers, because if the opportunity cost, measured in terms of forgone growth, of a slow adjustment towards the optimal industry structure is low, the consequences of not engaging in a rapid adjustment process are relatively trivial. However, if the opportunity cost is high the consequences are more alarming. Audretsch, Carree, van Stel and Thurik (2002) try to identify the impact of deviations in the actual industry structure from the optimal industry structure on growth. They use a data base linking industry structure to growth rates for a panel of 18 European countries spanning five years to test the hypothesis that deviations from the “optimal” industry structure result in reduced growth rates. They find that deviations from the optimal industry structure, measured in terms of the relative importance of small firms, have had an adverse effect on economic growth rates. This evidence suggests that those countries that have shifted industry structure towards a larger share of small firms in a more rapid fashion have been rewarded by higher growth rates.

In other words, the evidence shows the importance of initiatives like the EIM/CASBEC research program and the Global Entrepreneurship Monitor in supporting the policy debate to focus more and more on the role of entrepreneurship for economic growth. Despite various research initiatives "…remarkably little is known about the relationship between entrepreneurship and economic growth, including how it works, what determines its strength and the extent to which it holds for diverse countries" (Reynolds, Hay, Bygrave, Camp and Autio, 2000, p.11). The richness of the newly arising data material in terms of the variety of countries, the variety with which entrepreneurship can be measured and the large amount of explanatory variables will in due time provide policy makers with indispensable insight in macroeconomic policies and instruments needed to foster solid economic growth.

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