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# Year 2012 was special – design, collaboration, commitment and new achievements

In 2012 Helsinki, together with Espoo, Vantaa, Kauniainen and Lahti was the World Design Capital. The great mission of World Design Capital Helsinki 2012 was to promote the use of design and find new contexts where design can be leveraged. World Design Capital Helsinki 2012, with its theme of *Open Helsinki – Embedding Design in Life*, has striven to fulfill this mission.

The World Design Capital Helsinki 2012 programme was composed of a total of 580 projects and 2,800 events. According to four awareness surveys carried out by City of Helsinki Urban Facts, a good 90 per cent OR 93 per cent of Helsinki, Espoo, Vantaa, Kauniainen and Lahti residents were aware that their home city was the World Design Capital 2012 host city. Twothirds of the residents said that they had followed what was being said and announced about World Design Capital Helsinki 2012 (WDC 2012). The surveys undertaken also showed that the message of design as a means of solving everyday problems had been put across well.

During the year, design found its way into new environments within the public sector and also in the business or private sector. Moreover, we found that WDC 2012 increased the demand for design services. A joint project between the Finnish Design Business Association FDBA and Aalto University resulted in the development of Design ROI, a tool for calculating return on investment and measuring the financial benefit of investing in design.

Some of the World Design Capital projects will continue in 2013 and ahead. So will many of the events of the World Design Capital year. The legacy of the World Design Capital Helsinki 2012 may be summarised as follows (see http://wdchelsinki2012.fi/en):

- 1. Design became a matter of social interest and a topic of public discussion.
- 2. City residents gained a deeper insight into the importance of design and its impact on their daily life.
- 3. The user's perspective in design was highlighted.
- 4. Design was used to solve problems in different environments.
- 5. Design education for children and youth was increased.
- 6. The design world came together in the design capital.
- 7. Helsinki raised its profile as a design destination.
- 8. The business community gained a better understanding of design as a competitive edge.
- 9. New forms of collaboration emerged in and between different sectors.
- 10. New methods and places for doing things together sprung up around the city.

The message of an open city reached a wide audience. The World Design Capital year encouraged organisations, neighbourhood associations, and people working and living in the city to put their own visions into action. New shared spaces for local residents and visitors were created in all five cities.

WDC 2012 was a year of cooperation, commitment and creativity. The year paid a lot of at-

tention to design and services and a user-driven approach contributing to better well-being services and other everyday services. Citizen participation and new forms of collaboration were important objectives. To achieve these goals, you need openness and accessibility. In this context open data played a major role.

The international WDC 2012 closing summit was held on 29 November 2012 and the World Design Capital title shifted from Helsinki to the Cape Town. Cape Town's objectives as World Design Capital 2014 will emphasise socially responsible design, durability and innovations. We wish Cape Town a successful World Design Capital year.

To advance the open city goal, the City of Helsinki in cooperation with the cities of Espoo, Vantaa and Kauniainen as well as the Finnish Innovation Fund Sitra set up the *Helsinki Region Infoshare* -project in 2010, which launched the beta version of a new open data service Helsinki Region Infoshare – www.hri.fi in 2011 (see www.hri.fi/en/). The Ministry of Finances granted a municipal cooperation subsidy to the project.

The idea of Helsinki Region Infoshare is that making public data accessible enhances citizens' knowledge and understanding of their region and home municipality, which in turn improves the prerequisites of active citizenship. Making public data openly and freely accessible will be part of the ordinary operating procedures of the municipalities in the Helsinki Region by 2014. The City of Helsinki Urban Facts and Forum Virium Helsinki are responsible for the project. At present, there are about 1,000 different data sets in the service, for example on living conditions, the economy, wellbeing, employment and mobility of the region.

In 2012, the Mayor's Achievement of the Year contest was won by Helsinki Region Infoshare. The panel's comments on Helsinki Region Infoshare were as follows:

- "The project serves as a pioneering example of making public data accessible. Accessible public data increases efficiency in administration and improves the foundations of democracy and active citizenship. The project has created the foundation for a broad network among the cities."
- The example provided by Helsinki Region Infoshare can be applied both domestically and internationally, said Hannu Tulensalo, Chairman of the Panel and the City of Helsinki Personnel Director.
- If the public sector, corporations and other actors systematically make their data accessible, more versatile and cost-efficient online services can be produced in the future.

The Mayor's Achievement of the Year contest, being held for the 5th time, is intended for the personnel of the City of Helsinki. Through the contest, Mayor Jussi Pajunen wants to encourage the personnel to examine their working environment and working methods from new perspectives (see http://www.hel.fi/hki/helsinki/en/news).

It is a great honour for the City of Helsinki Urban Facts to have received an award, and the City of Helsinki Urban Facts would like to express warm thanks to all parties of the projects, i.e. Forum Virium Helsinki, the cities of Espoo, Vantaa and Kauniainen and the Finnish Innovation Fund Sitra. Helsinki Region Inforshare has enjoyed support and encouragement from many actors in the evolving field of open data, to all of which we extend our thanks.

Helsinki's population is growing. In 2012, the increase is expected to amount to about 8,300 people. It is estimated that migration increased the population of Helsinki by about 6,600. It was 1995 when Helsinki last experiences such a large net migration gain. Migration gain from abroad is thought to be about 3,600. According to our latest population forecast, Helsinki will surpass 650,000 residents by 2012 and 700,000 by 2035.

The numbers of retired people are those of day-care and school age are increasing. In the Helsinki region (an area of 14 municipalities), the population is expected to increase by 460,000 from its present level of 1.37 million by 2050. This means 1.83 million residents in the Helsinki region by 2050.

In 2013, the city is particularly focusing on young people. A special €10 million grant for the

anniversary celebrating Helsinki's 200 years as the capital of Finland will fund new forms of activity and projects to prevent the displacement of young people. Research into young people will also be done and the development of the living conditions of the young will be monitored.

We would like to thank our readers for the past year, and we wish you every success for 2013!

Asta Manninen Director

#### Seppo Laakso & Pekka Vuori

# Population development in Helsinki and the Helsinki Region –

Realised population growth and projections until 2050

## Population development and the need for predictions

Population development is a central phenomenon for both the regional economy of the larger functional area and the functions and economy of single municipalities. Phenomena that are important in connection with the planning and regional decision-making of the functional Helsinki Region have recently been abbreviated as MALPE, from the Finnish words referring to land use, housing, traffic, services and trades. MALPE also offers an excellent framework for explaining the significance of population development.

From the perspective of land use and housing, the demand for building plots and housing as well as the connected municipal engineering and local services needs result from population size, demographic and socio-economic structures and geographical needs. Traffic systems are closely connected to land use, and the dwellers' transport needs make up a significant part of the demand for traffic services. Local and regional service networks are linked to land use and traffic systems, and are built and maintained for the dwellers. The dwellers are furthermore connected to the trades, as the working-age population in the region forms the basis of the workforce available for companies, the public sector and other organisations that use labour force contribution. On the other hand, the residents form the clientele needed for commercial

services, and this means that the population in the functional region and its purchasing power form the main part of the demand for the local service sector businesses whose operations are based on regional demand.

The MALPE framework is generally considered to be regional; however, land use, housing, traffic, services and trades are scattered in single municipalities. The residents generate the majority of the city's income through municipal taxes and services fees. Due to this, the size and structure of the population and its geographical location are some of the most crucial information needed in order to maintain the administration, planning and service production of the city, and will remain so in the future.

In addition to the current situation, reasoned estimates of the development of population size and structure are required when planning the finances, services and land use of the city. When planning the services and the finances, the time span is several years, whereas in the planning of land use and traffic systems, the perspective inevitably spans over decades. Large investments in the basic infrastructure of the community are made in the long term; strategic traffic routes and other basic networks may define the development of the community structure for as long as hundreds of years ahead.

Complex economic and demographic processes are influencing factors behind population development, and predicting them is highly uncertain, even in the short term, let alone for several years or decades in advance. This means that very high uncertainty is connected to population projections. It is, nevertheless, justified to predict population development in the long term, despite the risk of misjudgement, as the alternative is to make decisions on long-term investments and planning solutions based solely on information about the present.

This report presents all the central results of the population projections compiled in 2012 for Helsinki and the Helsinki Region up to 2050. The perspective places special emphasis on the connections between population development, housing and housing production and building plots. The report introduces and analyses four different population development models and gives estimates on the volume of housing production required by each projection in Helsinki and the entire Helsinki Region.

## Population growth in Helsinki and the Helsinki Region

Since the 1950s, the population in the Helsinki Region has grown steadily, albeit with fluctuations in the growth rate. The growth has been connected to the Finnish urbanisation process that began rather late but proceeded at a fast pace. The total population of the seven largest urban regions<sup>1</sup> in Finland grew from 1.1 million to 2.6 million (2.4-fold) between 1951 and 2011. The Helsinki Region has accounted for about half of the population in the top seven largest urban regions. In 60 years, the population in the region has increased from 0.5 million to 1.4 million (2.6-fold). Large urban areas offer cluster and availability benefits that attract competitive and developing businesses to the region. The Helsinki Region has been one of the fastest growing metropolitan areas in Europe since the 1980s.

<sup>1</sup>The functional urban regions of Helsinki, Tampere, Turku, Oulu, Jyväskylä, Lahti and Kuopio.

In the population projections compiled in the 1950s and 1960s for Helsinki and the Helsinki Region, the rate of population growth in the Helsinki Region was overestimated, and it was predicted that growth would focus on a much smaller area than it actually did. In retrospect it can be stated that, after a slower period in the 1970s and 1980s, population growth in the Helsinki Region nearly returned to the growth track that was predicted in the previous decades; however, it was significantly more spread out regionally than the 1950s and 1960s projections predicted. Since the 1970s, the future population growth in Helsinki and the Helsinki Region has been systematically underestimated, as has the population development nationwide. The population projection completed for Helsinki and the Helsinki Region in 1994 recorded, as the highest possible alternatives, population estimates that were exceptionally high in comparison to previous predictions. The population development that has taken place since has been even faster than predicted in these estimates that were considered unrealistic at the time. Since the 1990s, population growth in the Helsinki Region has been based, primarily, on immigration. Produc-





tion and employment growth rates in the Helsinki Region have been faster than in the rest of Western Europe, maintaining the appeal that has generated international immigration, most of which has originated from Europe.

