

## **Entrepreneurial Regions in a Conservative World. How History Influences Economic Development.**

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For a very long term the conventional wisdom was that the economic most advanced regions have an economic advantage manifesting itself in higher economic growth. Existing manufacturing belts seemed to have a persistent advantage over other regions. These manufacturing belts were those places of the nations, which became industrialised in the 19<sup>th</sup> century (cf. Krugman1991). A heavy industrial triangle with the corners in Boulogne in France, Osnabruck in Germany, and Saarbrucken in Germany specialised in coal production, steel-making and heavy engineering was the dominant manufacturing belt on the European continent. The Ruhr region was the strongest concentration inside this triangle. There was also a minor industrial triangle in northern Italy with the corners in Milan, Turin and Genoa and in England with the corners in Newcastle, Liverpool and Birmingham.

In Europe these manufacturing belts were dynamic centres of the nations for about one hundred years giving strong empirical evidence that their positions as centres were permanent. This conception was strengthened by a strong belief in established large corporations as the masters of economic development. In a famous book in the 1960s the American economist John Kenneth Galbraith announced that the new industrial state was a reality. The economic system in this new state was based on planning. The initiatives to innovations did no more come from individuals but from the dominating big corporations, which controlled the markets and managed the consumers' behaviour according to their needs (Galbraith 1967).

Already a few years later did the new industrial state look old. The oil crisis in the early 1970s was followed by a long period of slow growth and severe structural economic problems. Industries, which were young and dynamic in the late 19<sup>th</sup> century - coal and iron mining, steel industry and heavy engineering – were hit hardest. The old manufacturing belts were transformed from being dynamic economic powerhouses to regions in crisis, with closedowns, raising unemployment and slow growth. From the 1970s there is a statistical correlation between the size of the manufacturing sector in a region and the rate of economic growth. Port-dependent regions with a large manufacturing sector and long industrial traditions have slow growth and they are normally designated for regional policy measures. These regions have started a long, in some cases a very long, period of transformation into the post-industrial society.

The 1970s was not just a period of structural crisis in old industries; it was also a period representing the beginning of new era in which a number of new promising industries were born. It started with the invention of the microprocessor in 1971. In 1972 Arpanet, which made communications

between two computers at different places possible, was presented at a conference in Washington. 1975 Altair presented the first personal computer in an advertisement in Popular Electronics and the software programme Basic was introduced. In 1976 Apple launched its first computer. At the end of the decade the Nordic countries started to develop a joint standard for mobile telephone. The changes in the 1970s created new markets, which has grown fast. To a large extent these opportunities was exploit by quite new firms located in regions without old industrial traditions. A number of large well known American companies like Apple, Compaq Computers, Microsoft, Oracle, Intel, Cisco, Dell and Yahoo have their roots in these changes. There are very few well-known international European companies from the same period. The new opportunities created by technological development in Europe has to a larger degree been realised by established firms. Firms like Ericsson, Nokia, Philips and Siemens are well-known members of this group.

What we can see is that this new industry primarily has grown up in regions with weak industrial traditions. Silicon Valley in California is the classical example of a transformation of a former peaceful agricultural valley to global centre for new knowledge-based industries (Lee et al eds. 2000). In Europe we cannot find the same concentration of new knowledge-based industries because old corporations play a more dominating role in exploiting new technological opportunities than in the U.S. All these fast growing U.S. firms established in 1960s and later have few counterparts in Europe. As a consequence we cannot find anything similar to Silicon Valley in Europe. However, we can find a similar pattern as in the U.S.

Many of the old dynamic industrial regions are growing slowly, while some regions without a long industrial history have emerged as new dynamic centres. In Germany Bavaria, which was still markedly rural in character in the early 1950s, has emerged as an important dynamic region. In the 1990s growth rate in Bavaria was about 50 per cent higher than the national average. In France the department of Alpes-Maritime in the region Provence-Alpes-Cote D'Azur has emerged as a national centre for high-technology industries, especially in an around the 'Technopole' in Sophia-Antipholis. In England East Anglia is one of the fastest growing regions. Cambridgeshire has developed into an important area for high-technology manufacturing. And has experienced rapid growth in jobs and population, while retaining much of its rural character. The medieval period has left a rich legacy of historic architecture in the region.

