

SERVICES AND REGIONAL DEVELOPMENT

Sven ILLERIS
Roskilde University, Denmark

Abstract: The purpose of this contribution is to discuss what roles the different economic sectors, and in particular services activities (the tertiary sector) play in regional development, understood as growth in production, incomes and employment in weakly developed regions. This question is approached in two ways. The contribution first contains a - primarily theoretical - re-examination of the so-called economic base model, which states that services play a passive role in regional development. The discussion leads to substantial modifications of the model. The second approach is more empirical. It will take as its point of departure the proposition - often heard, but rarely examined - that since service activities are more concentrated in big cities than other activities and in recent decades have shown higher growth rates than other economic activities, it follows that the economic development is now pulled towards big city regions. Examined by way of a statistical analysis in Denmark and France, this proposition could not be verified

Key Words : *services activities, regional development, Denmark, France*

The economic base model

The first approach focuses on a simple model, usually called the economic base model. It has been suggested under different names by different authors independent of each others. It seems that the first one to suggest it was the German economist W. Sombart (1907).

The simple observation on which this model was based was that in the early twentieth century, agriculture and manufacturing industries (the primary and secondary sectors) were able to sell their products far away, whereas service activities were limited to local markets. The reason was of course that with railways and steamships, the costs of goods transport had become modest, while for typical services - requiring frequent meetings between producers and users - it remained of overriding importance to minimize transport costs (including time costs).

Thus, only agriculture and manufacturing could contribute to the development of a region or a city: If these activities increased and sold more products to other regions or other countries, they brought in growing incomes. They constituted the "economic base" of the region or city where they were located. Services, on the other hand, were limited to serve the customers and the purchasing power of their own region or city. Their role in the local economic development was largely a passive one, they were "non-basic", depending on the incomes brought into the region or city by the basic sectors. This model may be illustrated by figure 1.

Figure 1 shows how the money flows, brought into a region or a city by the basic activities, are further redistributed according to the economic base model. A good deal of them are paid - as wages and profits - to the people working in the basic activities, thus to the local households. The latter use much of their incomes to buy services from local service enterprises and - via rates and taxes - from local public institutions. The service enterprises and institutions pay

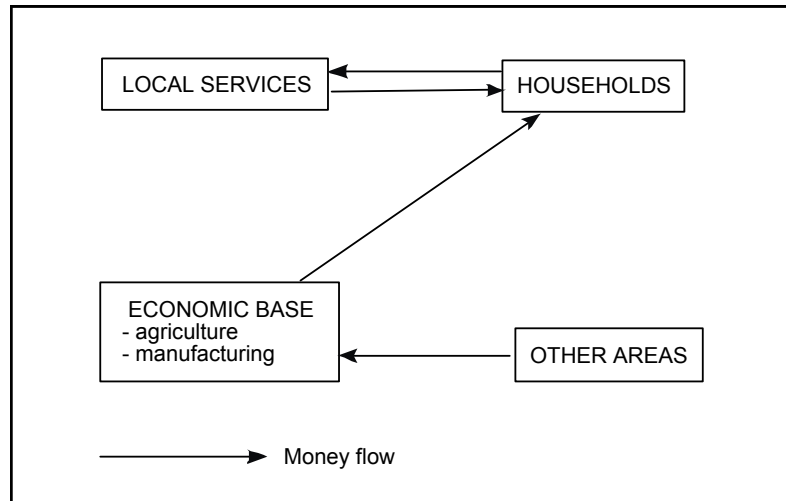


Fig.1 - The economic base model

wages and profits to other local households who again buy services etc. In this way, the money flows brought into the area from the outside have local multiplier effects.

This simple model has been refined somewhat, in particular through discussions among American economists in the 1950s, who took into account that cities received other money flows from the outside than payments for goods (see e.g. Tiebout, 1962).

A geographically more sophisticated version of the model was suggested in the Netherlands by van Lohuizen and Delfgaauw in 1924 (see de Smidt, 1967). While most versions of the model have not focussed on the delimitation of the region or city for which the economic base was defined, they did this and found that they had to distinguish between different hierarchical levels: The most widespread services are non-basic for quite small areas. Those who need more customers - e.g. hospitals - are regionally non-basic, but may be locally basic if they are located in small towns. Other service activities may be non-basic for larger parts of a country, but regionally basic, etc. It will be seen that van Lohuizen and Delfgaauw in this way espouse the later central place theory of Christaller (1933). (For a contemporary presentation of this theory, see e.g. Illeris, 1996).