#### **Factors of population growth**

Population change is divided into natural change (births, deaths and net change) and migration (inflow and outflow as well and net migration). The migration can be divided by migration area; the basic division is internal migration between municipalities and immigration and emigration (international migration).

Population change in the Helsinki Region by factor (Figure) illustrates the significant differences in the various change factors. Natural change is relatively stable and changes take place slowly, even though variation occurs between the years. However, there is great fluctuation in both internal migration and immigration/emigration, which partly take place in cycles and partly more or less randomly.

In migration, you can see the declining trend in net internal migration over a long period of time and the rising trend in immigration/emigration. There is great fluctuation in both. The net gain in internal migration to the Helsinki Region has been, on average 6,400 people a year, for the past 50 years.

Immigration/emigration was dominated by Finns' immigration and emigration, mainly to and from Sweden, until the late 1980s. In the 1980s, the migration flow took a permanent turn to the positive due to increased remigration.

In internal migration, Helsinki has gone through the same cycles as the entire region, but more intensely, as the region's internal net migration impacts Helsinki. Helsinki has suffered net migration loss to the rest of the region throughout the period, but there has been substantial fluctuation in the volume. In immigration/emigration, the trend in Helsinki is similar to that of the region. Figure 2. Factors in population change in the Helsinki Region, 1962–2011



Figure 3. Factors in population change in Helsinki, 1962–2011





# POPULATION DEVELOPMENT AS A PART OF REGIONAL ECONOMY

The regional economy has a central role in the population development of the region and, furthermore, the single municipalities. Changes in regional economy are reflected in population development, first and foremost as internal migration between regions.

International and national economic trends (export demand, domestic demand, financial

market, prices, etc.) and the region's appeal and competitive edge in relation to other regions (factors include basic structure, availability and competence of workforce, services, expense level, functionality of the housing market, etc.) are essential factors for businesses seeking to locate in the area, as well as investments and, ultimately, production volume. Great fluctuation is linked to both international and national factors; however, the factors related to regional competitive qualities and appeal are usually slow to change and their influence is primarily in the long term.

On the other hand, the production volume, together with the structure and technology of production, has an impact on the demand for labour. The labour demand and the supply of labour from the original population are reflected in migration as well as the willingness of the workforce living outside the region to work on the region's job market, i.e. commuting to work. In addition to questions of demand originating from companies, the housing options available essentially influence the realisation of migration. Availability, quality and properties of housing as well as the comfort and service level of the residential areas are appeal factors, whereas the price and rent level of housing serve as limiting factors. The availability of building plots is a factor behind available housing, as it is the most important prerequisite for new production.

Migration between regions impacts population size and age structure. Migration is selective in respect of age and other qualities of the population; most people who migrate between regions are young adults. As a result, migration also has a great impact on the age structure of the population. The working-age population forms the basis of the original population workforce available in the region.

#### MIGRATION

Migration has a very powerful influence on the population structure and population develop-

ment, both in the functional region and each individual municipality in the long term.

There is a strong interdependence between migration and the regional work market. Over a longer period of time, job opportunities have significant importance on whether people who have moved into a region stay there, move back to where they came from or further on somewhere else. Changes in the regional job market are reflected in Helsinki in particular, as Helsinki is the region's largest hub of jobs and the primary area where people locate as they first move into the region from outside the job market area.

The analysis of migration between the Helsinki Region and the rest of Finland in the period from 1975 to 2011 indicates that the following factors have been most influential on net migration to the Helsinki Region:

- Difference in growth (gross national product) in the Helsinki Region in comparison to the rest of the country has added to the migration gain in the Helsinki Region (the greater the difference in growth, the greater the migration gain).
- Finland's economic growth (GNP) has increased the migration gain in the Helsinki Region (the faster the overall economic growth, the greater the migration gain).
- The difference in housing prices between the Helsinki Region and the rest of the country has decreased migration gain (the greater the price difference, the less migration gain).

In the light of the results, the decrease in migration gain in internal migration as compared to the earlier situation in the Helsinki Region, which took place in the 2000s, can be interpreted as being due to the decrease in the difference of growth and the augmented differences in housing prices in the Helsinki Region in comparison to the rest of the country. The migration gain that followed the economic depression of the 1990s in the previous decade was a result of the difference of growth in the economy of the Helsinki Region as well as the decreased gap in housing prices<sup>2</sup>.

As for immigration/emigration in the Helsinki Region in the period from 1981 to 2011, the analysis indicates that the following factors have influenced international net migration to the Helsinki Region:

- Difference in growth (GNP) in the Helsinki Region in comparison to Western Europe<sup>3</sup> has increased the migration gain (the greater the difference in growth, the greater the migration gain).
- The acceleration of Finland's economic growth (GNP) has increased migration gain in the Helsinki Region (the faster the overall economic growth, the greater the migration gain).

These results confirm that the region's economic success in comparison to Western Europe attracts migrants from other EU countries, but also directs the migrant inflow from outside the EU into the Helsinki Region, just as to other growing urban areas.

Within the Helsinki Region, the long-term net migration flows are connected to housing production, even if completely conflicting changes can be detected for single years recorded. As a municipality's share in the housing production in the region as a whole increases, the municipality's migration rate in the region's internal migration improves.

#### OCCUPANCY RATE

Occupancy rate is an important factor in housing production required by population growth. More spacious occupancy rates mean larger dwelling stock, which means that more housing production is needed. According to studies (inter alia Laakso & Loikkanen, 2004), factors that influence the occupancy rate include the usable income of the households, the age structure and household-dwelling unit structure of the population as well as the qualities valued and preferred in housing and the cost of living (operating costs).

Occupancy rates in Helsinki grew at a fast pace from the 1960s until the end of the 1980s as a result of increased income level and relatively high housing production rates. After this period, and from the late 1990s on in particular, the occupancy rate development in Helsinki slowed down substantially and the trend was separated from the country's overall occupancy rate development (Figure 4). As for the Helsinki Region, the occupancy rate development has been similar to that of Helsinki. Since 2005, the occupancy rate in Helsinki has grown only marginally, even though growth has continued in the country as a whole. According to advance information, occupancy rate in Helsinki decreased between 2008 and 2011.

#### New projection options up to 2050

Four different long-term population projections have been prepared for the Helsinki Region and Helsinki up to 2050. These projections have been compiled using a demographic projection model, in which the hypotheses on migration are based on the framework of the regional economy.

# CONTINUING POPULATION GROWTH THE STARTING POINT

A common starting point in all the projections is that it is highly likely that urbanisation will continue in Finland. As the only metropolitan area and hub of international traffic in the country, the Helsinki Region offers substantial cluster benefits for business life. According to a number of different studies, the profitability of companies improves as economic operations are located close to each other, because large urban areas can ensure that the contribution markets function,

<sup>&</sup>lt;sup>2</sup>Additionally, the Act on the Municipality of Domicile that entered into force in 1994, added to net migration gain in the Helsinki region.

Figure 4: Occupancy rate (floor area in sq.m/person) in the occupied dwelling stock in Helsinki and the entire country,



Source: Statistics Finland / City of Helsinki Urban Facts.

the diverse needs of supply and demand for labour meet, information flows and innovations are shared between different parties. The Helsinki Region also offers the ease of availability for business operations and residents alike, both on the regional, national and international level. The ease of availability is an important requirement of trade and specialisation, logistics, people getting around and other forms of communication. These factors, together with the competence capital and other resources that have accumulated over a long period of time, are very likely to maintain the appeal of the Helsinki Region as a location of business operation for companies and a place of living for residents well into the future.

Furthermore, the standing of the Helsinki Region as an inflow migration destination and an area of net migration gain has ensured that the population is young. As a result of this, natural population growth is and will remain a significant factor in population growth in the Helsinki Region for decades to come, even if the migration net gain should stagnate for one reason or another.

#### PROJECTION MODELS: The alternative models are:

- 1. Fast model
- 2. Basic model

3. Decreasing model

4. Significantly decreasing model

All projections are calculations of stable growth by nature and do not attempt to predict the time or degree of fluctuation in economic trends.

The calculations are based on different and independent hypothesis about the regional economy and the housing market in the Helsinki Region, briefly described in the following. The birth and death hypothesis are identical in all the alternatives. No views have been expressed on the likelihood of the realisation of the models in compiling the projections. However, the starting point is that all the alternatives are possible, from the assumption that the economic scenarios behind them are realistic, at least in some circumstances. As a whole, the models form the extreme values, and it is justified to believe that population growth will fall within the range of variation presented.

The fast model is based on an economic situation in which the economy in the Helsinki Region (production and employment) will grow over the long term somewhat faster than the EU regional average and slightly faster than in Finland as a whole. The Helsinki Region will be able to provide a sufficient amount of land for building purposes for the housing production that the population growth requires, and it must be ensured that the traffic system and service network are maintained in a usable condition.

The basic model is based on an economic situation in which the economy in the Helsinki Region will grow in the long term slightly faster than the EU region average and at the same pace as in Finland as a whole. The scarcity of building plots and traffic congestion create occasional bottlenecks in development. *The decreasing model* represents the hypothesis that the economy in the Helsinki Region will grow slightly faster than the EU region average, but that the difference will slowly decline in the 2020s and will not exist at all after the 2030s. The appeal of the Helsinki Region will gradually fade. The scarcity of building plots and traffic congestion will create occasional bottlenecks in development.

The significantly decreasing model predicts that the difference in growth between the Helsinki Region, the EU and whole of Finland will soon decrease and, at the same time, long-term growth in Europe as a whole will remain slow. No significant new areas of growth will appear in the Helsinki Region to replace the declining fields. The Helsinki Region will also drag the rest of Finland into a long period of slow growth. The possibilities available for housing production in Helsinki will have nearly run out by the 2030s.