Different approaches have been used to explain this shift in development pattern from old industrial areas to more rural areas. The classical approach is to focus on the factor supply in different regions. Access to raw materials, energy sources, access to ports and railways are factors, which made large imprints in the regional pattern in the industrialisation process in the 1890s (Pollard 1981). In explaining the new regional pattern since the 1970s focus has been on universities. Pioneering research at universities creates a localized pool of technical skill and supplier that may support the formation of new enterprises and attract established corporations (Saxenian 1994).

This approach contains important elements of the truth. However, it also excludes other important aspects. The question of location is transformed to a

comparative analysis. Economic policy-makers primarily react on the new circumstances and the winners are the regions, which in the new situation offer the best production conditions.

For about 100 years ago Joseph Schumpeter presented a theory in which the human agent is placed in the centre of the process of economic development, the agent of change is the entrepreneur (Schumpeter 1911/1934). Schumpeter's general argument was that all truly important changes in the economy are set off by the entrepreneur, who is an innovator creating new products/services, introduce new method of production, new markets and new organisational models. In his role as innovator the entrepreneur makes a cultural contribution, a new combination, which did not exist until he brought it into being. Focusing on the innovating entrepreneur we must admit that there is no special logic behind for why things are the way they are. Any number of arbitrarily small perturbations along the way could have made the world, as we know it, turn out very differently (Romer 1994). However, still it is possibly to understand what made the world turn out in the way it did.

Economic development is not the result of slow movement. The economy is in a continuous state of upheaval, with new business being created, existing business expanding and contracting and other firms failing, Economic change is propelled by the succession of technologies and practices that destroy old, inefficient arrangements as newer ones are created. New ideas are frequently created by new firms: the business that builds the first personal computers was not the firms that produced minicomputers or mainframes. New businesses develop new ideas in new places that displace the old ones. Economic progress contains a strong element of "creative destruction" of the existing economic and political order (Schumpeter 1911/1934).

Economic development since the 1970s is an illustration of this state of upheaval. A lot of new business has been created, while existing business has contracted or failed. It is period in which researchers and policy-makers have returned to Schumpeter and his "creative destruction". The willingness to tolerate new ideas that challenge the current arrangements of business and government varies over time and among regions.

Development of information technology has created a flow of opportunities for making new combinations. Many new combinations were created in existing firms placed in different types of regions. A significant number of new combinations was created by entrepreneurs and became the basis for new firms located outside the old industrial regions. The fact seems to be that old industrial regions are not a fertile soil for entrepreneurs forming new companies. Other regions seem to offer more space for entrepreneurial spirit. These changes gave raise to the human capital theory based on the idea that people are the engine of growth in regions. The clustering of highly educated and creative people are the key to regional growth. Dynamic regions are places, which are attracting these people. One popular hypothesis is that educated and creative persons prefer regions that are diverse, tolerant and open to new ideas (Florida 2002).

Old industrial regions do not offer such a culture. These regions, industrialised in the late 19<sup>th</sup> century and specialized in the growth industry

of that time, owes its distinctive characteristics very largely to the major development which occurred in the latter half of the nineteenth century. Their development can be interpreted as an illustration of the force, which "the legacy lingers on" (Massey 1986). The cumulative learning of regions are reflected in culture and the shared mental models of how the world works and guide people's interpretations of economic and political problems and opportunities. Beliefs about the value of new technology, risk taking, and the trust in social institutions influence the rate and type of economic growth in a region. The structure of incentives is shaped by institutions, which means that ultimately the effectiveness of markets is dependent on collective, political processes (Olson 1996), The room for creative ventures are restricted in such regions.

Industrial regions are characterised by their sharp, social stratification, which also often thrown into greater relief by the housing market. The physical structure of industrial towns reflects this stratification. The labour/capital dialectic plays an important role that cause entrepreneurs to be viewed with suspicion, which means there is little chance of a worker becoming a self-employed entrepreneur. In additions to this, the unions have a strong position in these regions, and have taken it upon themselves to act collectively on behalf of the labour force, making the individual subordinate to the collective. The scope for individual solutions is thus limited, and promotion of the collective leads to political intentions to improve conditions for the people. Individuality is met by skepticism.

