Finnish districts and regional differentiation

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In this article we chart the emergence of functional region level analysis and policy implementation in Finland and attempt to clarify its significance for the analysis of Finnish regional development in the latter half of the 1990s. The characteristics of development in terms of regional gross production, employment, and migration at the national level show a propensity towards increasing polarisation: more and more districts are below the national average as economic development agglomerates to fewer growth centres.

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Introduction

Regional analysis often draws from statistical material based on conventional administrative units, i.e., municipalities or regions in the Finnish case. In 1999 – the date referred to by the statistical material used in this article – there were 452 municipalities in a country of five million people. It is thus obvious that most of the Finnish municipalities are simply too small in spatial terms to be used in the comprehensive analysis of regional development trends. On the other hand, the alternative level of spatial unit analysis, namely the 19 *regions* (in statistical and administrative vocabulary), is too heterogeneous to portray the actual spatial patterns of Finnish society.

It is for this reason that the more recent concept of *district* has risen in status to become the significant functional level in the Finnish urban and regional system. The concept refers to agglomerations of municipalities that are grouped together according to their functional orientation in order to reflect the actual daily operational conditions of people, enterprises, and community organisations. In the urban context, the concept of district refers to *functional urban regions* (FUR).

District is a useful concept also when analysing regional development from a functional viewpoint. Using district as the level of analysis makes it possible to distinguish internal development dynamics from the features of external development more explicitly. *Internal dynamics* refers to development conditions and features within the functional urban region, while *external development* relates to the inter-regional, national, and international levels. The most important quality of the concept of district is thus its capacity to extend beyond administrative boundaries. As a result, the needs of economic activity and service production can be mapped more efficiently. This leads to more coherent strategic planning, visioning, and, for example, to the rationalisation of public service provision.

Furthermore, some interesting data, such as that on GDP per capita, are not available for public use at the municipal level in Finland due to data protection and confidentiality arrangements required by the Statistics Act. Municipal data remains useful in the analysis of the internal dynamics of a district, however – in the study of the dynamics of, and between, core cities and fringes.

The Ministry of Interior inserted a district governance level between the municipal and regional levels in 1994, thus giving shape to the current Finnish administrative structure for urban regions and inter-municipal cooperation. In governmental – and also in statistical – terms, the English term "district" has also been referred to as a "subregional unit" (Aluekehitysalan...1998). In tandem with the municipal and region-level divisions undertaken in the late 1990s, this drive towards the creation of districts has played a central role in the implementation of regional development policy and statistical monitoring. At the operational level, districts are thus utilised in targeting regional policy incentives according to their disparities and characteristics.

District units were defined by the Ministry of Interior in accordance with travel-to-work patterns and volumes as well as by means of an analysis of the existing co-operation structures between municipalities. In 1994, Finland was divided into 88 districts, each composed of several municipalities. Three years later, the division was slightly modified: three districts were eliminated and individual modifications were made to a further fourteen. Thus, the number of districts in 1999 was 85 (note that the analysis in this article is based on this division). Yet another round of modifications were made to the district division boundaries in 2001. One new district was created, three districts were merged into one, two districts were eliminated (putting the total number of districts at 82 in 2001) and boundaries were amended in 19 districts (Municipalities... 2001).

Despite this functional delineation of district boundaries, it must be noted that in some cases they have simply been moulded to suit essentially political rather than rational-administrative purposes. For instance, the spatial identity of Finland's Swedish-speaking minority of roughly 300,000 individuals has affected administrative boundaries in coastal areas, the minority's principal zone of residence (see Raento & Husso 2002: CD-Fig. 1). Furthermore, the regional policy incentives disbursed to regions and perceived to be lagging behind in development have led some municipalities in the rural-urban fringe areas to seek co-operation partners from amongst those rural municipalities that are less well-off rather than from those urban centres that are economically stronger. Moreover, higher-level administrative boundaries, such as those at the regional level, determine district boundaries explicitly in some cases.

Given this mismatch between functional and administrative boundaries (the latter are political in nature), the need to reassess travel-to-work areas as a concept parallel to a district's territorial form has become apparent. According to the method introduced by Statistics Finland, the definition of a *travel-to-work area* is the following: "A municipality is a travel-to-work area centre if, firstly, no more than 20 percent of its labour force are out-commuters, and, secondly, no more than 7.5 percent of its labour force commutes to a single municipality." If a municipality is not defined as a centre of a travel-to-work-area, it is attached to the municipality that attracts the largest number of commuters. Alternatively, a commuting-flow threshold of 15 percent is used to determine whether a municipality is attached to a particular centre or not (Vartiainen & Antikainen 1998; summarized in Antikainen & Vartiainen 1999b).

