

FINDING A NICHE IN THE GLOBAL ECONOMY : RURAL TRANSFORMATION AND THE INDUSTRIALISATION OF WESTERN JUTLAND

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Résumé

Depuis la seconde moitié des années 60, des changements importants sont intervenus dans la façon dont les zones rurales des pays capitalistes européens les plus avancés se sont positionnées face aux processus d'accumulation et de croissance. Cela reflète en partie la croissance continue de la demande de main d'oeuvre dans leurs zones urbaines principales, de plus en plus orientées vers les services. Parallèlement, en effet, on enregistrait une pénurie grandissante de main d'oeuvre et d'autres externalités négatives liées à la croissance rapide et à la congestion de ces zones urbaines. Une réponse à cette situation fut la réévaluation de l'attrait des zones rurales pour la localisation des activités industrielles. Les caractéristiques les plus rétrogrades, que l'exclusion des circuits de production industrielle avaient contribué à créer et à maintenir, devinrent des critères d'attraction pour la relocalisation de certains types de productions. On constate donc, depuis les années 60, un intérêt croissant pour les régions non industrialisées de la marge de l'Europe de l'Ouest. Par conséquent, la localisation des industries manufacturières en zones rurales a pris de plus en plus d'importance dans le processus de restructuration industrielle. Des régions européennes auparavant déprimées et non industrialisées émergèrent en tant que nouveaux centres de croissance industrielle. Une de ces régions est le Jutland occidental, à l'ouest du Danemark, antérieurement jugé « à la périphérie de la périphérie danoise », mais aujourd'hui une aire industrialisée internationale et compétitive. C'est cette région qui constitue l'objet de cette communication.

MOTS-CLÉS : industrialisation, géographie rurale, Jutland

KEYWORDS : Industrialisation, rural geography, Jutland

1. INTRODUCTION

For many decades after the rise of industrial capitalism in western Europe, there was a pronounced spatial division of labour between the urbanised and industrialised core regions and the rural and agricultural peripheral ones. Insofar as there were relations between the two types of areas, they were articulated via rural to urban migration, predominantly but not entirely intra-national movements of people. Such migrations were motivated at the level of individuals by a complex interplay of the imagined attractions of the urban and the known deprivations and hardships of living and working (or not) in the rural periphery, and often shaped in terms of their destinations by the networks of friendship and family relationships. The net effect of such migrations, in relation to the general trajectory of national regimes of capital accumulation and economic growth, was to ensure that the burgeoning demands for labour power of the urban and industrial sectors were effectively met. In this way, the reproduction of labour power

in the rural peripheries of the advanced industrial economies of western Europe played a key role in national modes of regulation over a long period. This was true both of the regulatory modes that enabled the extensive regimes of accumulation of the nineteenth and early twentieth century and the intensive Fordist regime that succeeded it in the second half of the twentieth century.

From the latter half of the 1960s, however, some important changes began to take place in the ways in which rural areas within the advanced capitalist core countries of Europe related to the processes of accumulation and growth. In part, this was a reflection of the continuing growth of demand for labour in their increasingly service-oriented as well as industrial urban areas. Already from the 1950s there had been growing evidence of the burgeoning demand for labour sucking in temporary migrant workers from the Mediterranean periphery of southern Europe and north Africa (and beyond) to France, West Germany, the Benelux countries, and Switzerland, as well as Denmark and Sweden [10].

As the pace of economic growth continued at historically high rates - around 5% per annum for much of the 1960s - these demands for international migrant labour continued to be powerful ones. The costs of the reproduction of labour power were increasingly displaced to the rural areas of the Mediterranean rather than those within western Europe as the scale of this particular type of spatial fix shifted increasingly from the intra-national to the international.