It is important to notice that the basic activities usually are very different from one region or city to another: They may be predominantly agricultural in some areas, while fishing, mining or different types of manufacturing may prevail in others. It is mainly between the basic activities that the geographical division of labour takes place. As long as we are in societies with relatively similar consumption patterns everywhere, the composition of the non-basic activities does not vary much.

The economic base model is easy to understand, and also to verify in simple cases: If a new basic activity such as a mine is opened somewhere, the region's economic development accelerates, and service activities are soon attracted to serve the personnel of the mine. If it closes down again, the personnel of the mine moves away and the service activities disappear.

However, there seem to have been few attempts to verify more generally if the the regional development of services does actually depend on the basic activities, and those which have been made render contradictory results (Illeris 1989 in appendix II, Capron & Debande 1997).

When the West European countries established their regional policies – mostly in the 1950s and 1960s – they tried primarily to influence the location of manufacturing industries and other goods-producing activities in the regions in question. Explicitly or implicitly, this strategy was based on the economic base model. Local government efforts to promote their economic development took the same direction.

The practical application of the economic base model, both in its original versions and in the modified versions described below, has sometimes made the practitioners forget that the model deals with the different roles of different sectors in the economic development process of an area, taking its point of departure in sales to other areas. It is not a general growth theory, and increasing exports is not the only possible source of growth in an area – though Mercantilistic thinking tended to focus on this source. For the World as a whole, economic growth is of course not created by exports. For a region, a country and the World as a whole, there are other sources of growth – as well as barriers to growth – which are the subject of economic growth theory, but not of this contribution.

Modifications of the economic base model

Models of course simplify realities. However, even if some details have been added to the economic base model (see Nijkamp et al., 1986), many critics have found the economic base model too simplifying (e.g. Krikelas, 1992). Not all service activities are constrained to sell on local markets. Wholesale merchants have for centuries sold services to distant buyers, activities connected with tourism have joined them. Recent developments in transport and communication technologies have reduced the costs of face-to-face meetings and in some cases made it possible to sell services without such meetings. It has also been argued that the economic flows are much more complicated than those included in the economic base model and that in contemporary economies, all economic activities to an increasing degree are mutually dependent. Finally, the inter-sectoral relationships which are relevant for regional development do not only consist of money flows.

To counter the criticism, it might be appropriate to apply input-output models. However, it is only in rare cases possible to obtain the data necessary to construct regional or local input-output tables. Furthermore, some dependences remain more important than others, and input-output models are not good tools to show this. Hence there is good reason to try to modify the economic base model in such a way that it reflects the increasing interdependence between economic entities, but retain the understanding that in a regional or urban context some dependences are particularly important.

A modified version of the economic base model could be the one shown in figure 2, in which not only a new main sector has been added, but also a new type of relationship between the sectors, called "necessary conditions". However, the main sectors of the original model are still there: The basic activities, the households, and the non-basic services selling to local households.

Services sold outside the region

In figure 2, the first modification is that some service activities are included in the basic sector,