#### POPULATION PROJECTIONS

*The Helsinki Region's* population totalled 1,366,000 at the beginning of 2012. According to these population projections (Figure 5), the region's population will total at least 1,588,000

(the significantly decreasing model) and at most 1,742,000 (the fast model) by 2035, which means a variation range of approximately 154,000 inhabitants. In 2050, the extremes of the projections will range from 1,678,000 to 1,966,000; with a variation range of 288,000 people.

*Helsinki's* population was 595,000 people at the beginning of 2012. According to the population projections (Figure 6), the 2035 extremes for Helsinki are 649,000 (Significantly decreasing model) and 760,000 (Fast model) inhabitants. The variation range totals 111,000 people. For 2050, the extremes range from 647,000 to 861,000, with a variation range of 214,000 people.

The range of extremes is relatively larger in Helsinki than the entire region. This is primarily due to the fact that there is most variation in the models in the factor of net migration, which is relatively more important to population change in Helsinki than in the entire region. In the Fast model, Helsinki's population grows almost linearly, whereas in the Significantly decreasing model, population growth in Helsinki stagnates completely in the 2030s.

Table 1. Po	nulation in th	ne Helsinki Region (	on 1 Jan 2012 and	nopulation	projections fo	r 2035 and 2050
TUDIC 1.1 V		ie neisinki kegion v	011 1 Juli 2012 uliu	population	projections to	1 2035 unu 2050

	Projection model							
Helsinki Region	Fast	Basic	Decreasing	Significantly decreasing				
Population 2012 (1,000)	1,366	1,366	1,366	1,366				
Population 2035 (1,000)	1,742	1,678	1,645	1,588				
Population 2050 (1,000)	1,966	1,830	1,756	1,678				
Change 2012–2035 (1,000)	376	312	278	221				
Change 2012–2050 (1,000)	600	464	389	312				
Change 2012–2035 (%)	28	23	20	16				
Change 2012–2050 (%)	44	34	28	23				

#### Table 2. Population in Helsinki on 1 Jan 2012 and population projections for 2035 and 2050

	Projection model						
Helsinki	Fast	Basic	Decreasing	Significantly decreasing			
Population 2012 (1,000)	595	595	595	595			
Population 2035 (1,000)	760	704	688	649			
Population 2050 (1,000)	861	735	703	647			
Change 2012–2035 (1,000)	165	109	93	53			
Change 2012–2050 (1,000)	266	140	107	51			
Change 2012–2035 (%)	28	18	16	9			
Change 2012–2050 (%)	45	24	18	9			

### Figure 5: Helsinki Region (14 municipalities), population 1980–2012 and projection models up to 2050



Figure 6. Population in Helsinki 1980–2012 and projection alternatives up to 2050



### POPULATION PROJECTIONS AND AGE STRUCTURE

The different population projection models produce population age structures that differ from each other significantly. In Helsinki, migration has a crucial importance for the age structure. Speaking in general terms, the more migration

### Figure 7. 20–64-year-olds in Helsinki in 1980–2012 and population projection up to 2050



gain there is for the city, the larger the number and proportion of working-age inhabitants and children in the population. The number of elderly people does not, however, vary greatly between the various models; however, their proportion in the population does increase as the overall population growth decreases. In the Fast model, the amount of the working-age population in Helsinki continues to grow until 2050, whereas in the Significantly decreasing model, their number begins to fall immediately (Figure 7).

### Population growth requires housing production possibilities

Sufficient housing production is a prerequisite for population growth as it makes it possible for the population to "fit into" the region's dwelling stock. Migration's standing as a factor of population growth is primarily dependent on the appeal of the region in comparison to other regions and the number of potential migrants; housing, on the other hand, is a limiting factor. Adjusting factors include prices and rents of housing and occupancy rates.

The development of the occupancy rate is a crucial factor in the growth needs of the dwelling stock. In the Helsinki Region, the occupancy rate has grown in the past 30 years by an average of 0.3 floor sq.metres/person/year. This has meant that one-third of the housing production on average has been used to increase the occupancy rate, and two-thirds has been produced to satisfy the demands created by population growth. The growth of the occupancy rate has slowed down gradually and, since 2007, the growth has practically stagnated, both in the Helsinki Region and in Helsinki.

The dwelling stock growth required in each projection model was assessed when compiling the projections, considering the various development alternatives for the occupancy rate in the Helsinki Region and in Helsinki. These calculations will be used as the basis for assessing the need for acquiring building plots and the planning volume required in the coming decades. The growth of the dwelling stock means the housing production from which the decrease in housing units is subtracted.

For the entire Helsinki Region, the combination of population growth and the occupancy rate hypothesis gives the following results. In the Fast model projection, dwelling stock in the Helsinki Region should expand, if the occupancy rate growth is expected to be "normal", by 41 million floor sq.metres and, with slow occupancy rate growth, by 28 million floor sq.metres by 2050. The region's current dwelling stock totals 63 million floor sq.metres. This means that, if the Fast model of the population projections is realised, the dwelling stock should increase by 44–65%. In the Basic model, the extremes of dwelling stock expansion in the whole region range from 26 to 34 million floor sq.metres; in the Decreasing model, from 24 to 30 million floor sq.metres; and in the Significantly decreasing model, from 22 to 26 million floor sq.metres.

As for Helsinki (Figure 2), population growth according to the Fast model would require housing production totalling 12-18 million floor sq.metres by 2050. The current dwelling stock in Helsinki totals approximately 27 million floor sq.metres. This means that the dwelling stock should expand by 44–67% by 2050. In the Basic model, the extreme values for dwelling stock expansion in Helsinki range from 8 to 11.5 million floor sq.metres; in the Decreasing model from 7 to 10 million floor sq.metres; and in the Significantly decreasing model between 5 and 7 million floor sq.metres.

#### Conclusions

It is likely that the whole of Northern Europe will remain an attracting region of Europe and the whole world for a long time. If the Helsinki Region maintains its position as one of the leading centres of growth in Northern Europe, it will also continue to be a destination for international and domestic migration inflow. The European financial crisis, wars and natural disasters in various parts of the world, global warming and the lowering borders generate migration flows into regions with booming economies and stable conditions. The gap in income level between Finland and Russia, the Baltic countries and Eastern Europe remains substantial, which attracts immigration to Finland from the neighbouring countries and Eastern Europe. Migration is an individual decision and it cannot be stopped or planned by the authorities.

The possibility of fast population growth calls for being prepared for more dense and expanded use of land as well as the necessary expansion of the basic infrastructure and the service network. The sufficient supply of building plots and housing production are prerequisites for population growth. On the other hand, the uncertain factor of occupancy rate trends is vital for the housing production required.

The flip side of the pressure for land use, generated by growth, is that a constant migration net gain keeps the amount of the working-age population on the increase and its proportion high. Furthermore, elderly citizens' proportion of the population grows at a slower pace. Through this, fast population growth produces the basis of the income needed to finance the basic infrastructure and services.

Slow population growth, recorded in the projections as the Decreasing model and Significantly decreasing model, results in less pressure on land use, but also causes the working-age population to grow slowly or to decrease. This complicates the situation regarding the public financial deficit, due to a poorer dependency ratio.

If land use cannot be adjusted to the growth pressures, but the availability of building plots remains a bottleneck for the production of housing, this will influence both population development and housing prices. Housing production that is insufficient with respect to population growth will result in relatively increasing housing prices, which will decrease migration gain. On the other hand, if the availability of building plots in Helsinki and elsewhere in the Helsinki Region should remain low, the pressures for land use will fall on the neighbouring municipalities and the outer circle of the job market zone, where the possibilities for land use are more flexible. This, for its part, would lead to an increasingly scattered community structure.

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#### Seppo Montén

### Labour supply and demand in the Helsinki Region

The article views those factors that influence local labour supply in Finland, including of course, basically, the population number and, above all, the population structure of each region. The population's economic activity, i.e. participation in working life, is measured in terms of employment rate, i.e. the proportion of gainfully occupied among working-age inhabitants. An area may receive or lose labour through migration or commuting. The article is based on a study presented in the publication Helsingin tila ja kehitys 2012 (Helsinki's present state and development). Towards the end of the publication, we use earlier research to have a brief look at the projected labour need in the Helsinki Region.

#### **Demographic analysis**

A crucial background factor behind labour supply is the age structure of the population and how it changes. If there are fewer entrants to the labour market (15–24 year olds) than there are people exiting the labour market, we talk about a demographic labour shortage.

In Figure 1, the topmost line depicts demographic labour shortage. There have been clearly more entrants into the labour market than there have been exits from it, and yet the curves met in 2003 in the country as a whole. Nonetheless in Helsinki there will not, according to the latest forecast, be more people leaving than entering the labour market due to age until 2017. In Helsinki, the labour force renews itself clearly better than it does elsewhere.

The age structure of the population is favourable in Helsinki, thanks to a positive migration balance largely feeding from young people. Although a demographic labour shortage is closer at hand than it used to be, forecasts suggest that the working-age population, i.e. the 15-64 year olds, will still be increasing in Helsinki, albeit slower in future than earlier. The forecast increase for Helsinki over 2012-2040 is around 26,800. On the other hand, the situation in the country as a whole looks very bad: the long-lasting growth in the working-age population turned into decline in 2010, and this decline will go on up until the 2030s. Over those 20 years, the number of people of working age in Finland will decrease by 117,000.

The number of working-aged people alone does not indicate everything: it is essential to what extent they go to work. The employment rate tells how large a proportion of the working-aged are at work. I used the labour survey material of 2011 to calculate employment rates by age group in the areas studied. When we apply these employment rates to the corresponding population forecasts by age group, the forecast number of people at work is obtained. The bottom-most line of the figure describes this computation. It would suggest that the number of people at work will clearly grow up until 2040 in Helsinki. In the country as a whole, on the other hand, the number of people at work will decrease up until 2028, after which it will start increasing the same way as does the projection of the number of people of working age.