At the same time, however, and despite this growing incorporation of temporary international migrant workers, there were increasing pressures of labour shortage and other negative externalities associated with rapid growth and congestion in the core urban industrial and service centres of north west Europe. One response to this situation was a re-evaluation of the attractions of rural areas, both in terms of their residential desirability (which became associated with the growth of counter-urbanisation, an aspect only tangentially considered here, but see [4] and as a location for industrial, and in particular manufacturing, activities. In these new circumstances, the very characteristics of backwardness which exclusion from the circuits of industrial capitalist production had helped create and sustain, became magnetic attractions in the relocation of certain sorts of industrial production processes. Thus during the 1960s, there was an increasing interest in the previously unindustrialised regions within north west Europe; in the 1970s this also became evident over much of what became termed the intermediate regions of southern Europe, those areas lying between their metropolitan cores and their distant and marginalised rural peripheries. In southern Europe, these were then those regions that lay adjacent and accessible to the metropolitan regions but which had remained largely outside the circuits of modern capitalist industry (although often with strong artisanal traditions that now became a source of competitive advantage). This was especially so in Italy, but was the case also in Greece, Portugal and Spain. In summary, then, a variety of formerly unindustrialised rural areas were becoming incorporated as key locations in a search for a new sort of spatial fix within the territories of most north western and southern European States. It was a tendency that had contradictory implications in relation to the prevailing macro-scale regime of accumulation. In part, industrialising the countryside via implanting branch plants, typically disarticulated from the rest of the regional economy, was part of a strategy which was seeking to preserve the then-dominant Fordist regime of accumulation

by altering both of its geographies of production and of its mode of regulation. At the same time, however, insofar as rural industrialisation was associated with processes of small firm growth, flexible specialisation, small batch production and product differentiation, it was challenging the dominance of mass production and consumption, and raising questions as to the continuing viability of the Fordist regime. It is important to stress that the tensions inherent in these conflicting tendencies have yet to be resolved at the macro-level and it is not at all clear what Fordism's successor, assuming that it has one, will look like as a sustainable regime of accumulation.

What is not in dispute is that there has been a growing importance of rural areas as locations for manufacturing activities as part of this restructuring process. Nevertheless, there is some debate as to how this growth of rural industrialisation is to be understood in its own terms. Such rural areas became seen, by some, as one homogeneous type of « new industrial space » [22]. There are, however, considerable dangers in generalising about such a diverse range of areas, especially in relation to the generative processes that underpinned the beginnings of industrial growth in them, since these have clearly involved distinctive combinations of the interplay of corporate decisions and priorities, state strategies and the specificities (cultural, institutional and social, as well as economic) of particular locations. A simple distinction can be made between industrialisation processes that were predominantly a result of branch plant investment by major state industries or by national or transnational corporations (again suggestive of the ways in which such areas were simultaneously becoming incorporated into a global economy as well as national production spaces) and those that were predominantly a result of endogenous formation and growth of endogenous small and medium-sized enterprises [8].

From the second half of the 1970s, there was a growing emphasis upon this latter model of industrialisation, based around endogenous enterprise and local SMEs (although it is again important to stress that markets are often international and not just local). Just as the disadvantages of backwardness had become competitive advantages for at least some rural areas, so too had a seemingly archaic and backward form of capitalist organisation - the small firm - become seen as positively advantageous in the search for successful new industrial and territorial development models. In part, this was because of a

growing perception that the Fordist regime of accumulation, based around big firms, mass production, mass consumption and state policies which kept these in balance was reaching its limits at both macro- and micro-economic scales, as well as in terms of its environmental sustainability [8]. One consequence of the subsequent search for what has been termed by some as a sustainable post-Fordist growth model and regulatory regime was that national states increasingly retreated from attempting to tackle problems of spatially uneven development by seeking to influence the locational decisions of major transnationals - not least because major branch plant investments were both increasingly rare and the subject of fierce competition in a global place market. On the other hand, devolving responsibility for local and regional development to these sub-national levels shifted the emphasis there more to smaller scale local enterprises - while the Tesson of the « Third Italy » [1] seemed to be that local areas could successfully find flexibly specialised niches in the global market place, provided that they identified and deployed their local and territorially specific competitive advantages [21]. Thus around Europe a number of formerly, depressed and unindustrialised areas began to emerge as new centres of industrial growth. One such area is the west of Jutland in the west of Denmark, an area that in many ways was formerly the periphery of the Danish periphery but which now has become an internationally competitive area of manufacturing. It is this area that is the focus of the rest of this chapter.