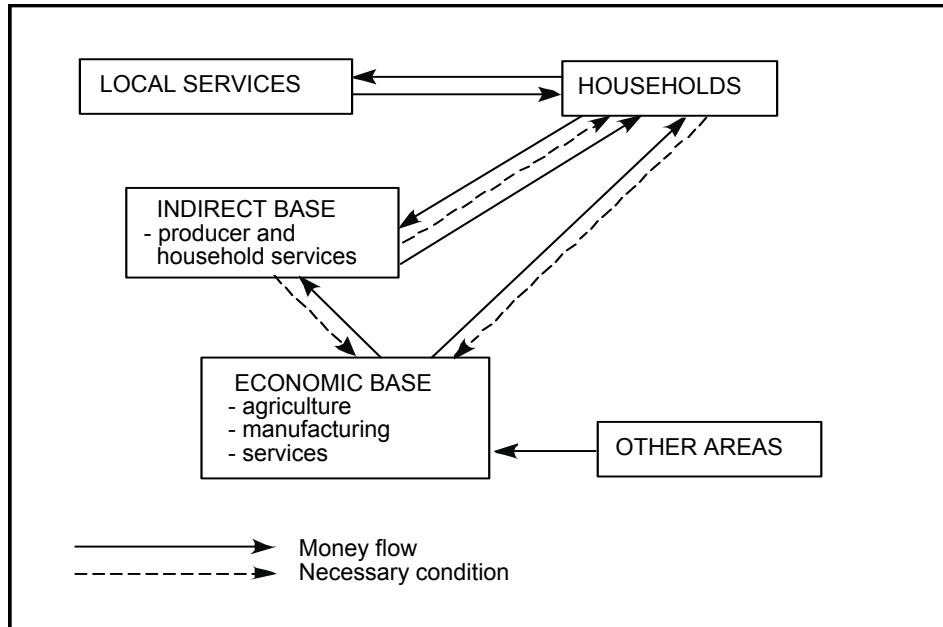


Fig. 2 - The modified economic base model

being able to sell their products outside their region or city and thus creating incomes and jobs which are independent of the local demand – as agriculture and manufacturing do. "Outside their region or city" of course includes selling services internationally, a topic on which there is a rapidly growing literature (e.g. Cuadrado-Roura, Rubalcaba-Bermejo & Bryson, 2002).

An important and expanding group of basic service activities are connected with tourism. All over the world, many national, regional and local governments see tourism – in particular agro-tourism – as a panacea, but there is not so much tourism that all regions can develop on this basis.

Relocation of civil service agencies (serving the whole country) from capitals to locations which need development is another example. In some countries, new provincial job opportunities created in this way are predominantly for lower grade civil servants. However, there are also cases – e.g. Sweden – where higher grade agencies have been relocated. In other countries a devolution of tasks from central to regional governments (serving their own area) has contributed substantially to the development of regions outside the capital.

New information and communication technologies have recently created opportunities to sell a number of services over long distances – sometimes internationally. Especially routinized, so-called back office services can be transmitted in this way, often accompanied by other innovations in work and organisation. Regional development agencies eagerly try to attract them. However, they now tend to relocate to India and other countries where English-speaking personnel can be recruited at relatively low wages.

However, also sophisticated services are delivered to distant users. But while routinized

services primarily use telecommunications and can be located in many places, sophisticated services in many cases need face-to-face contact with the users and for several reasons tend to concentrate in big cities and immediately adjacent areas. Their ability to sell over long distances, even if considerable travelling costs are involved, is due to the high value of the service products for the users.

Public services delivered to whole countries (national government services) are – with the above-mentioned exceptions – produced in the national capitals, which in most countries are the biggest cities. This seems not to have attracted research.

Business services, on the other hand, have been the object of much recent research. As noted by Illeris (1994), large customers make extensive use of distant, even global networks of service providers, while small firms primarily use local or regional suppliers.

An extreme concentration of sophisticated business services has occurred in the so-called global cities (especially New York, Tokyo and London) which has recently been a major topic of investigation. These cities are simultaneously global centres of innovation, of investment capital, of specialized expertise, and of management for corporations and non-governmental organizations. The locational factors behind the concentration of such services are both large local markets and unrivalled global transport and communication infrastructures. As additional factors, the easy access to key information from many sources has often been stressed. Similar or related firms may form clusters where collective learning processes, knowledge acquisition and sharing develop (Scott 1988). But as regards producer services, clustering is under-researched and face-to-face networking may be over-estimated. On the other hand, the role of the large supply of highly qualified staff is probably under-estimated.

Services as a condition for regional competitiveness

The second modification is the introduction of a main sector called "indirectly basic". This sector includes services which are sold locally – proximity remains often important – but are necessary conditions for the competitiveness of the area's basic firms.

The indirectly basic sector has two components: First, producer services are sold to local firms. An example of an indirectly basic company is a computer service firm with an intimate knowledge of their customers' IT-systems, which must be maintained and updated, often at short notice. Basic firms often depend on other local services for their productivity, learning processes, innovative ability and product quality, and there is currently much research focus on this interaction. The general tendency for firms to concentrate on their core activities and to outsource a number of service inputs – in other words: the increasing division of labour – obviously means that the importance of indirectly basic services is increasing, since it is still advantageous to buy such inputs locally.