The situation is similar in the core cities of other urban regions too that attract people from nearby and further away. Since migrants are usually young, the age structure of the population stays favourable in terms of labour supply.

The message of the series of graphs is, for Helsinki's part, that although the number of age-conditioned labour market exits approaches that of entrants, the most recent projection for the city (City of Helsinki Urban Facts 2012) suggests that the number of people of working age will continue to grow. Over ten years, from 2012 to 2022, the increase will be around 8 500 people. And if employment rates by age group stay at the





present level, the number of people at work will grow even more, by almost 11,000. Meanwhile, the number of people at work in the country as a whole will fall by almost 63,000.

#### Workforce migration

In 2009, Helsinki had a migration surplus of almost 1,700 employed people, and the Helsinki Region one of almost 2,900. The migration surplus for Helsinki is only due to a surplus of people with upper secondary-level education. Among those with tertiary education and those with basic education only, Helsinki scored a migration deficit. However, the majority of secondary level graduates are students who have come to study at polytechnics and universities in Helsinki. Some of these will eventually end up in tertiary education. If they stay in the local labour market, they will also, after completing their university or polytechnics studies, rank as tertiary education migrants.

If someone employed moves to any given area, it does not necessarily mean that their workplace is in that same area, albeit that the likelihood may be high.

Besides domestic migration, Helsinki received a foreign migration surplus in 2009 of over 1,200, and the Helsinki Region over 2,100 people. Statistics Finland no longer reports education as background data for immigration.

### Figure 2. Domestic net migration of Helsinki and the Helsinki Region, by level of education in 2009



Source: Statistics Finland's employment statistics

#### Commuting

Travel to work across local borders has grown almost as a trend. According to the Labour Force Survey, in 2011 almost 169,000 people went to work in Helsinki from outside town, whilst over 70,000 Helsinki residents went to work outside town. Thus in 2011 Helsinki received a net number of 98,000 commuters from out of town. This means commuters are a vital labour provision factor for Helsinki.

The Helsinki Region forms a compact labour market area, and commuting figures in the region are clearly lower than in Helsinki. There is relatively little commuting from the Helsinki Region to the rest of Finland. Again, over 64,000 come to work in the Helsinki Region from the rest of Finland, for which reason net commuting stands at 40,000 people.

et us now take a look at net commuting figures in various industries. The figures are from employment statistics for 2009. That year, Helsinki had a commuting surplus of 92,000 employees, making up no less than 24 per cent of jobs in Helsinki. Helsinki is a net winner in all industries. The graph shows the net commuting figure (the bars, left-hand scale) and the share of net commuting of all jobs in the area (the line, right-hand scale). Helsinki receives large numbers of out-of-town labour in the fields of, for example, health and social services, information and media, and public administration. The relative importance of out-of-town labour is particularly great in the sectors of public administration, finance and insurance, information and communications, construction and 'other services'. In finance and public administration, for example, a net level of over 40 per cent of jobs are held by people who live outside Helsinki.

In the Helsinki Region, net commuting figures are clearly lower than in Helsinki proper, and shares of jobs in the region are less than 10 per cent at the most. Trade has the largest commuting surplus in the Helsinki Region.

#### Figure 3. Commuting in Helsinki 1995–2011



Source: Statistics Finland's Labour Force Survey

#### Figure 4. Net commuting by industry in Helsinki in 2009



Source: Statistics Finland's employment statistics

#### Job self-sufficiency rate

The significance of net commuting for the provision of labour in an area is described by the concept of job self-sufficiency. It expresses the ratio between the number of jobs in the area and the number of employees living in the area. A high job self-sufficiency rate expresses a favourable employment situation where there is strong demand for labour. From the angle of sufficient labour provision, it has another aspect as well: the higher the job self-sufficiency rate, the more dependent the area is on out-of-town labour. In Helsinki, job self-sufficiency has long stayed around 135 per cent, substantially higher than in, for example, the neighbouring cities. In recent years, Helsinki's job self-sufficiency rate has fallen slightly, down at 132 per cent in 2011. This still means Helsinki has 32 per cent more jobs than it has employed residents. Job self-sufficiency and net commuting are, in principle, the same thing and, for example, the 32 per cent job surplus in 2011 was met with net commuting of the same size.

When job self-sufficiency rises, it means that the number of jobs in an area grows faster than the number of gainfully-occupied residents in the area. Or then the number of jobs in the area falls more slowly than does the number of gainfully-occupied people in the area.

Job self-sufficiency can also be measured in terms of so-called real job self-sufficiency, which indicates what proportion of jobs in an area are held by people residing in the area. In different areas, real job self-sufficiency has fallen slightly over the years. Commuting across the borders of your own community has constantly increased, and a decreasing proportion of residents work in their municipality of residence. In the Helsinki Region as a whole, however, the proportion of local residents working in the Helsinki Region has stayed quite high, since commuting is lively particularly within the region, rather than between the region and the rest of Finland. In 2011, no less than 91 per cent of jobs in the region were held by residents of the region.

In the municipalities of the Helsinki Metropolitan Area, i.e. the four central municipalities of the Helsinki Region, real job self-sufficiency is relatively low. In Helsinki, only 60 per cent of jobs are held by Helsinki residents. In Espoo and, especially, in Vantaa, this figure is even lower. The relatively high proportion in the Helsinki Metropolitan Area as a whole reflects the fact that commuting is particularly vigorous between



#### Figure 5. Job self-sufficiency rate in various areas in 1995–2011



its municipalities. Especially with Vantaa residents, commuting is common: only 40 per cent work in their home town, while at the same time, Vantaa's job self-sufficiency has risen over one hundred per cent and Vantaa has become a regional hub of employment. Professionals increasingly come to these jobs from outside Vantaa. The falling curves of real job sufficiency of an area indicate that the area is more dependent than before on labour from out of town.

### Participation in working life, i.e. economic activity

Those people of working age who are not economically active form the labour pool. Besides unemployed people, this reserve includes students and all those of working age who for some reason or other are not gainfully occupied.

After the economic depression in the early 1990s, the employment rate and labour force rates have, as a rule, risen – except during the troughs in 2002–2004 and 2009–2010.

A substantial rise in employment rates is possible only through a falling unemployment rate; the unemployed thus form a crucial labour reserve. According to the 2011 Labour Force Survey, there were just over 22,000 jobless in Helsinki, with the unemployment rate at 6.9 per cent. In Finland as a whole, the unemployment rate was one percentage point higher. In Helsinki, the employment rate is over five percentage points higher than in Finland on average. A higher employment rate than in the rest of the country is a very good thing for economic sustainability and activity. However, from the angle of labour sufficiency, it also implies that the labour pool is smaller in the region than in the rest of the country, when a larger share of the population is already engaged in the labour market.

Rising employment rates and falling unemployment rates efficiently increase the number of people at work. In Helsinki, for example, the 2011 Labour Force Survey says a one percentage point change in the employment rate meant a change of 4,110 people in the number of employed people. Similarly, a one percentage point





change in the rate of unemployment alters the number of jobless by 3,270 people.

# Projected labour need and labour output in the Helsinki Region

Research on the future need for labour in the region has calculated that in the years 2006 to 2020, the Helsinki Region needs 20,350 new employees annually. The young age groups in the region will bring only around 13,200 new employees per annum. The calculated number of new employees coming from outside the region amounts to roughly 4,000 through migration surplus and another 1,200 through net commuting. The remaining annual need of 1,900 employees should be raised from the region's own labour pool.

In relative terms, the young age groups of the region will meet roughly two-thirds of the projected labour need. Every fifth employee will come through an immigration surplus of people at work, and those residing outside the region will hold, in net terms, a traditional six per cent of the jobs in the region. Thus, to meet the projected labour demand, almost every tenth vacancy will have to be filled by people from the region's own labour pool, i.e. unemployed people or not economically active people.

### Figure 8. Sufficiency of labour provision in the Helsinki Region up until 2020



Labour sufficiency may become a crucial limitation to job growth of any great magnitude. One of the curves on our graph shows the attrition of labour force, i.e. how many employees annually leave the labour force, and the other shows the labour input provided by the young age groups among the region's population. The assumption as regards the employment rate of these young people is quite high, no less than 85 per cent. Full compensation of labour force attrition implies that the number of jobs stays unchanged. Thus any growth in job numbers requires as much new labour as the growth itself. As the figure shows, the situation is quite difficult. Labour force attrition annually stays around 4,000 people higher than the labour input provided by the young generations, and the gap seems to be growing towards the end of the period projected. With labour force attrition of this magnitude, the young age groups of the region cannot possibly keep job numbers at stable, let alone allow any job growth. Therefore the demographic labour shortage we saw earlier is visibly present in our calculations.

As we saw above, strong job growth in the Helsinki Region has traditionally relied on labour influx from outside the region. In future, the need for such help may even grow. To allow growth – or indeed to keep up the present level – the region will in future, too, need a strong surplus of migrants, especially employed migrants. This is a basic assumption of the population projections. Such influx may be threatened by jobs being increasingly created in those regions that have to date provided labour to the Helsinki Region. This is not just theory - we know that the graphs of demographic labour shortage are very similar for very many regions today - and the Helsinki Region may not be such an attractive goal once jobs start appearing increasingly in people's own communities. The situation is not helped by the above-mentioned fact that in both the Helsinki Region and its central zone, the Helsinki Metropolitan Area, a steadily smaller proportion of jobs is taken by locals. Local housing



Figure 9. Labour force attrition and young labour input in the Helsinki Region in 2010–2020

prices may reduce migration surpluses while possibly also, at the same time, increasing commuting to Helsinki and the Helsinki Metropolitan Area.

No very clear picture exists of commuting across national borders but, among others, an interview survey carried out by Statistics Finland at borders suggests the phenomenon is growing. The stream of commuters from abroad is strongly concentrated on just a few industries, above all the construction industry. And this commuting is strongly focused on Helsinki.

Meeting the need for labour will also require more efficient use than earlier of the region's own labour pool (jobless and working-age residents not currently included in the labour force). The proportion of foreign-background residents has grown strongly in the Helsinki Region, above all in Helsinki proper, and this trend is forecast to continue. Rising economic activity rates in the foreign-background population help solve the problem of labour provision. Employment rates among this population are still clearly below average.