2. REGIONAL EMPLOYMENT CHANGE IN DENMARK AND THE GROWTH OF MANUFACTURING EMPLOYMENT IN WESTERN JUTLAND

Over the last four decades there has been a dramatic change in the geography of manufacturing within Denmark. In the five peripheral counties of western Jutland - that is, south Jutland, Ribe, Ringkøbing, Viborg and north Jutland - employment in manufacturing (in establishments with at least six employees) increased from 74,000 in 1971 to 170,000 in 1993 [13, p. 51], [6]. Western Jutland increased its share of national manufacturing employment from 15% in 1960 [11, p. 153] to 35% in 1993. Linked to this regional shift, in the 1980s there was also a movement of manufacturing jobs towards both medium sized and small towns and rural communes [5], [12]. [24, p. 18]. Thus the changing geography of employment encompassed quite a complex mosaic of changes at various scales.

These locational shifts in employment are only marginally a result of companies relocating from Copenhagen or as a result of the implantation of branch plants into Jutland [15], [16]. They are above all a product of higher growth rates among existing firms in Jutland and differences in birth and death rates of new firms between the two locations. This raises important questions as to the processes and mechanisms which facilitated and made possible such a climate of entrepreneurship in the periphery of Jutland.

3. NEW FIRMS AND INDUSTRIES IN WESTERN JUTLAND

There undoubtedly are well-known examples of local Jutland firms which have grown quite large, becoming major influences on particular global product markets which they serve from the production facilities in western Jutland (such as Bang and Olufsen in the Struer-Lemvig-Skive area; Eccoshoes in Bredebro; H-T-H Kitchens in Olgod; Danfoss in Nordborg; Grundfos in Bjerringbo; Vestas in Lem; and of course Lego in Billund). Some have become multinationals. At the same time, they have become major influences on local labour markets. One expression of their local labour market impact is that just three municipalities experienced over 25% of net growth in manufacturing employment in Jutland between 1972 and 1982 [15].

Such larger firms and plants are, however, atypical. Most manufacturing firms and factories in peripheral Jutland are small (with a median employment level of 36 and median annual sales of about £2 million), independently and locally owned [7], [13, p. 59]. Such firms are concentrated sectorally in engineering, clothing and textiles, and food - the sectors in which growth in western Jutland in the 1980s tended to be concentrated [24, p 25]. The occupational structure of employment is weighted towards skilled manual workers and highly educated white collar workers. This is indicative of the way in which such small firms have maintained competitiveness via strategies involving innovation, quality and design which rely on relatively skilled, well-paid and committed workers. The existence of a well-organised and flexible labour force is an important attraction to them. On the other hand, it has been argued that the attraction for larger firms is the high productivity of a labour force that displays flexibility and a willingness to accept jobs deskilled by technological advances [15]. Favourable labour market conditions, with abundant supplies of labour for

technologically deskilled labour processes in component production and assembly were an important reason why they chose to expand in western Jutland [24]. It is therefore worth noting that the same characteristics of the labour market in western Jutland have proved attractive to companies for rather different reasons, depending on the character of the production process in their factories.

There was, however, very little evidence of Fordist mass production [7]. Some 90% of firms' production involved customisation of products and flexibility in product mix. More generally, such small firms were dynamic and innovative, reflecting their responsiveness to fluctuations and variations in consumer demand. There are also widespread formal and informal inter-firm linkages within western Jutland; there is, for example, evidence of widespread local sub-contracting links in industries such as clothing as a key element in strategies for coping with fluctuations in demand. Equally, while the vast majority of small firms rely on the internal provision of producer services functions, such purchases of these services (notably accountancy, insurance, legal and transport) as they do make are overwhelmingly in their local area or in the rest of Denmark outside of Copenhagen.