The understanding of the role of the knowledge services, learning processes and innovation taking place within regions has been an outstanding research preoccupation in recent years. However, it would probably be fruitful to dig still deeper into these mechanics – not least with the purpose of being able to fine-tune relevant policies.

The individual interactions between the service-producing firms and the service-using firms are often modest and may seem unimportant. What lends importance to the phenomenon is the total amount of external local contacts which, taken together, has changed the nature of the firms from relatively isolated units to ones which participate in complex economic systems with

an intensive division of labour. This is – as discussed by Giddens (1990) – a consequence of the ever growing complexity of technology, knowledge requirements, markets and surrounding societies in which the firms operate.

It seems that the indirectly basic producer services are particularly important for the R&D, design, innovation and planning activities of their customers (le Roy, 1997). And that they are particularly important for small and medium enterprises which are not able to produce such services internally or to buy them from distant providers (Illeris, 1994).

It is difficult to estimate the importance of the local supply of such services in an exact way. Already in 1955, Blumenfeld argued that their importance was so crucial that the economic base model should be turned upside down: According to him and his followers, it is not the service producers that have to locate near the service users, but the service users that have to locate near the service producers.

The terms infrastructure or business environment are sometimes used about these conditions for development. Infrastructure may consist of purely physical structures such as transport and communication equipment. But the word is also used about soft elements, namely such service activities as financial or consulting firms or transport activities.

The second component of the indirectly basic sector consists of service activities whose products are important for the presence of certain households, whose qualified workers again constitute a necessary condition for the competitiveness of firms which sell outside their region.

Thus today, a location where well educated staff members can be recruited – not only a few top persons, but the whole personnel – is vital for the competitiveness of basic firms. These means either a location where local young people can acquire a good and relevant education, or a location where qualified persons and their families can be attracted from elsewhere, or a location with both characteristics. The attractiveness factor means that general living conditions in the area must include a number of qualities, some which cannot be influenced (climate, beautiful landscape), while others depend on the supply of services – e.g. cultural and leisure services - in the area.

The regional policies of West European countries and the European Union, as well as the development policies of local governments have gradually recognized an increasing role for service activities.

Services which serve regional needs

There has been relatively little research focusing on the genuinely "non-basic" sector, the private and public service activities which only serve the population and the non-basic firms and public sector in their own region. The non-basic sector is not inherently relevant for regional development. However, *structural changes may lead to increases in the incomes and employment created in those service activities that serve the regional demand. Structural changes may also favour the development of some regions more than others. But such structural changes in the various service activities have rarely been studied from a regional development point of view.*

The changes may have their causes on the demand side: Due to increasing demand, services may spread to regions where they were not previously found. Or decreasing demand may force them to concentrate in fewer regions. Or the demand may change differentially, e.g. for

demographic reasons. The causes may also be due to supply factors such as increasing economies of scale.

Thus in previously planned economies, the service activities have grown rapidly in the transition period, where a previously suppressed demand became manifest. In the early stages, most of the growth took place in sectors serving regional needs, e.g. in trade, repair, restaurants, administration and real estate.

The economic base model and the Reich's "Three jobs"

The economic base model has been developed independently of other social science theories. It is interesting to notice, however, that the above-mentioned modifications gives it a striking similarity to one of the most prominent recent labour market theories, namely Robert Reich's theory (1991) of three job-types.

Even if the household sector in figure 2 has been shown as a non-differentiated category, it has already in the text been hinted that different households get incomes from different sectors and that their location is influenced by different conditions. If we try to classify households according to these criteria, we end up with three classes which resemble Reich's three job-types:

- The jobs which Reich calls in-person services correspond to what above was called services which serve regional needs. This is the large amount of private and public service work which still is tied to be performed in close contact with the final consumers, by whom it is paid. These activities constitute the genuinely non-basic sector.
- The jobs which Reich calls symbolic-analytic services correspond to the indirectly basic service work *and* to some of the basic service work, and the work is paid by the firms in these sectors. The characteristics of this service work is that it demands high qualifications, and that it is not found everywhere: Only where conditions are found satisfactory, the highly mobile symbolic analysts will be attracted and work in firms which then sell their products outside the region.
- The jobs which Reich calls routine production correspond to the work in the part of the basic sector which only demands more modest qualifications, but is able to sell their products – whether goods or services - outside the region. This is a sector of global price and hence wage competition – the routine labour can be found in many places.