Despite the threat of demographic labour shortage, the favourable age structure brought about by migration keeps up growth in the working-age population, and the provision of labour stays good as long as migration remains at the present level. Employment rates have risen strongly in the oldest age groups, i.e. those over 55. This is another factor influencing the provision and sufficiency of labour: as work careers get longer, the need for replacing labour is put off for a bit. In all age groups, employment rates are higher in the Helsinki Region than the rest of Finland, but still a long way from what they used to be back in 1989. Thus, there is room for growth, but less so than in the rest of Finland.

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#### KATJA VILKAMA

# Socio-economic and ethnic differentiation of neighbourhoods in Helsinki

The process of neighbourhood differentiation is spatial development through which neighbourhoods in a city's various regions become differentiated in their population structure. This differentiation may occur in different forms, most often as demographic, socio-economic, or ethnic differentiation. The first of these refers to households of different age structure and life situations settling in separate neighbourhoods. Socio-economic differentiation involves residents with different levels of income, education, or professional status ending up in different neighbourhoods. Finally, ethnic differentiation is a process whereby neighbourhoods are differentiated with respect to the ethnic groups settling there.

Differentiation of neighbourhoods in terms of the population structure is a typical feature of urban development in major cities. Observations of social and spatial differences in big cities were reported already in the 19th century, when urban poverty was a glaring social problem in the largest industrial cities of Great Britain and the United States (cf. Parker 2004: 27-38). In Finland, research on urban spatial and social segregation started to become common in the 20th century when, for example, Heikki Waris (1932/1973) and Leo Aario (1951) studied urban development and social and spatial differences in Helsinki. In the early 20th century and even in the years just after the Second World War, Helsinki was still clearly divided into workers' districts and

bourgeois neighbourhoods (Waris 1932/1973; Sosiaalinen tasapaino... 1982: 13–14). However, with housing and social-welfare policies, progressive taxation, and an overall increase in affluence and education, differences between districts levelled out considerably in the latter half of the 20th century (Lankinen 1997). By 1990, socio-economic differences in Helsinki were, therefore, small by international standards, and neighbourhoods were rather heterogeneous in their housing and types of residents. Concentrations of unemployment and low-income earners were found only in small 'pockets of poverty', within individual houses or blocks that were scattered about the city (Vaattovaara 1998).

However, the deep economic recession of the early 1990s changed the process of spatial development and left a clear social imprint on the urban structure of Helsinki. Some neighbourhoods did not manage to keep up with the general development in income and employment during the time of growth that followed the recession, thus bringing out the socio economic differences between neighbourhoods more clearly again (cf. Kortteinen et al. 1999). Since those years, the 2000s have seen a rise in overall education and income levels in Helsinki. Differences in household incomes have not grown much, yet the proportion of low income households has grown strongly. This has been particularly apparent in the rapid growth of the proportion of low-income families with children (Hietaniemi 2012).

The ethnic structure of the population has changed too, as the number of immigrants has grown rapidly.

Recent changes in the socio-economic and ethnic structure of Helsinki neighbourhoods have raised concerns about the growing inequality between the city's districts and about the effects of spatial differences on individuals' well-being. In this article, the processes of neighbourhoods' differentiation are discussed from the perspective of the local changes in education, income, and unemployment levels and the proportions of immigrants.

## Dynamics of the processes of neighbourhood differentiation

Socio-economic and ethnic differences between city districts are often thought to result from local differences in the structures of the housing stock: those residents who have the lowest income or who are otherwise least successful in the housing market typically live in areas where reasonably priced housing is available. Depending on the structures of the local housing markets, these areas may consist of either rented or owner-occupied housing, and they lie either near the city centre or further out, in the suburbs. Housing construction, along with the allocation practices that regulate access to various forms of housing, thus exerts a fundamental influence on the processes of neighbourhood differentiation. The greater the concentration of certain tenure types and the more segmented the access to various forms of housing, the greater the differentiation between neighbourhoods typically is.

However, the dynamics of neighbourhood differentiation are not an outcome of local housing market structures alone. Residents too are ac-





tive agents influencing the differentiation process, through their housing choices (see Figure 1). Each resident lives in his or her current neighbourhood either because of having been born there or through having moved there. Intra-urban migration flows, therefore, crucially influence local processes of neighbourhood differentiation.

International studies have shown that intra-urban migration flows are often highly selective both ethnically and socio-economically (cf. Skifter Andersen 2003; Andersson & Bråmå 2004). In other words, different population groups tend to move differently within city regions. This is mostly due to differences in income: those with a secure and stable income have better opportunities than others to advance on the housing ladder and choose a neighbourhood of their liking. However, households may also try to relocate to areas where they feel they can better 'fit in'; in other words, they may try to move to neighbourhoods whose residents share their lifestyle and social standing (cf. Clark 1986; Kortteinen et al. 2005; Kytö & Väliniemi 2009). In particular, families with children and those with a high education and income level are prone to reacting (by moving away) to negative changes in their neighbourhood. Better-off families' attempts to escape areas that are perceived as weak in terms of housing, population, or public services may accelerate the differentiation process, because those who move to deteriorating areas typically have a weaker socio-economic position than those who leave (Skifter Andersen 2003: 118–124; Andersson & Bråmå 2004). The neighbourhood-differentiation processes may, therefore, reproduce themselves through selective migration flows. This may further increase the spatial differences and produce starker divisions between well-to-do and deteriorating neighbourhoods. However, differentiation between neighbourhoods may proceed differently in different cities, depending on features of the local housing and populations.

# Diverging socio-economic and ethnic trends between neighbourhoods

Helsinki is quite clearly a spatially differentiated city today – not just at block level but also by district and neighbourhood. Local differences in education and income levels, unemployment rates, and the proportions of immigrants are clear. In fact, differences between neighbourhoods have grown slightly, especially between those at the extremes of the distribution (Lönnqvist & Tuominen 2012).

The recent polarisation of neighbourhoods is most pronounced in the local differences in the proportions of highly educated residents (those holding at least a master's degree). Helsinki has long been clearly divided into areas of low vs. high education (cf. Vaattovaara 1998). Indeed, in 2012, the proportion of highly educated 25–64-year-old residents varied between 3.3 and 46.1 per cent from one Helsinki neighbourhood to the next.

Overall, the proportion of highly educated residents grew by 5.4 percentage points between 2000 and 2012. This general rise in education level can be seen even in those neighbourhoods that previously had low proportions of the highly educated (cf. Lönnqvist & Tuominen 2012). However, the growth in these neighbourhoods was clearly slower than the city's average (see Figure 2). Many of these neighbourhoods were built in the 1960-70s or the 1980-90s and consist predominantly of blocks of flats with a high proportion of social housing. The most rapid growth in the proportion of highly educated residents was observed in areas of detached housing and in those block-of-flats-dominated neighbourhoods that are located in or near inner Helsinki.

Local differences in unemployment rate and income too can be considered relatively great. At the beginning of 2010, unemployment rates varied between 1.4 and 16.3 per cent in Helsinki neighbourhoods. In all, there were 20 neighbourhoods where the unemployment rate reached Figure 2. The proportion of highly educated 25–64-year-old residents in Helsinki neighbour-hoods in 2000 and the absolute change (in percentage points) over 2000–2012 (neighbour-hoods with under 300 residents not included)



Change (percentage points) in 2000-2012

Source: Helsinki Region Area Database.

over 10%. In more than half of these areas, the proportion of unemployed people grew over 2000–2010, whilst at the same time the level of unemployment fell in the city as a whole. Analysis of local changes shows that the level of unemployment has developed differently in different parts of town. Unemployment is highest in the eastern and north-eastern suburbs of Helsinki and lowest in neighbourhoods with large amounts of detached, semi-detached, or terraced housing, and in large parts of the southern and western parts of inner Helsinki.

Local variation in income level shows considerable correlation with the variation in unemployment rates. The average incomes of over-15-year-old residents are lowest in those parts of Helsinki where unemployment is high. Nonetheless, income rose in all neighbour-hoods between 2001 and 2010, except in some of the neighbourhoods with the highest income level. In those areas with the lowest income, however, income has risen more slowly than elsewhere. In 2010, the average income was highest in the Kaivopuisto and Kuusisaari areas.

The differences between neighbourhoods are clearly visible also in the proportions of residents with a foreign background. Although immigrant-dominated neighbourhoods are still non-existent in Helsinki, the proportion of immigrants in some neighbourhoods is already approaching 30%, which is almost three times higher than the city's average. The spatial differences in the proportion of immigrants reflect differences in the housing stock (cf. Kauppinen 2002; Vilkama 2011: 110-113). Residents with an immigrant background - i.e., residents with a foreign mother tongue - are concentrated mainly in neighbourhoods with a large proportion of social housing.

However, as Figure 3 shows, the proportion of social housing does not fully explain the differences in the proportions, and their growth rates,

### Figure 3. The proportion of foreign-mother-tongue residents in Helsinki neighbourhoods in 2000, and absolute change over 2000–2012 (Viikin tiedepuisto and neighbourhoods with fewer than 300 residents not included)



Source: Helsinki Region Area Database.

for foreign-mother-tongue residents in Helsinki neighbourhoods. The absolute growth of the proportion of these residents was most pronounced in those areas where the proportion of immigrants was already relatively high in 2000. These areas are mostly in the eastern, north-eastern, and north-western suburbs of Helsinki. In 2000-2012, the proportion of foreign-mother-tongue residents grew, at its fastest, by 16.2 percentage points, while the equivalent average for the city as a whole was 6.1. In four neighbourhoods (Kaivopuisto, Kuusisaari, Viikin tiedepuisto, and Santahamina), the proportion of foreign-mother-tongue residents decreased.