One interpretation of the development of these localised intra-regional cooperative networks of small firms relates it to the specificities of the local culture of individualism and self-reliance. Most new small firms have been started by the sons of self-employed fathers and the traditions of independence have been carried into the new manufacturing firm. They remain small so that they can retain personal control [19] and will cooperate with other firms as one part of a strategy to retain their independence. Many of the potential disadvantages of small size are overcome by cooperative participation in locationally concentrated networks.

Yet at the same time there is evidence of these same strongly localised firms being simultaneously embedded in international chains of purchases and sales. Around a third of all purchases are imports and almost half of all sales are exports. Thus the global and the local are combined in particular ways as location on the periphery of the national territory clearly poses no insuperable problems to producing in an internationally competitive way. Indeed, such a nationally peripheral location may facilitate international competitiveness, with location a much more significant influence on the competitiveness of

small establishments than it is on that of large ones. It is to this question of the significance of place to production that we now turn via a consideration of industrial districts in peripheral Jutland.

4. INDUSTRIAL DISTRICTS WITHIN WESTERN JUTLAND

While some sectors exhibit no evidence of spatial clustering within western Jutland, in others it is clearly evident and can be interpreted in terms of concepts of industrial districts - such as the furniture and clothing and textile districts of Herning-Ikast [12], [14]. Around Herning-Ikast small companies in these sectors produce flexibly for niche markets and are extremely active in seeking out new products and market niches. There is also considerable vertical disintegration of production within networks of linked and mutually cooperating small firms, each specialising in a narrow range of tasks. Everyone knows what everyone else can do, so that search costs are minimised, as are transaction costs, within a dense web of local interactions. There is undoubtedly « something in the air » which facilitates the smooth operation of the local production system.

A striking feature of the Herning-Ikast textile district is its entrepreneurial spirit [13, p. 59]. Some Danish researchers interpret this prevalence of small, locally-owned independent firms as reflecting the dominance of the « life mode of self-employment », in which people value self-employment per se [19]. There is, however, another type of explanation of this self-reproducing industrial structure. This focuses less on the psychology of individual entrepreneurs and more upon the existence of a regional « transmission mechanism » [20]. This facilitates the reproduction of the existing industrial structure both by increasing the chances of survival of existing firms and increasing the probabilities of new firms in these sectors locating there (as opposed to somewhere else). Such a « transmission mechanism » has two components [17]. First, entrepreneurs within a given industrial sector will concentrate in areas where this sector is already prominent. In such areas the potential entrepreneur has already learned the necessary trade specific qualifications and acquired the necessary experience, developing critical personal contacts and knowledge of local institutions as (s)he is socialised into the industrial culture of the area. Secondly, the path-dependent character of development in itself ensures that a spatial clustering of firms in a given industry will make the

location involved particularly appropriate to the locational requirements of other firms in that industry. In summary, *that* location will have acquired and created the capacities, competencies and skills needed to service firms in just that industry.

This path-dependent character of industrial development strongly suggests that to understand the present organizational structure of production, it is necessary to consider briefly the economic history of western Jutland in general and that of the locality of Herning-Ikast in particular. As late as 1850, agriculture in western Jutland was still organised in an essentially feudal manner but by the end of the first World War nearly all the land was owned by independent farmers [7]. In the 1870s, in response to a crisis triggered by the sudden availability of cereals from north America on world markets, farmers in west Jutland took the lead in establishing cooperatives to produce meat and dairy products for the international market. The coming of the railways both facilitated this and provided incipient industrial nodes as craftsmen migrated into the emerging railway towns. Herning and Ikast were two such towns, around which a different form of industrial development took place.

Textile and clothing production began in west Jutland in the seventeenth century, with farmers and their families knitting stockings from locally produced wool. In the nineteenth century, local manufacturing and trading firms were created in Herning and Ikast, and put out production, based on imported wool, to farmers who had knitting machines on their farms. This form of production survived the Danish industrial revolution of the second half of the nineteenth century and flourished under central Government's protectionist policies of the 1930s. With growing international competition in the 1950s, however, the prospects for textile production in western Jutland looked very bleak. The initial corporate response to this new market situation was Taylorist rationalisation of the production process but this was soon replaced by the emergence of a different strategy, focused more on specialization, and an emphasis on design, quality and niche marketing, innovation and flexibility in production. State-of-the-art machinery and production technologies were increasingly used. Such companies, while dynamic and innovative, nevertheless remained - and typically still remain - small.