Application of the economic base model

In regional development policies, the economic base model is often applied to estimate the impact on a local economy of possible actions. For instance, if a plant is expanded or closed down, or if a new institution is established in a town, what is the effect on the local economy?

It is not easy to measure local financial flows, and the indirectly basic sector can hardly be defined quantitatively. However, a number of studies have been made in which sellers or buyers of services – especially producer services – have been asked where they sell/buy the services, which indicates the order of magnitude of the effects. It seems that in advanced western economies, half of the sales are normally made within a distance of 20-30 kilometers, while a third take place more than 50-100 kilometers away (Illeris, 1996). Thus on the local level, producer services normally have a basic role, selling outside the narrow local area. Some studies show that this role tends to increase (Beyers, 1999).

Statistical data make it possible to estimate employment in the basic and non-basic sectors, which gives an idea of the order of magnitude of the multipliers. However, multipliers can change over time, and they depend on the hierarchical level of the region or city in question. For instance, a recent study by Beyers (1999) deals with employees in American counties in 1985 and 1995 (except in agriculture and the – rather modest - public sector). He distinguishes metropolitan areas (with over 50,000 inhabitants) and non-metropolitan areas. Table 1 shows basic and non-basic employment in the secondary and tertiary sector.

Table 1

Employment in the United States 1985 and 1995

million		1985			1995		
		second.	tertiary	total	second.	tertiary	total
metropolitan	basic	9.6	13.2	22.7	8.6	19.4	28.0
	non-basic	10.2	34.6	44.8	10.1	45.9	56.0
	total	19.8	47.8	67.6	18.7	65.3	84.0
non-metropolitan	basic	3.3	2.8	6.0	3.6	3.8	7.4
	non-basic	1.0	4.2	5.2	1.3	6.2	7.6
	total	4.3	7.0	11.3	4.9	10.0	14.9
total	basic	12.8	16.0	28.8	12.2	23.2	35.4
	non-basic	11.3	38.8	50.1	11.4	52.1	63.5
	total	24.1	54.8	78.9	23.6	75.3	99.0

Source: *Beyers (1999)*

Table 1 confirms the increasing dominance of service employment, especially in metropolitan areas. In other words: Metropolitan areas primarily provide themselves and the lower hierarchical levels with services, while in non-metropolitan areas manufacturing employment (and of course agricultural) make up a higher share of the total employment.

The prevailing discourse in western Europe in recent years has emphasised the importance of big cities in the international competition. But the truth is that exports are primarily generated in the secondary sectors of rural areas and small towns, while services – still more distance-sensitive than goods – only constitute a modest part (about 20 per cent) of international trade. Thus as regards exports, big city economies can be said to be relatively little internationalised: For instance in Denmark in 1998, 14 per cent of the total turnover in the Greater Copenhagen area were exported, against 22 per cent of the turnover in local government areas (*kommuner*) whose biggest town had less than 20,000 inhabitants (Illeris 2002). *Capitals and other major metropolitan areas primarily serve domestic markets with sophisticated private and public services* (and of course local markets with less sophisticated services). This should not really come as a surprise: from the central place theory it follows that services must have a relatively heavier weight in top level than in lower level centres.

Table 1 also shows that in the USA in 1995, 31 per cent of the service employment is basic on the county level. On the other hand, 52 per cent of the secondary employment is basic. Table 2 shows the multipliers, defined as 1/the share of basic employment.

Due to the growth in tertiary employment, less basic than secondary employment, one would

expect the multipliers to increase. However, table 2 shows that this increase is very modest, especially in metropolitan areas. This is the effect of the very rapid growth in basic service employment, a growth which reached 45 per cent over these 10 years.