### A clear pattern of neighbourhood differentiation

The changes in the socio-economic and ethnic differentiation of Helsinki neighbourhoods that

are described above clearly show that the spatial divisions created by social and economic developments of the 1990s have not disappeared. The prominence and persistence of these divisions is well illustrated in the spatial pattern of the differentiation. The mapping of socio economic and ethnic statistics shows that the pattern of neighbourhood differentiation looks very similar regardless of the indicator. Maps 1 and 2 illustrate this by charting differences between the neighbourhoods in terms of unemployment rate, income and education level, and proportions of foreign-mother-tongue residents. In both maps, the neighbourhoods have been divided into four categories on the basis of whether they have higher or lower values than the city average. For example, in Map 1, the areas in dark red are neighbourhoods where the proportions of unemployed and low-education residents (those having no more than a compulsory education) are higher than the Helsinki average.

Map 1. Helsinki neighbourhoods relative to the city's average in 2010 – proportions of unemployed residents and low-education-level 25–64-year-old residents



Source: Helsinki Region Area Database.

The neighbourhoods showing the highest and lowest proportions tend to be the same ones on the two maps, regardless of the phenomenon analysed. In other words, those neighbourhoods appearing as areas of low income and education have the highest values also for proportions of immigrants and unemployed people. On both maps, the southern and western parts of inner Helsinki, a great deal of western Helsinki, and the detached- and terraced-housing-dominated areas of northern Helsinki show values very different from those of the suburban zones of eastern, north-east, and north-west Helsinki.

These clear spatial differences can largely be traced to structural differences in the housing

stock and to segmentation of the housing market. However, the growing differences between the neighbourhoods, especially at both extremes of the continuum, also point to the role of intra-urban migration. Recent studies show that there are clear signs of spatial selectivity of intra-urban migration in Helsinki (cf. Vilkama 2011), and this may further increase the differences between districts. Concentrations of evidence of social deprivation such as dependence on social welfare, youth unemployment, or welfare-dependence of children have also been shown to coincide spatially with unemployment, low income, and high proportions of immigrants (cf. Helsingin tila ja kehitys... 2012). This may further increase the Map 2. Helsinki neighbourhoods relative to the city's average in 2010 – level of income and proportion of foreign-mother-tongue residents



Source: Helsinki Region Area Database.

selectivity of intra-urban migration, if better-off households try to move elsewhere or avoid moving to neighbourhoods that are perceived as restless.

#### Conclusion

Spatial differentiation of neighbourhoods is not only a negative trend. Differentiation of the population and housing in different parts of town give neighbourhoods profiles of their own that can, in ideal circumstances, enrich the urban landscape. However, neighbourhoods' differentiation may also have negative outcomes, if the differences between neighbourhoods become too great and start to produce and reproduce increasing local differences in well-being. In particular, the spatial concentration of unemployment, deprivation such as poverty, and social problems can have serious human and social consequences.

In Helsinki, the processes of neighbourhood differentiation are still fairly modest by international standards, despite the clear, persistent patterns and some increases in the differences. Signs of severe urban segregation that could lead to the development of slums with high concentrations of poverty are not yet visible in Helsinki. Nonetheless, the recent development of slight growth in socio-economic and ethnic differences, particularly between the neighbourhoods at either extreme of the spectrum, poses challenges for local urban policy. Low income, low education levels, higher-than-average unemployment, and various problems related to health and marginalisation largely coexist in the same neighbourhoods in Helsinki. The proportions of immigrants too tend to be higher than average in the same areas. This puts city districts in unequal positions, for example, from the perspective of local service needs. Prevention of the negative outcomes of neighbourhoods' differentiation and intervention in further increases in differences in well-being can, accordingly, be considered important tasks.

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#### Elise Haapamäki

# Measuring morbidity and health differences within Helsinki

The article briefly presents an indicator for assessment of local health differences and reports on what Helsinki residents' health looks like if the indicator is applied to it. Changes over time are analysed for 2009 to 2011.

One aspect of local differentiation is divergences in health between population groups. Education, occupation, and income are significant for perceived health, morbidity, and mortality (Rotko et. al. 2011, p. 13), and differences in socio-economic structure between neighbourhoods may imply local differences in health. Reducing health differences may enable both reduction in health problems and guaranteed sufficiency of services (ibid., p. 14).

### The morbidity index as an indicator of health differences within Helsinki

One of the strategic goals of the City of Helsinki is to reduce differences in residents' health or well-being. One of the metrics available for health problems is the morbidity index of Kela – the Social Insurance Institution of Finland – an index that combines three register variables and compares them with the national level, set to 100. It accounts also for local differences in population structure. If the index value of an area is below 100, the population is healthier in that area than in the country as a whole. If the value is above 100, the population is less healthy than the national average. The index is computed annually for all Finnish municipalities. In addition, the City of Helsinki has several times commissioned indexing with city district granularity to enable analyses of local health differences.

The morbidity index now shows that, when the city is analysed as a whole, Helsinki residents appear to be in better health than Finns are on average. In addition, the health of the population of the other municipalities in the Helsinki Metropolitan Area, if measured in terms of the morbidity index, is better than the Finnish average. In Kauniainen, morbidity was clearly lower than in the other cities, but Espoo residents too were less unwell than average. In Vantaa, the morbidity index reads roughly the same as Helsinki's.

#### Morbidity index:

The indicator is an index describing the good or ill health of the population of a specific municipality in relation to the average for the country's total population (indexed at a value of 100). The figure is calculated for each municipality in Finland, both in raw form and adjusted for age. The morbidity index is based on three register variables: mortality, the proportion of the working-age population receiving disability pension, and the proportion of people entitled to reimbursement for medicines out of the total population. Each variable has been calculated separately in proportion to the national average. The final index used is the average of these three sub-indices.

Source: Kela, Health Barometer



Figure 1. The age-adjusted morbidity index in Helsinki, Espoo, Vantaa, and Kauniainen, 2000–2011

Source: Kela, Health Barometer.

Local differences in health can be seen within Helsinki. While people in some districts are healthier than average, other districts show higher-than-average morbidity in the Finnish context. In 2011, the lowest morbidity-index value in a district of Helsinki was 34 points below the national average and the highest 15 points above the average, making the difference between the worst and the best area 49 points. Most typically, the deviation was positive, though, and almost 350,000 residents of Helsinki (59% of the city's inhabitants) lived in districts where the index value was lower than the index for the city as a whole.

In 2011, six districts of Helsinki had an age-adjusted morbidity index below 70. These districts of very low morbidity had, in total, roughly 75,300 inhabitants and accounted for 13% of Helsinki's population. Since there were five further districts whose index was below 80, more than a quarter of Helsinki residents (27%) were found to live in an area of low morbidity.

In six districts, morbidity was higher than the Finnish average. In all, around 71,000 Helsinki residents, 12% of the city's population, lived in areas where the age-adjusted morbidity index was above the national average of 100. Still, in

Figure 2. Map of the age-adjusted morbidity index in the districts of Helsinki, 2011



none of these districts was the index as high as in those Finnish municipalities and provinces where it reached its highest. The index for Helsinki (90) was exceeded in 12 districts, where, all told, 38% of the city's inhabitants lived.

## Socio-economic differences' contribution to local health differences

It is a well-known fact that socio-economic background factors influence individuals' health. Several studies have shown that, above all, education, type of work, and income correlate with people's health, and, although the health of Finns at large has improved, socio-economically related differences in health have remained or even grown. The correlation between socio-economic status and health differences is particularly significant among people of working age, though less so for old-age pensioners (Palosuo et al. (eds) 2007).

Differences in socio-economic breakdown between districts influence the variation of the morbidity index in Helsinki. Education, income, and unemployment levels seem related to people's health: Districts with low morbidity showed income levels above the city's average and below-city-average unemployment rates. In addition, the population of these districts had a higher education than average. Correspondingly, in districts where the morbidity index was above the city average, the population mostly had a lower income level, fewer university or polytechnic degrees on average, and a higher unemployment rate than the city showed overall.

#### Changes between 2009 and 2011

Changes over time in the morbidity index do not directly indicate changes in the health of the population. They only describe relative change with reference to the national level. At city level, the age-adjusted morbidity index of Helsinki has stayed at the same level for the last five years – namely, 10 points below the national average. However, changes were evident in the age-adjusted morbidity index within Helsinki between 2009 and 2011. Although there was no major change in the districts' health ranking, disparities between districts became smaller – as a rule, nearing the national level. In almost all districts where the index was below 70 in 2009, it had risen in 2011, approaching the level for the whole city and Finland in general. Also, in all those districts where the index was above 100, the difference from the index for the city had declined.

#### Conclusion

Certain challenges in Helsinki are clear with respect to differences in residents' health and morbidity. Some groups are more vulnerable than others are, and it seems that vulnerable groups have become more concentrated in some areas than in others. Where the morbidity index is concerned, local health differences exist in Helsinki; however, these would seem to be decreasing. In order to assess whether this indicates a steady trend, more long term, continuous monitoring is required.

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#### Pekka Mustonen

# Helsinki, Tallinn and travelling people – a leisure perspective

Where travelling between Helsinki and Tallinn is concerned, quite often the focus is on work-based motives. Nevertheless, most people travel between Finland and Estonia for reasons of leisure. Interestingly, there is a lack of discussion of the phenomenon. Research into the motives, the socio-economic background of the tourists and of course the connections between these is scarce. This article concentrates on these issues and aims at finding some answers, for example to questions about who the tourists travelling in the Gulf of Finland are and what their motives are.

#### Background

Thousands of people travel between Helsinki and Tallinn, "the twin cities", every day. Still it is unknown why they travel, how often they travel, what they consume and, most importantly, who they are.

As a part of the Helsinki-Tallinn Transport and Planning Scenarios EU project (H-TTransPlan 2012), a series of surveys was conducted to respond to the demand for information. The aim of this sub-project was to gather information on the people travelling between Finland and Estonia. The questions included the following aspects: What was the reason for their trip? Which mode of transport was used when leaving/coming to the port? How many times are they planning to travel next year? Do they have a place of work and are they planning to move to the destination country? How much money did they spend at the destination? Did they stay in Helsinki and Tallinn or travel further afield?