Districts and the regionalisation process

The feasibility of using the concept of district can also be justified within the context of urban change. Districts (or, in a narrower sense, FURs) are highlighted by the ongoing global process of *regionalisation* (in Finnish, *seutuistuminen*), outlined in both Swedish and Finnish geographical literature (cf. Järnegren & Ventura 1977; Ventura & Wärneryd 1983; cf. Vartiainen 1992).

Initially, regionalisation referred to the growth of diversified large and medium-sized urban regions and, intra-regionally, to the branching out of population growth from the centre to the surrounding rural areas. In practice, economic activities and jobs were concentrated in the centre of these urban regions although population grew in the fringe areas, i.e., in the surrounding municipalities. The core (the centre) of the urban region together with its fringe areas thus formed an increasingly interwoven and interactive functional region (cf. van der Laan 1998).

The process was already prevalent in the 1970s and is now considered to be the most important structural change impacting upon the Finnish urban and regional system. Regionalisation perhaps originated in the development of urban centres and the surrounding suburban municipalities, originally pertaining to the strengthening of urban centres and FURs as nodes in the national regional structure, but the district approach has come to be viewed as important in a rural and peripheral region context.

The major reason for the feasibility of districts in Finland's peripheral regions stems from the financial crisis in the public sector in the 1990s. The crisis compelled municipalities to engage in a more efficient pooling of resources through schemes of inter-municipal co-operation. It should also be noted that a further reason for the emergence of this co-operation is that the struc-

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tural fund programmes of the European Union now actively promote such activities. Generally speaking, co-operation at the district level strengthened throughout the 1990s, with the district level now being considered as one of the basic levels of regional and community strategy formulation and planning for both local and national policy-making. In this way, districts have come to attract increased governmental capacity instead of being mere statistical units of analysis.

The case of Joensuu

The Joensuu district is one of 82 districts in Finland. Joensuu is a medium-sized university town with 52,000 inhabitants (91,500 inhabitants in the entire district). The regionalisation process is very visible in the case of Joensuu. The engine of local development is the city of Joensuu, a relatively strong employment, service, and research and development (R&D) centre at the national level. Beginning in the mid-1970s, the district's population growth has been confined primarily to its fringe areas, however. Consequently, the Joensuu travel-to-work area is now relatively large, both in terms of population and of physical expanse.

In Figure 1 we have determined the travel-towork area of Joensuu according to sub-municipal units (normally travel-to-work area is defined using municipalities as basic units). The 15-percent commuting threshold used to define areas belonging to the Joensuu travel-to-work area is also employed in this analysis. In the case of Joensuu, the district and travel-to-work area boundaries match relatively well. The travel-to-work area extends to the southern areas of the municipality of Polvijärvi, which is part of the neighbouring district of Outokumpu. Co-operation in its various forms also crosses district boundaries. As such, in rela-



Fig. 1. Structure of the Joensuu district. The centre of the district is the City of Joensuu. The travel-to-work area crosses municipal boundaries. The Joensuu district is one of the 82 administrative districts established by Finland's Ministry of the Interior. The Joensuu district co-operation organisation (JYTY) includes the neighbouring district of Outokumpu.

tion to the present case, the Joensuu district cooperation organisation (JYTY) also includes the entire district of Outokumpu (with 13,500 inhabitants).

Differentiation of districts

A comparison of regional growth, employment, and migration describes rather well the state of spatial development at the end of the 1990s in Finland. The sixth edition of the Finnish-language *Atlas of Finland (Suomen kartasto)* included an analysis of the characteristics of development in 1995 (Antikainen & Vartiainen 1999).

In what follows, district boundaries correspond to the 1999 classification. We have grouped districts according to three basic indicators of regional development: gross domestic product (GDP) per capita in each district, unemployment rate, and net migration rate. In this grouping, a district's growth is considered strong if the level of its GDP is ten percent higher than the national average, and weak if it is ten percent lower. The migration rate refers to the number of migrations as a proportion of the population in the target district. Migration balance is considered positive if the rate is five per thousand or higher, and negative if it is minus five per thousand or lower. The unemployment rate is compared to the national average. Unemployment is considered high if the level is ten percent higher than the national average, and low if it is ten percent lower.