Small size is therefore no barrier to corporate success; indeed, it is perhaps part of the key to that

success. One indication of this is that the rate of profit of clothing and textile firms in Ringkøbing County in the 1980s was three times greater than that in the rest of the country. Another indicator is that, in strong contrast to the national trend, employment in these industries in Ringkøbing County was at the same level in 1989 as in 1972 (9,900), although it did fall a little in Herning-Ikast over this period (from 7,400 to 6,400) because of localised decentralisation. No less than 85% of Danish knitwear companies are now found in the municipalities of Herning and Ikast. The most labour intensive operations, such as sewing, have, however, now been sub-contracted out to low wage countries, such as those of eastern Europe. The activities retained in Herning-Ikast are the more skilled, more highly remunerated, and those related to gathering information and intelligence about markets and trends in fashions. This new spatial division of labour has necessitated the development of frequent and flexible transport systems (with, for example, three shipments per day of pieces from Herning to locations in Poland, using Polish drivers).

5. LOCAL POLITICS AND LOCAL GOVERNMENT ECONOMIC DEVELOPMENT POLICIES

For a while, there were considerable pressures from within Jutland for a stronger central government regional policy. This was particularly so following the establishment of The West Jutland Development Council (WJDC) in 1957 in the county of Ringkøbing. This was set up as a local lobbying and pressure group, which argued that Jutland's underdevelopment was not inevitable. It could be tackled via industrial development. Consistent lobbying by the WJDC resulted in some major central government policy initiatives, intended to help transform economy and society in western Jutland (notably the 1958 Regional Development Act; the 1958 School Reform; and the 1970 Local Government Reform Act). Perhaps the key point to emphasise about recent industrial development in western Jutland, however, is that it has taken place largely without reliance upon the incentives of a central government regional industrial policy [11, p. 154]. Central government has therefore been at best a marginal and indirect influence on the recent industrialisation of Jutland. This is particularly so since «...the central government has a very liberal industrial policy, if it has any policy at all» [11, p. 155].

In contrast, local government has been much more influential, especially after the reforms of the early 1970s. Two principles underlay the reform process. The first was to enhance administrative efficiency by increasing the range of functions undertaken by local government and by creating new territorial units of sufficient size to allow decisions to be taken locally in relation to the provision of public services and to enable local government to carry out some planning and development of infrastructure. The second underlying principle was that each city should be surrounded by a single local government area. Application of these principles led to a sharp reduction in the number of local government areas as 14 counties and 275 municipalities were created to replace the previous plethora of units [23, p. 101].

The next step in the reform process was to devolve more power and responsibility to the county and municipality levels. This was followed by changes in the method of financing local government expenditure. Both municipalities and counties could now directly raise local income tax while the previous system of central government refunds for local government expenditures was abolished (except for pensions) and replaced to a system of block grants. This transformed local government into a significant economic actor, with considerable potential to influence local development trajectories. By the mid-1980s local government expenditure accounted for almost 70% of total government current expenditure and 55% of total government capital expenditure [11, p. 151].