Table 2

Multipliers in the United States 1985 and 1995

	1985	1995
metropolitan	2.930	2.973
non-metropolitan	1.809	1.988
Total	2.684	2.764

Source: *Beyers (1999)*

Table 2 also shows that multipliers are higher in metropolitan areas than in non-metropolitan areas. This is a general rule: The higher in the hierarchy, the higher are the multipliers. This is explained by the central place theory: On the local level, service users only find a part of the services they demand locally, and must buy the rest on higher hierarchical levels. On a higher level, service users can find (almost) all services locally and make (almost) all their purchases here.

It may be concluded that only with a number of modifications, the economic base model still supplies concepts and theoretical understanding on a simple level of the role of services in regional and urban development.

Service growth and regional and urban development

Let us now turn to the to the second approach of this contribution. It takes as its point of departure the well-known fact that in advanced economies, the tertiary sector has in recent decades shown higher growth rates – whether measured by employment or by GDP – than other economic sectors. In Denmark for instance, from 1982 to 2000 employment in the primary sector decreased by 41 per cent, in the secondary sector increased by 2 per cent, but in the tertiary sector increased by 18 per cent. In France, from 1989 to 1998 employment in the primary sector decreased by 25%, while the number of wage-earners in the secondary sector decreased by 14% and in the tertiary sector increased by 14%. All other things equal, the effect of this will be that regions and cities with a high proportion of service activities will show above-average growth.

Where is the share of service activities high? This varies systematically: Big cities (and the regions in which they are placed) have higher service shares than small towns and rural areas. Thus in Denmark which as a whole had 72 per cent of its employment in 2000 in the tertiary sector, this share was 84 per cent in Greater Copenhagen (with 1.4 million inhabitants). The share declined regularly by decreasing size of towns, ending with 59 per cent in *kommuner* with no town over 5,000 inhabitants. In France in 1998, the tertiary sector's share of the wage earners was 81% in the Paris region (Ile-de-France); here, too, the share declined by decreasing degree of urbanisation, ending with 62% in counties (*départements*) with no town over 70,000 inhabitants. *Ceteris paribus*, the growth of service activities primarily benefits big cities.

Going more into detail, the growth rates of different service activities also differ. In western societies, knowledge-intensive business services have shown high growth rates in recent

decades. This sub-sector is even more concentrated in big cities than the service sector as a whole. In itself, this fact pulls economic development even more in the direction of big city regions.

However, there are important differences from sub-sector to sub-sector and from country to country, depending on the composition of demand, government priorities, wage and price levels, ability to export services etc (see discussion in Illeris, 1996).

The question of whether the above-average growth of service activities plus their above-average geographical concentration really results in above-average economic development in big city regions will be examined empirically, using employment data from Denmark 1982-2000 and from France 1989-1998.

The method applied will be the so-called shift-share analysis, in which it for a given period is calculated (a) what growth would have occurred in all geographical categories and sectors, if in each sector the growth in each geographical category had been the same as for the country as a whole (the structural component); and (b) what is the difference between this structural component and the growth that has actually occurred – in each sector and in each geographical category (the shift component). It should be stressed that the results of shift-share analyses are only valid for the period, for the sectoral break-down and for the geographical break-down applied. If other periods or other sectoral or geographical classifications are applied, the results may be different.

As an example, table 3 shows the changing number of wage-earners in France, 1989-1998. The basis is a division into 36 sectors and into the 96 *départements*, grouped in 5 classes according to the biggest city (*unité urbaine*) in each *département*. It should be noticed that the wage-earners constitute the large majority of persons employed in all sectors except agriculture, but in agriculture data for total employment were available and have been used.

It should also be noticed that in table 3, the *départements* (in the Paris area the region) include the periurban zones from where many people commute to the central cities. The non-basic activities which serve these commuters are thus included, which is logical. It is less logical that the directly and indirectly basic activities of the periurban zones – which may have little to do with the central cities – are included, too.