The threshold values utilised in the study presented in the 1999 *Atlas of Finland* relating to the characteristics of development in 1995 are presented in Table 1. These values differ slightly from those actually employed in the Antikainen and Vartiainen (1999a) study. The reason is that conceptual modifications were made to the GDP and unemployment statistics for 1999. In what follows, new values for 1995 are presented with regard to GDP.

The threshold values describing the situation at the end of the 1990s are presented in Table 2. The values for each of these indicators in 1995 and 1999 (per district) are presented in CD-Appendixes 1, 2, and 3. Cartographic presentations for each variable, and synthesis of each are presented in Figures 2–4 and CD-Figures 1–7. The definition of functionally significant urban regions used here is based on Vartiainen and Antikainen (1998) (in English, see Antikainen & Vartiainen 1999b).

Analysis of the data suggests that regional growth is at its highest level in export-oriented districts (Fig. 2 & CD-Fig. 1-2). The economy is booming in information-technology-oriented districts and especially where Nokia is located (Nokia was the leading international telecommunications firm and the main engine of the Finnish knowledge-based economy in the late 1990s). This is particularly so for both the district of Salo, Nokia's home base in terms of the electronics industry, and also with regard to the Helsinki and Oulu districts, where the local boom related to the knowledge-based economy is most visible. In addition, gross domestic product is also rather high in small districts that specialise in the forestry and steel industries. Such districts include Jämsä and Äänekoski in Central Finland. Large and medium-sized districts that are industrialised in the traditional sense and have a strong economic track record (such as Kouvola and Lappeenranta in south-eastern Finland) remain close to the national average, however. A special case in terms of GDP in Finland is that of Mariehamn, the cap-

Variable / Indicator	National Value	Good	Average	Weak
Regional growth (GDP/capita, in FIM: FIM 5.94753=1 EUR)	96,199	>10%; >105,819	10%–10% 105,818–86,580	<-10% <86,579
Employment (Unemployment %)	19.6%	<10% <17.6%	10%–10% 17.7–21.4%	>—10% >21.5%
Migration Net migration rate (‰)		≤5‰	4.99‰–4.99‰	≥-5‰

Table 1. Threshold values employed with regard to regional economy, employment, and migration, in 1995.

Variable / Indicator	National Value	Good	Average	Weak
Regional growth (GDP/capita, in FIM: FIM 5.94753=1 EUR)	120,652	>10%; >132,717	10%–10% 132,718–108,586	<-10% <108,585
Employment (Unemployment %)	14.0%	<10% <12.6%	10%–10% 12.7–15.4	>-10% >15.5%
Migration Net migration rate (‰)		≥5‰	4.99‱–4.99‰	≤-5‰

Table 2. Threshold values employed with regard to regional economy, employment, and migration, in 1999.

ital of the autonomous Åland Islands, which is an important private service centre for shipping companies and for banking.

The GDP per capita level rose significantly in most Finnish districts in the late 1990s. This is, however, mainly due to the low starting levels of 1995, which were a consequence of a deep nationwide recession in the early 1990s. GDP per capita growth has been moderate only in a few heavily industrialised districts (Kemi–Tornio, Raahe, and Porvoo). This, in turn, is a result of a successful year, 1995, particularly for the steel industry; production is heavily concentrated in Kemi– Tornio and in Raahe in the northern coastal area of the Gulf of Bothnia, close to the Swedish border. As an indicator, GDP is sensitive to economic fluctuations. The market prices of products react instantly to these fluctuations.

Today a strong regional economy does not necessarily entail anything close to traditional notions of 'full employment'. This is primarily so because of the 'jobless growth' in many traditional manufacturing industries. This phenomenon is especially prevalent in many small and medium-sized industrial districts (e.g., Jämsä and Äänekoski). In addition, the emerging knowledge-based industries do not usually provide viable employment opportunities to the often elderly local labour force. This is visible also in many growth centres that suffer from high unemployment rates, even though the basis of the local economy is solid (e.g., Oulu and Tampere).

It is obvious that significant north-south and east-west divisions in terms of unemployment exist across Finland (Fig. 3 & CD-Fig. 3–4). These divisions have been rather stable for decades, however, highlighting the inertia inherent to the economic and cultural structures of Finland's macro-regions. With few exceptions, peripheral regions in northern and eastern Finland are regions of high unemployment. The lowest unemployment rate is found in coastal, often Swedishspeaking districts in western Finland. Based on the figures in the 1995 and 1999 data comparison, a greater number of districts were below the national average in 1999, despite the sharp fall of the unemployment rate. This perhaps unexpected result is due to two factors. Firstly, the unemployment level in 1995 was high across most of the districts. Secondly, employment in some of the largest districts, especially in Helsinki and its surroundings, improved considerably, thus reducing the average unemployment rate nationally.