Local government activities continue to be to a considerable degree regulated by legislation and by central government to avoid the emergence of « undue inequalities » in levels of service provision between municipalities [2, p. 67]. Nevertheless, local governments do have « room for manoeuvre » in carrying out their responsibilities in these spheres. They can exert significant influence over the levels and standards of provision of public services in education, health and social services. To a degree, these changes gave local government more capacity to become involved with local economic development issues and policies and this became an arena in which they could become pro-active if they so wished. This was of considerable importance in peripheral Jutland after 1970. In particular, successful municipalities have often been keen to emphasise to potential investors that they are prepared to be flexible in responding to companies' needs [24, p. 55-62]. Often, however, the significance of local policies has been more in their

fulfilling a supportive and permissive role, sometimes subtly bending the rules on issues such as planning permission, rather than via their provision of active financial support for local companies

There have, however, been important changes in the ways in which local institutions to encourage economic development have operated, which are linked to their own developmental trajectory. Such local agencies first emerged in the late 1950s, locally financed and created without any formal national legislative basis as truly « local » initiatives. As a result, there was great variability between municipalities as they explored the space in the « grey area » between the structures of local government and local civil society in establishing their own local development agencies (most of which still exist today). This enabled them to operate in a responsive way, unfettered by the formal rules and regulations of a national regulatory system. Subsequently, however, other institutions have also emerged within the structures of municipal local government, more formally controlled and organised within the structures of the local political system. As a result, they have a different mode of operation to that of the first round of local agencies but still have considerable autonomy in responding to the needs of local businesses. To further complicate matters, from the late 1980s Counties also embarked on the creation of their own development agencies, essentially bigger versions of the first round of municipal agencies. By the late 1980s there was therefore a complex pattern of competitive municipality and County development agencies which, in addition to competing locally for investment and new firms, were also all trying to deal directly with the EU in Brussels, by-passing central government in Copenhagen.

Furthermore, until 1992 there was no formal legislative basis for this plethora of competing institutions. Legislation introduced in that year set limits to the « room for manoeuvre » of these agencies, defining a line between state and market, between private and public sectors. Within these prescribed limits, however, local agencies can do anything that they are not specifically forbidden from undertaking but what they do do is shaped by informal norms and « rules of behaviour », a type of « unwritten constitution » which set informal limits within the formal ones. Even so, the agencies are constantly seeking to push back these informal limits - for example, in relation to extending their

sphere of operations into areas previously reserved for the private sector.

There is no doubt that in the initial stages the existence of such local agencies, growing organically on a « bottom up » basis and so embedded within the social relationships and political structures of local areas, was important in creating supportive environments for (new) local small firms, sensitised to, and responsive to, their particular requirements. The burgeoning numbers of such local agencies, and the different bases on which they were created, certainly created a very dense network of overlapping local agencies that provided continued support to local economic development. With the increasing numbers of such agencies, and the growing complexity of relations between them, some commentators began to see this chaotic structure as a growing barrier to, rather than support for, local economic success (Tanvej, 1995, personal communication). Despite the presence of local « key actors » in the overlapping memberships of various local agencies and central government branches and institutions, there is insufficient focus and coherence to the system of local developmental agencies. In response, there were growing pressures to rationalise the system on a more « top down » basis, linked to the creation of new regional government structures and the formation of « business links », coalitions of state agencies, private sector companies and social partners such as trades unions, educational institutions, labour market agencies and so on.

6. INDUSTRIAL RELATIONS, NETWORKS AND RESOURCES WITHIN CIVIL SOCIETY

Relations between employers and employees within the small firms of peripheral Jutland are predominantly structured on paternalistic lines. At local level, there is currently a greater willingness to accommodate the requirements of companies and to be flexible over the application of national norms and mies [13, p. 60]. Even so, it is important not to over-generalise as there can be sharp differences in local labour market conditions, depending on the local industrial structure.

While unionization is high - with a rate of unionization of about 80%, the same as in the rest of Denmark - wages are relatively high, and strikes generally are extremely rare, indicative of a form of complicit and cooperative unionism that is built around perceived shared interests between companies and their workers. One indication of this

is that workers are willing to work overtime if this is needed and, typically, are generally more motivated and committed to « their » company than are those in Copenhagen. Consistently throughout the 1970s and the early 1980s the numbers of working days lost through absenteeism and illness were much lower in peripheral Denmark than in the Copenhagen region [15]. Maskell attaches great importance to the plentiful pool of « green » labour, typically a product of the shrinking labour demands of agriculture, in creating this particular pattern of industrial relations. First generation industrial workers arrived at the factories with no first knowledge of the culture and norms of working there. It was therefore easier to socialise them into the sorts of working practices and attitudes that the owners and managers of new firms wanted. On the other hand, paternalism also has its more positive aspects as employers take a greater interest in the welfare of their employees - who may often be family members or neighbours. In this sense, the boundary between the firm, the community and civil Society becomes blurred and permeable.