When thinking of the "twin cities", "Hellinn or Talsinki" (Demos Helsinki 2009), focus slides easily towards those who travel because of work – workers and business people travelling back and forth. Still, the biggest share of travellers consists of "ordinary" tourists. The share of tourists, i.e. people who travel for leisure purposes, is more than 50% to Finland and to Estonia about 75% (Statistics Finland 2012). The data gathered in the H-TTransPlan project give even larger shares for tourists, which, however, might be due to methodological differences. Be it 75% or 90%, however, most people who travel from Helsinki to Tallinn or vice versa are not workers.

Most people travel because they want to. Travelling is a substitute for other spare-time activities. These people might travel for obvious touristic reasons; to experience change or to escape everyday life. They might travel because they know someone on the other side of the border. Maybe they enjoy just walking around in a characteristically different environment. Some go to opera. Some travel because they have nothing else to do. Dinner in a nice restaurant? Shopping? There is a multitude of different motives. It is these people, tourists, who are under scrutiny in this brief introduction. The aim is not to present the exact numbers of how many people travel, etc.; sufficient estimates of these can be found from existing statistics. Instead of this, the aim is to scratch under the surface taking account, however, of the restrictions on data. The additional aim is to consider the most common stereotype of tourism between Finland and Estonia: is it all about buying alcohol?

#### The data

Passenger surveys were carried out mainly on vessels travelling between the two cities, Helsinki and Tallinn. After the first round, half of the people were chosen randomly for interviews and other half were chosen so that the data would contain enough workers. 4,137 people in total were interviewed. The samples were collected between July 2011 and April 2012 in four approximately equal-sized rounds.

In this article, reference to Finnish or Estonian tourists is often made. However the focus is not on citizenship but on people travelling from Tallinn/Estonia or Helsinki/Finland regardless where they are from. Thus, "Finnish" refer to people coming to Helsinki from Tallinn and "Estonians" to people leaving Helsinki for Tallinn. In the data, about 85% of the people travelling from Tallinn to Helsinki were Finns and about 65% the other way around. To maximise the size of the sample, citizens of other countries were also included in the analyses.

#### Motivation of tourists according to the data

People were asked what the main motivation was behind the trip. Respondents had to choose an alternative between holiday, visiting friends and relatives and shopping – these three being the most important ones. About four out of five Finnish tourists travelled to Estonia either for shopping or holiday purposes. Estonians, instead of coming to Finland for purely leisure (the share of 'holiday' was 38%), also travelled to meet their friends and relatives (27%). The rest of the Estonians seemed to come to Finland to shop or to travel to other countries. Helsinki, thus, seems to be a relatively important transit city for people travelling from Estonia.

Those tourists who visit their friends and relatives are clearly the most frequent travellers, regardless of the direction. According to the data, almost 40% of those who visited their friends and relatives in Finland had travelled to Finland at least five times during the past year.

The figures for those who come to shop or for a holiday differ somewhat between the Finns and Estonians. Most of the Finnish tourists belonging to these categories had travelled once or twice during the past year, whilst among the Estonians there were many who had not travelled to Finland at all during the past year. When it comes to shopping, the figures are much the same regardless of the direction.

Interestingly, but not surprisingly, the above paragraph would be almost identical if, instead of the past year's travelling frequency, the focus were on next year. More than 60% of the people, who had not travelled last year to Finland/Estonia, were not going to do so next year either. Respectively, 63% of those who had visited once will visit once; 66% who had visited twice will visit twice and so on.

The data do not allow detailed examinations, but some information on the shoppers, 'visitors' or holidaying tourists can, however, be presented. Most of the shoppers were women, regardless of the direction of the trip. Men, instead, chose holiday as their main motive more often than the women did. Estonian visitors were mainly women.

The variable indicating education level was recoded here into two classes; people with a high education and people without a high education. More detailed classification was not possible due to the insufficient sample size. Where Finnish tourists were concerned, the proportion of holidaying tourists was larger amongst those with a high education. Accordingly there were more shoppers amongst those with a lower education; the other way around, 65% of the shoppers belonged to this category. In the case of Estonians, holidaying tourists were more often educated whilst visitors were not. Almost 60% of the visitors belonged to the group without a high education.

#### Who are they?

Although cruise traffic between Finland and Estonia has long roots, and nowadays more than 7 million single trips are made annually, it is not well-known who these people who travel are. However, there are, of course, stereotypes concerning the types of people who travel between the two cities. There are people who carry alcohol to Finland because of the price difference. There are also a lot of regularly travelling pensioners. On Fridays and Saturdays, boats are filled with party-minded people and, controversially, families with children. Estonians travel to meet their friends and relatives. Some tourists do their shopping on the other side of the border.

The size of the sample that was picked randomly was 1,431 in the case of leisure travellers. This is only just enough to make some sort of generalisations, despite the fact that seasonal changes, for example, are not fully covered. Neither are the data are comprehensive enough for detailed categorisations.

Interestingly, the number of women in the random sample exceeded that of men. About 55% of the tourists, regardless of the direction of the trip, were women. The share of women was also greater when shopping was the main purpose of the trip, again regardless of the direction. Where Estonians are concerned, women seemed to visit friends and relatives more often than men; 65% of these tourists were women.

Where the age profiles of the tourists travelling between the two cities are concerned, significant differences can be easily seen. Whilst most of the Estonians belong to the younger categories, Finnish travellers are generally older. In the case of Estonians, differences between the age categories seem to be clearly larger. Interestingly, quite many interviewed tourists would not give their age.

As could have been assumed beforehand, the main motives of the tourists are to some extent connected with their age, especially in the case of



Figure 1. Age profiles of leisure travellers (% of respondents)

Figure Pekka Mustonen.

the Finns. Older tourists chose shopping as their main motive more often than younger ones did. In the case of holiday being the main reason, the differences were smaller. Estonians were younger, whether the reason was to have a holiday, visit friends and relatives or to shop.

#### Consumption - who and what?

The recently published report of the TransBaltic project (TransBaltic 2011) states that difference in retail prices of alcohol and tobacco as the reason why passenger traffic between the two countries survives.

"...the driving force behind this traffic is partly the same as for the tax-free routes, namely the significantly cheaper alcohol and tobacco in Estonia in comparison with neighbouring Finland. [...] The difference in tax levels and thus the retail price on alcohol and tobacco [...] has provided enough incitement for upholding the traffic."

Obviously, the reality is not that simple. On one hand, the majority of tourists do not buy alcohol. According to these data, about one-third of Finnish tourists and only a few percent of Estonian tourists bought alcohol from a store. However, the data do not contain information on alcohol bought on ferries. Thus, the real number of people buying alcohol during their trip – either on ferries or from a store – is larger than the stated one-third; 50 % could be a rough estimate.

Nevertheless, the survey results indicate that there is a significant number of people who do not buy alcohol. On the other hand, given the short distance between Helsinki and Tallinn and the fundamentally different characteristics of the cities, considering alcohol purchasing as the fundamental basis for tourism simplifies the reality too much.

Respondents were asked to estimate how many euros they spent, for example on accommodation, restaurants, cafés, groceries and alcohol. They were also asked to estimate the overall sum that they spent at their destination. When examining the overall consumption, interestingly the amounts were relatively similar regardless of the direction of the trip. Accordingly, the amounts were similar regardless of the main motive of the trip (see figure 2). Those who chose

Figure 2.Consumption at the destination classified by the main motive of the trip (euros)



#### Figure Pekka Mustonen.

shopping as their main motive did not spend more than the others.

Three consumption categories are presented here in greater detail; restaurants, groceries and alcohol (Figure 3). Estonians spend more on groceries and Finns buy more alcohol. The mean of alcohol spend by Finnish tourists (€98) overestimates the real situation, because there are many people who spend significant amounts of money on alcohol. When examining shopping, deviation must always be taken into account. In the case of alcohol, the deviation is particularly severe. Buying alcoholic beverages from Tallinn, for example, for parties to be held in Finland is quite a common habit. In the case of buying alcohol, the median (€52) is probably closer to the actual average.

Females spend less money on alcohol regardless of the direction. People who spend a lot on alcohol are mostly men; the difference between the mean and the median is smaller where women are concerned. These data and observations, however, do not tell anything about the people who finally will use the alcohol or their drinking habits. Finnish men (€58 on average) consume more in restaurants than women (€39). In the case of Estonians, women spend more (€50) but the difference is relatively small (men spend €47 on average). Estonian women buy more groceries from Finland (€63) than men (€45). Interestingly, Finnish men spend more on groceries (€39) than women (€33).

When examining consumption together with education, again some interesting observations can be made. It seems that people with a high education spend more in restaurants and on groceries. People without a high education seem to spend more on alcohol. Similar results can be found when consumption is examined against employment status. The unemployed seem to spend more money on alcohol than the employed, students and the retired.

These differences, some bigger than others, as well as all the estimates presented here in euros, should be interpreted with care. Deviations are severe and the size of the data insufficient in many cases. Only greater differences, for example the ones found in alcohol consumption, are likely to reflect the real situation. By using a dif-

Figure 3.Money spent in restaurants, on groceries and on alcohol (euros)



Figure Pekka Mustonen.

ferent set of data, estimates of money spent in restaurants or on groceries could well be different from these. These results, however, indicate tha

#### Discussion

The passenger survey connected to the H-TTransPlan EU project enables more detailed examination of the quality of tourism between Helsinki and Tallinn than other existing data. Existing data such as Statistics Finland's tourism statistics produce invaluable information on passenger flows, but they do not go deeper into the subject.

The data utilised here do not reach the same representative figures but aim at explaining the phenomenon beneath the surface.

It is clear that more research is needed. It is important to know how many tourists and workers travel between the two cities, and there are quite reliable estimates of these, but knowing who travels and why is equally important. There is a huge gap in the field of tourism research where the more qualitative characteristics of tourism in the Gulf of Finland are concerned.

A deeper analysis of these data refers to the hypothesis that socio-economic structures affect tourists' behaviour. It can be assumed that social differences are particularly great when consumption of alcohol or consumption in restaurants is under scrutiny. Not all the results are presented here due to limited space.