Analysis of the data suggests that at the turn of the millennium, migration was focused on only a few growth centres in Finland (Fig. 4 & CD-Fig. 5–6). The districts of Oulu, Jyväskylä, Tampere, Turku, Salo, and particularly that of Helsinki show strong positive net migration rates. Most of these destinations are large or medium-sized university towns, Salo being the only exception. Migration flows reflect local education and labour market opportunities. The spatial differentiation of education and labour markets was emphasized particularly during the long boom period of the Finnish economy starting in the mid-1990s. Large university districts are competitive in both of these fields.

The growth of Helsinki and its surroundings is reflected in the neighbouring districts as well. Indeed, migration is increasingly directed towards districts with a good transportation infrastructure to, and from, the Helsinki region (e.g., Hämeenlinna, Porvoo, and Lohja).

The Jyväskylä district has a slightly different profile from the other growth centres. Here, GDP is relatively low and unemployment remains high. Most of the medium-sized provincial centres (e.g.,



Fig. 2. Regional GDP per capita, in 1999 (Source: Statistics Finland). For a comparison with the year 1995, see CD-Fig. 1.

Vaasa, Seinäjoki, Lappeenranta, Mikkeli, Kuopio, and Joensuu) have migration balances near zero. The highest negative migration balance is to be found in peripheral areas of northern and eastern Finland (see Antikainen 2001).

The summary of the examination is presented in CD-Figure 7. The two maps show that only the Helsinki and Salo districts fall in the highest category in all three variables. The Oulu district is also strong but its unemployment level remains considerably high. The number of districts in the weakest category was 20 in 1995, but the total number in this category had risen to 30 in 1999. Many small and medium-sized districts in peripheral northern and eastern Finland also lag behind the national average: in 1995 only the district of Kajaani could be placed in the weakest category, but in 1999, it was accompanied by Rovaniemi, Varkaus, and Savonlinna. Noteworthy in this respect is the position of two northern regional centres (Kajaani and Rovaniemi) in this group. Furthermore, the trend in small and mediumsized industrial regions in coastal western districts such as Raahe and Kokkola is not positive either, as they also belong to the weakest category.

New conditions for regional development

According to the conventional rules of regional development in an industrialised society, local economic growth should lead to employment growth and, consequently, to a positive migration balance. This almost causally perceived connection between local economic growth and employment changed at least somewhat significantly during the 1990s, however: some regions with strong positive economic growth suffered from massive unemployment and out-migration (e.g., Kemi–Tornio and Imatra), and vice versa. In addition, the reorganisation of the service sector challenged the generation of employment in service-based districts in the latter half of the 1990s.

Currently, the number of winners is decreasing and the number of losers is growing among the Finnish districts. The winners are large university districts and centres of the electronics industry, whilst the losers are those districts where the economic structure is derived from primary production, basic industries, and public services. Success, however, is often dependent on the chosen variables, indicators, and databases. The dichotomy of "winners" and "losers" should not therefore be exaggerated or dramatised. A significant number of districts in Finland are performing adequately: they are not booming nor are they in crisis (Menestys... 1999). Furthermore, the most interesting up-swingers, Oulu and Salo, rely on relatively narrow elements of growth and, overall, the actual demographic and economic changes in these now prospering districts are relatively minor.

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Fig. 3. Unemployment rate, in 1999 (Source: Ministry of Labour). For a comparison with the year 1995, see CD-Fig. 3.



Fig. 4. Net migration, in 1999 (Source: Statistics Finland). For a comparison with the year 1995, see CD-Fig. 5.

Regional differences also exist *within* the districts: very negative development trends characterise some residential areas of Helsinki, while prospering villages can be found in peripheral eastern Finland. The former case reflects the growth of urban problems that are now a part of the landscape of structural change across society. The latter case, in turn, reflects the growing role of locality-based factors in spatial development. In Finland this mosaic-like spatial pattern has been typical of South and Central Ostrobothnia where micro-entrepreneurship has played a very significant role in the local economy. R&D-intensive institutions, universities, and other research and development units play a decisive role in knowledge-based development. In addition, it is essential that urban regions have a competitive, high-competence-based position in the international economy. Only a few urban regions in Finland possess these preconditions for development. The future criteria for success will be even more multi-dimensional, however: quantitative growth will not replace qualitative development as socio-cultural elements have a more direct and pronounced impact on the locational preferences of the population and the economy.

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