In strong contrast to other industrial organisations, which have their headquarters offices in Copenhagen, those in clothing and textiles have their headquarters offices in Herning. They operate as lobbying organisations, helping shape the climate of opinion on issues of relevance to the industry, and also fulfil extensive consultancy functions. There is also evidence of the emergence of specialised institutions which help meet the needs of small clothing and textile companies. For example, the non-profit making organization, the Danish Textile and Clothing Institute, offers incubator facilities for new firms, access to CAD-CAM, to technical information centres, and to joint marketing facilities, and a range of sophisticated consultancy services. In addition, it offers information to small firms - on diverse issues including outputs and prices, international fashion and design trends, export markets, the labour market and industrial relations, and legal, technological, environmental and educational matters. It also provides high quality training courses for them in industry-oriented vocational schools. There has also been the development of specialist private road transport services, with (in 1990) at least weekly deliveries from Herning to over 70 European cities. Such guaranteed rapid delivery is of particular significance in ensuring the competitiveness of local production in the volatile markets of clothing fashion in Europe. Conversely, Herning is the site of Scandinavia's largest fair and

exhibition centre, bringing international fashion buyers to the locality.

Running through all these organisations, as well as the networks of economic relations between firms, and helping ensure the smooth reproduction of these various institutions, there is an informal network of people who are on the numerous Boards and Committees, or who at least personally know those who are. In many cases family ties contribute to the strength of the network. In summary, economic cooperation essentially takes place in a culture that encourages enterprise and entrepreneurship and on the basis of and embedded within existing social networks that create an atmosphere of mutual trust among people who know one another well.

Furthermore, such a structure of social relationships enables and facilitates the creation of very particular types of knowledge that are central to economic competitiveness. In particular, it nurtures the creation of specific types of tacit knowledge, of « knowing how to go on », that are embedded in the day-to-day routines and culture of economic practices. This tacit knowledge is both non-tradeable and non-codifiable and can only be produced in practice; particular types of knowledge produced in this way in particular places can then underwrite their competitive position in the market place precisely because they cannot be exchanged in markets. Maskell and Malmberg [17] provide a particularly apposite example of this process in relation to the industrial districts of Herning-Ikast. They point out that an employee in a local branch of a national bank will, over the years, have been presented with a large number of loan applications from small clothing and furniture firms. As a result, (s)he will have built up an extensive and detailed knowledge of these two local industries. This accumulated knowledge and experience will enable that person to identify unusual projects and particularly promising firms and investment opportunities. (S)he will be able to advance larger loans than would otherwise be available without increasing the risk for the lending bank and - more significantly - be more likely to detect potentially high flying projects. A clerk from a branch of the same bank in another part of the country - who would only very rarely deal with loan applications from clothing or furniture firms - would have to rely, of necessity, solely on the formal requirements defining security and credit rating and a general knowledge of the poor chances of survival of new small firms in these sectors. Kristensen [14] stresses the importance of local banks in western Jutland (often with origins in the nineteenth century),

similarly attuned to the investment opportunities that exist within the local economy. The clear implication is that banks in Herning-Ikast are far more capable of financing activities in these sectors than are banks in other regions, enhancing the competitiveness of firms in such sectors as a result of territorially-specific competencies.

7. LEARNING, EDUCATION AND REGIONAL INNOVATION SYSTEMS

While agriculture remains an important source of employment and economic activity in Jutland, employment in particular has shrunk markedly over the postwar period. This markedly increased the participation rate of young people in formal education [14]. This in turn changed their occupational orientation from agricultural to non-agricultural activities.