Table 3

Changes in the number of wage-earners, France 1989-1998

	1989		total	structure	shift	1998
	thousand	per cent	per cent	per cent	per cent	thousand
Paris region	4722	+0.2	+7.9	-7.6		4733
<i>Dép.s</i> with cities >1 m. inhab	2005	+3.7	+4.8	-1.0		2080
<i>Dép.s</i> w. cities 270-1000,000 inh.	4714	+6.3	+3.9	+2.4		5013
<i>Dép.s</i> w. cities 70-270,000 inh.	5379	+4.2	+1.6	+2.6		5607
<i>Dép.s</i> w. no cities > 70,000 inh.	3295	+2.6	-0.2	+2.8		3381
France total	20293	+3.6	+3.6	0		21032

Sources: INSEE 1996/2000.

Another example is from Denmark. Table 4 shows the growth in total employment (at place of work) from November 1982 to January 2000 (thus over 17 years), based on a division into 25 sectors and 275 *kommuner* grouped into 5 classes according to the population of the *kommuner* or – for the smaller ones – their biggest town. It should be noticed that due to a shift in 1993 from the 1968 International Standard Industrial Classification to the 1988 ISIC, the 1982 and 2000 data are not totally comparable, but the differences are so small that they do not influence the conclusions to be drawn from the table. Periurban commuting zones are generally not included, only the contiguous built-up areas of the 3 first mentioned urban classes. The advantages and disadvantages are thus the opposite of those of the French example.

Table 4

Changes in employment, Denmark 1982-2000

	1982		total structure shift		2000
	thousand	per cent	per cent	per cent	thousand
Greater Copenhagen	782	+ 5.0	+ 15.9	- 10.9	821
<i>Komm.</i> with 150-300,000 inhab.	313	+ 15.9	+ 13.0	+ 3.0	362
<i>Komm.</i> with 25-100,000 inhab.	538	+ 12.7	+ 8.9	+ 3.8	606
<i>Komm.</i> , biggest town 5-20,000 inh.	418	+ 12.5	+ 3.8	+ 8.8	470
<i>Komm.</i> , no town >5000 inh.	481	+ 1.9	- 2.0	+ 3.9	490
Denmark total	2532	+ 8.6	+ 8.6	0	2750

Source: Data communicated by Statistics Denmark

In spite of the different definitions of the classes used in tables 3 and 4, the conclusions to be drawn from them are the same, namely first, that the structural components would have resulted in higher growth rates in big cities and their regions than in smaller town and rural areas. But, second, *all other things are not equal*. There are major shifts between the geographical classes. They are due to re-locations, to differential growth rates of existing firms, and to geographical differences in birth rates and death rates of firms - for many reasons which cannot be explored here. In these two cases, there are heavy negative shifts in cities with over 1 million inhabitants; the details of the analyses – not shown in the tables – are that these negative shifts occur both in the secondary and in the tertiary sector. On the lower geographical levels, there are positive shifts (growth above the national average); in the medium-sized cities, these shifts are most important in services, while on the lowest levels of the urban hierarchy they occur primarily in the manufacturing sectors. In the lowest Danish class, which has a clearly rural character, the net shift in services is negative. *The total result is that medium-sized towns and their regions show higher growth rates than both big cities and small towns/rural areas*. Regional and urban economic development is not simply determined by the high growth rates of service activities and the relative geographical concentration of service. Indeed, the notion that the high growth rate of service activities and the relative geographical concentration of services should necessarily lead to above-average growth in big city regions could be called a structural fallacy.

It should be stressed that the findings shown in tables 3 and 4 cannot be generalized. In other areas and in other periods, the results may be different. Indeed, if the Danish data are split into two sub-periods, the analysis shows that the 1982-1993 development - dominated by the shift

components - was radically different from the 1993-2000 development, dominated by the structural components (Illeris 2003). It is only possible to conclude that *the structure does not necessarily determine the regional and urban development*.

Conclusion

In the first part of this contribution, the traditional theory of the passive role of services in regional development, namely the economic base model, was discussed. It was concluded that only with major modifications this model could be accepted: The basic sector, selling its products over long distances outside its region, includes not only agricultural and manufacturing activities, but also a number of service activities. Besides, an indirectly basic sector must be added. It consists firstly of service activities which sell their products to the basic firms of their regions and which are of decisive importance for the competitiveness of these firms. Secondly, other service activities are important for increasing the qualifications of their regions' labour force and for attracting highly qualified personnel, and in this way for the competitiveness of the basic firms. Finally, even the non-basic service sector which only serves the region's own needs is not totally passive: For a number of reasons, structural changes occur in this sector, which lead to growth in some regions and decreases in other regions. The way in which this modified economic base model categorises the sectors has a striking resemblance to the way in which Reich categorises the job types.