People in such regions often show great confidence in the ability of politicians to control change, which generates a political tendency to concentrate on the existing structures. External changes are judged primarily by their expected effects on existing industries and business in the region, while little attention is paid to how these changes can create the right conditions for completely new business ideas. Such regions therefore do not offer very attractive environments for entrepreneurs and the dynamic innovative spirit they embody.

A strong institutional structure is a forceful protection against changes outside the existing framework. Without such changes there will be little scope for economic and social renewal. Annalee Saxenian's comparative analysis of the ICT-industry in Boston and Silicon Valley illustrates the impact of the regional culture on corporate strategies and organisations (Saxenian 1994). Saxenian emphasis differences in business organisation and strategy key factors in shaping the outcome. Firms in Silicon Valley adapted more quickly to changing technologies and markets because they had more informal internal practices, worked well with outside firms, and that the region had more entrepreneurs and stronger networks. The lack of industrial traditions in Silicon Valley made the region open to new way of organizing production. In contrast to the Boston region Silicon Valley is region in which firms support innovations and move quickly to new markets and people feel free to start their own firms.

The new era starting at the 1970s brought with it radical changes in production. Professionals working in networks processing information and accessible all hours were substituted for semiskilled workers fabrication

goods in factories in a regulated working hours. This new model was in conflict with the old institutional structure. The resistance against it was strongest in regions with a strong institutional structure. For entrepreneurs who want realise ideas of new products/services, introduce new method of production, new markets and new organisational models it was easier to search for regions with soft institutional structure. Regions with a rural history, where people live in small or medium-sized towns and where the social stratification of the industrial society never really took hold, offered such conditions. The culture in these regions differs radically from the one in industrial regions.

Group allegiances amongst the population are weaker and being a self-employed entrepreneur is regarded as natural. Trade unions, like other institutions of the industrial society, are also weak. Solutions tend not to be collective, and there is widespread acceptance of variation in lifestyle.

The regional development in Europe since the 1970s indicate that regions with a rural history, like East Anglia, Lower Bavaria, Languedoc-Roussillon, Toscana and Mid-Jutland, combine a dynamic economy with growing population, while old industrial regions, like Northeast England, Nordrhein-Weatfalen, Rheinland-Pfalz, Piccardie and Piemonte, stagnates or decline.

Regional development seems to be path dependent. The history of a region influence on its future while it become embedded I the regional culture. For many decades the most convincing interpretation of the pattern was that industrial advanced regions had an impregnable lead. The disadvantage of backwardness seemed to be permanent. Now history has turned page. Since the 1970s some of the former leading regions has get caught in the structure, while other regions have been the home for entrepreneurs' new combination. Conditions, which was considered as a handicap in the 1960s has been transformed to an advantage in the 1990s.

The conclusion is that history seems to be more important than public policy in forming the future of a region. In the dynamic regions politicians seems to be more like gardeners than builders. They water and fertilise wherever it seems necessary in the hope that the growth potential will be nourished. In practical terms, this means that land is set aside for new homes in attractive parts of the region or that higher education in the region is expanded. They lay new paths in their garden too, by improving the transport and communication infrastructure. In old industrial regions the gardeners have to tore down old structures before they can sow again.

The role of the gardener means that policy has to create conditions favourable to the growth of regional business and thus influence the conditions that affect the region's development, What result the policy has will then be determined by what use other actors decide to make of these conditions. How companies' react is important, as the local willingness to set up companies. Local industrial growth requires expanding companies and entrepreneurs with initiative, who are able to exploit the opportunities that open up around them. One important role of public policy is to encourage and support these companies and entrepreneurs.

A region's economic development thus become an organic process, in which action by various types of actors – companies, entrepreneurs, public agencies and politicians – form a web or network that shapes the development of the region, something which is strongly influenced by the region's economic history.

Regions without the dynamism are caught in old structures blocking the emergence of new ones. Structural problems in a region can be interpreted as an expression of past sins of omissions. The present is strongly rooted in the region's history. In such regions the great challenge for policy makers is to tear down old structures and open for new arrangements. Economic progress means that the institutions in regions will continue to need to devise new arrangements and solutions.

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