The School Reform of 1958 was of great significance. It set out to even out core-periphery inequalities in educational provision and secure a uniform provision of primary, secondary and tertiary education in all regions. The legal requirement for a certain standard of educational provision had a substantial impact on the more rural counties of Denmark - and so on western Jutland. This reform of the educational system had two major impacts : it increased the overall level of education nationally; and the peripheral areas were given a new capacity to encourage the training and education of a new professional class. Both these changes have had significant impacts on the labour market, especially in areas such as western Jutland in which they interacted with existing societal characteristics.

The combination of a yeoman inheritance as self-employed, independent farmers with this new range of skills provided young people with an impetus to create their own new businesses. In the 1970s and 1980s these were increasingly in manufacturing. Entrepreneurial traditions and educational change combined to produce a self-reinforcing process whereby new small- and medium-sized enterprises hired and trained apprentices who, in turn, often went on to create their own businesses (and to create cooperative links with their former employers). Kristensen [14] stresses that the apprenticeship system and the skilled workers it produces is a crucial precondition for the flexibility and entrepreneurship that characterise Danish industry in general and that of the Herning-Ikast district in particular.

Furthermore, local educational institutions were and are sensitive to the labour requirements of local firms, developing programmes to counter specific skilled labour shortages, for example. Local Chambers of Commerce and other business organisations articulate their training needs and local educational institutions respond to them. This reflects to a large degree the personal links and networks spanning the educational and business spheres. This responsiveness of local educational institutions assumed greater importance as the labour market in peripheral Jutland became increasingly tight in the early 1990s.

8. SUMMARY, CONCLUSIONS AND LESSONS FROM THE PERIPHERY OF JUTLAND

Western Jutland from many points of view seems to be a spectacularly successful example of a formerly agricultural region that became transformed into a centre of internationally competitive industrial production, based around indigenous small- and medium-sized enterprises and focused on a quite narrow range of mature, « traditional » sectors such as clothing and furniture. There seems little doubt that much of this successful industrial growth has been at best only tangentially related to central government regional policies. There seems equally little doubt, however, that the plethora of local development agencies that sprung up initially at municipality level, then later at County level, spanning the boundaries of the state and local civil society were very important in creating conditions that were conducive to and facultative of the formation and growth of local small manufacturing firms. Such local institutions played a decisive role in nurturing entrepreneurship and ensuring local competitiveness, often with strong locational clustering into distinctive industrial districts within the periphery of Jutland. Locally specific knowledge, often of a tacit form, became crucial in creating environments that were acutely tuned to the competitive requirements of production in specific sectors and companies.

The degree of cultural specificity and embeddedness in which industrialisation of western Jutland is grounded means that it is not a model that can be readily transported to other areas. It most certainly does not « constitute a blueprint for development » elsewhere [7] but this is not to say that there may not be lessons that can usefully be learned in other regions from the experiences of peripheral Jutland. The importance of local institutions both within and outside the structures of the state, of a local tradition

of entrepreneurship and self-reliance, and of labour market conditions that permitted flexible production strategies to be developed and deployed is readily apparent. However, insofar as its competitive advantage is rooted in locally and regionally specific tacit knowledge, it may well be that the bases of this advantage are at best imperfectly understood by key local actors and not readily detectable in or decodable from the structures of local institutions [17].

There are also questions as to the extent to which the local conditions that nurtured successful growth in the past will continue to do so in the future, for three reasons. The first is that the political-economic map of Europe continues to alter in important ways following the post-1989 changes in eastern Europe and the continuing widening and deepening of the European Union. The second is that the local labour market in the periphery of Jutland is changing in important ways, above all from one characterised by high unemployment to one characterised by low unemployment. This may well threaten the flexible deployment of skilled labour in production that has been so important in ensuring the region's economic competitiveness. The third is that there are some commentators who now see the plethora of local development agencies and institutions as a growing disadvantage whereas in the past this dense network of overlapping institutions and social relationships indubitably helped underpin local economic success. It remains to be seen, however, whether there will be a rationalisation of these local agencies and institutions onto a restructured and simplified regional basis.

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