In the second part of the contribution, what may be called the structural fallacy is attacked. By this is meant the proposition that since service activities show above-average growth and are above-average concentrated in big city regions, overall growth should be highest in big city regions. This is shown not necessarily to be the case. Shift-share analyses in France and Denmark in the last decades of the 20th century show that shifts out of the big cities more than counterbalance their structural advantages. However, this is not necessarily the case everywhere and in all periods.

Explicitly or implicitly, national and EU as well as local government policies aiming at strengthening economic development in weak regions were originally based on the traditional economic base model and focussed on the manufacturing sector. This contribution shows that there are strong arguments in favour of pulling much of the service sector actively into these policies.

References

- BEYERS W.B. (1999), *Trade in Services: Modeling the Contribution to the Economic Base of Regions*, Paper, North American Regional Science Association Meetings in Montreal.
- BLUMENFELD H. (1955), *The Economic Base of the Metropolis: Critical Remarks on the "Basic-Nonbasic" Concept*, Journal of the American Institute of Planners, 21, 4, p. 114-132.
- CAPRON H., DEBANDE O. (1997), *The Role of the Manufacturing Base in the Development of Private and Public Services*, Regional Studies, 31, 7, p. 681-693.
- CHRISTALLER W. (1933), *Die zentralen Orte in Süddeutschland*, Jena: Gustav Fischer.
- CUADRADO-ROURA J.R., RUBALCABA-BERMEJO L., BRYSON J.R. (eds) (2002), *Trading Services in the Global Economy*, Cheltenham: Edward Elgar.
- GIDDENS A. (1990), *The Consequences of Modernity*, Cambridge, Polity Press.
- ILLERIS S. (1989), *Services and Regions in Europe*, Aldershot, Avebury.
- ILLERIS S. (1994), *Proximity between Service Producers and Service Users*, Tijdschrift voor Economische en Sociale Geografie, 85, 4, p. 294-302.
- ILLERIS S. (1996), *The Service Economy: A Geographical Approach*, Chichester,

Wiley.

ILLERIS S. (2002), *Is Growth in Cities Contagious? How Cities and Towns influence Regional Economic Development*, p. 30-35 in *European Cities in a Global Era: Urban Identities and Regional Development*, Copenhagen, Ministry of the Environment.

ILLERIS S. (2003), *Shifts and Structural Components in Regional Development: Denmark 1982-2000*, p. 81-94 in R. Domanski (ed), *Recent Advances in Urban and Regional Studies*, Studia Regionalia 12. Warsaw: Polish Academy of Sciences.

INSEE (Institut National de Statistique et des Etudes Economiques), (1996/2000), *L'Emploi départemental et sectoriel de 1989 à 1994/de 1996 à 1998*. Paris.

KRIKELAS A.C. (1992), *Why Regions grow: A Review of Research on the Economic Base Model*, *Economic Review*, Federal Reserve Bank of Atlanta, July-August, p.16-29.

LE ROY A. (1997), *Les activités de services: Une chance pour les économies rurales*, Paris, L'Harmattan.

NIJKAMP P., RIETVELD P., SNICKARS F. (1986), *Regional and Multiregional Economic Models: A Survey*, In P. Nijkamp (ed), *Handbook of Regional and Urban Economics*, vol. 1. Amsterdam: North-Holland.

REICH R.B. (1991), *The Work of Nations*, New York, Vintage Books.

SCOTT A.J. (1988), *Metropolis: From the Division of Labor to Urban Form*, Berkeley & Los Angeles, University of California Press.

SMIDT M. de (1967), *Stuwend en verzorgend: Een verkenning van de ontwikkeling der conceptie*, *Bulletin Geografisch Instituut Utrecht*, 4, p.7-39, 70-82.

SOMBART W. (1907), *Das Begriff der Stadt und das Wesen der Städtebildung*, *Archiv für Sozialwissenschaft und Sozialpolitik*, p.1-9.

TIEBOUT C.M. (1962), *The Community Economic Base Study*, New York, Committee on Economic Development.