Thus, it seems that socio-economic status and education, among other things, are connected to tourist behaviour. This is a well-known fact from tourism studies, and literature on it can be found in any book on tourism sociology. However, there is a lack of discussion of this fact where tourism between Helsinki and Tallinn is concerned. Too easily this whole phenomenon is put under same headline – "cruises" – and the tone of this headline is not always positive.

To conclude, it must be underlined that tourism between Helsinki and Tallinn is a complex phenomenon and there is a multitude of different motives. Every time that the qualitative "facts" of this huge phenomenon are presented – millions of people travel annually between the two cities – the listener should first consider how reliable the source really is.

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#### HANNU PIEKKOLA & ILKKA SUSILUOTO

### Economic growth in cities, and the role of intangible capital

In Finland, economy and population are increasingly being concentrated in urban areas, particularly so in the biggest cities. Today, the Helsinki Region alone produces one-third of Finnish national GDP. Regional development in Finland is part of global change where the basic forces relating to production and technology steer the course.

What are the forces that make companies and residents locate near to each other and form accumulations of production and population? What economic advantages result from proximity? Research findings show that dense location of population and economy tends to stimulate productivity, production and income. It has been estimated that the productivity of a city region grows by roughly 5 per cent each time its employment density doubles (Ciccione and Hall 1996; Ciccione 2002). Some calculations regarding Sweden and Finland suggest roughly the same (Karlsson and Pettersson 2004; Piekkola 2010a; Loikkanen and Susiluoto 2011). Piekkola (2010a) sees a similar movement in Finland, but only half as strong.

First of all, accumulation may be caused by natural conditions: the location of natural assets such as ore, accessibility by land or sea, a favourable soil or climate. These, of course, are not the only reason for accumulation. Of crucial importance, too, are the external benefits, due to which it is an advantage for companies and employees to locate near to each other. Once underway, geographical concentration may then continue of its own accord. Advantages of accumulation occur particularly in terms of knowledge transfer, formation of local labour markets and input sharing.

In recent years, there has been much research into knowledge spillovers. Jane Jacobs (1969), who wrote about the development of cities, made a distinction between information and tacit knowledge. Important factors for the transfer of such knowledge include geographical proximity, close individual contacts and trust, the preconditions for which are best found in cities and knowledge accumulations.

Labour market pooling, too, promotes accumulation. For example, workers' skills and companies' needs meet better in large agglomerations than in sparsely populated areas. The role of input sharing in turn can be seen in those scale benefits that come about in large regional economies when the production inputs are manufactured.

However, accumulation also gives rise to costs of overcrowding and increases the costs of living such as housing costs, for example, which are highest in cities. Piekkola (2010b) estimates that the productivity of companies is roughly 20% higher in the Helsinki Region than in rural areas – but so is the level of wages. Advantages of accumulation are greatest in activities that produce much value added and where minimising production cost is not of primary importance. The INNODRIVE project included in the EU Seventh Framework Programme looked at the role of intangible capital in six countries. Intangible capital produces information with high value added content, and is global by nature, since the spread of technology often ignores geographical borders. This global aspect of intangible capital has not to date been explored sufficiently. In the study, intangible capital within companies was divided into three groups, and was assessed in activities connected with these groups, namely organisational activity (including management and marketing), information & technology activity, and research & development activity. Part of the work carried out in these professional groups adds to forthcoming investment and thus links to the production of intangible capital. The findings suggest that intangible capital in Finland is even more concentrated than the productive activity of companies. On the other hand, business today is also networked with the capital region in middle-sized cities. This spreads the advantages of accumulation to these companies, too, and the

bottle neck may thus typically be the provision of skilled and educated labour.

#### **Production in city regions**

In the following, we describe the long-term development of value added in economic regions. Between 1975 and 2008, the Finnish economy experienced a strong concentration in the Helsinki Region: the region's share of Finnish GDP grew from less than a quarter to just over one-third. GDP per capita also grew much more quickly in the Helsinki Region than in the country as a whole. Of intangible capital especially, about half is located in the Helsinki Region. An analysis by type of region shows a correlation between, on one hand, the size of the region and, on the other, its share of value added per capita. The share of national value added has developed more favourably in larger regions, but the share of smaller economic regions of the entire Finnish GDP has decreased by almost a quarter since 1975. The data in Table 1 are based on Statistics Finland's Regional Accounts.

	Value added in 2008		Index, €/capita,		Region's share of national		
	M€	€/capita	Finland=10	00	value adde	d, %	
Economic Region			1975	2008	1975	2008	
Helsinki Region The following four altogether	54,577	42,950	129	141	24,3	33,8	
(excl. Helsinki Region)	30,470	29,743	107	98	17,7	18,9	
Middle-sized (11) altogether	26,436	28,279	98	93	17,7	16,4	
Rest of Finland	50,021	24,009	86	79	40,2	30,9	
Finland as a whole	161,504	30,396	100	100	100	100	

Table 1	Value adde	d of the large	est economic rec	ions and other r	egions in 1975 and 2008
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From a three-decade perspective, the groups of larger regions have grown faster than the small ones (Table 2). This also applied quite well to the three sub-periods, namely the years before the economic recession in Finland in the early 1990s, the recession years and the years of recovery, and the last ten years of observation. According to Statistics Finland's Regional Accounts, Finnish GDP annually grew by an average of 2.8 per cent, and the private sector by a bit more, 3.1 per cent.

		-			
Economic Region 1975–	1990	1990-1998	1998-2008	1975-2008	
Helsinki Region	3.6	2.8	4.0	3.5	
The following four altogether (excl. Helsinki Region)	3.1	1.5	4.4	3.1	
Middle-sized (11) altogether-	2.8	1.1	2.7	2.4	
Rest of Finland	3.0	0.7	2.3	2.2	
Finland as a whole	3.2	1.5	3.3	2.8	

#### Table 2. The growth of value added (per cent per annum) in regions in 1975–2008

#### Intangible capital in city regions

The INNODRIVE project included in the EU Seventh Framework Programme analyses the intangible capital of Finnish companies (Piekkola 2010a). Recent literature has extended intangible capital to include not only research and development work but also corporate organisation and management. Particularly in services, it is common to advance from R&D to management tasks, whereby activities that produce long-term value added probably grow rather than decrease. Thus, intangible capital is not only born in research laboratories of companies but, especially in services, it is linked to the ability to lead an organisation and market new products. Also in information and data technology investment, there is much long-term intangible development work being done that current calculations of national economies do not account for. By some estimates, the intangible investments of companies make up roughly 10% of companies' value added (Piekkola, 2010a). Purchased intangible investments such as consultancy, branding, software and databases add to this. Thus, intangible investments may make up almost as large a proportion of GDP as can material investments.

Figures 1 and 2 illustrate the relationship between intangible capital and the productivity of labour in various regions in Finland (Piekkola 2010b). Both graphs show on their horizontal axis a calculation of intangible capital per employee in companies in the largest economic regions, with the cities of the Helsinki Region marked separately. The vertical axis of Figure 1 shows the productivity of labour, and the vertical axis of Figure 2 shows the wages per hour of private sector employees.

#### Figure 1. Intangible capital per employee and labour productivity in 1998–2008



Value added per employee €1000 in 2010

#### Figure 2. Hourly wages and intangible capital per employee in 1998–2008



Figure 3. Intangible capital per employee in 2006





In cities with much intangible capital, labour productivity and wage levels are also usually higher. Of the bigger cities, Helsinki, Vantaa, Turku, Oulu and Tampere rank close to each other in terms of intangible investments and labour productivity. Many middle-size city regions andmanufacturing communities such as Riihimäki, Kotka-Hamina and Porvoo do well in the analysis described by the graphs. In all, intangible capital per employee and hourly wages correlate quite well (+0.57). With work productivity, too, intangible capital correlates positively, but not as strongly (+0.29).

As elsewhere in Europe, intangible capital has become concentrated in major growth centres in Finland. Companies located in the Helsinki Metropolitan Area and the Outer Helsinki Region hold 49 per cent of Finnish intangible capital: in Helsinki 32%, Espoo 7%, Vantaa 8% and the Outer Helsinki Region 3%. We may note that in Germany 40% of intangible capital is found in the 10 largest regions, and that in Great Britain, London holds around 40% of the national intangible capital. In Figure 3, intangible capital is divided into organisational capital, research & development and information technology per employee. Cities and economic regions appear in order of size.

There is much intangible capital per employee in Espoo, Vaasa and Porvoo. In Helsinki and Espoo, ICT-capital stands out, and in Pori, Vaasa and Porvoo, research & development does. In terms of organisational capital, cities do not differ much from each other. As a rule, human capital, organisational capital and R&D capital all correlate positively with each other.

#### **Employment and labour productivity**

During the slightly more than 30 years studied, employment in Finland grew by around nine per cent, or roughly by 200,000 employees. During that same time, however, employment in the private sector declined by around 40,000 people. Thus employment in the public sector grew considerably. During the economic recession of the early 1990s, employment fell very drastically: by around 460,000 people in just four years.

The decline in employment that came with the economic recession was quite similar in the various types of regions (Figure 4), but since then, employment has developed clearly differently in the different region groups. As in production, in employment, too, development in the groups of regions largely follows the size order of the regions. Helsinki is, once more, in a class of its own with a growth of over two per cent per annum, and total employment in the other four regions has increased by around one-fifth over the three decades studied. In the middle-sized regions, however, employment never started growing in the 1970s and 1980s. Studies in future will have to assess to what extent growth in the Helsinki Region is explained by intangible investments in the public sector. We may, however, note that employment change in the private sector, too, roughly adopts the order of size of the re-







gions: the bigger the region, the more favourable the employment trend.

Figure 5 shows long-term development in relative labour productivity in the private sector in terms of five-year moving averages. Once more we see the regularity of size: average labour productivity is higher in bigger regions than in smaller ones (Figure 5). We should add that, among single larger economic regions, labour productivity is highest in the Helsinki and Oulu regions and at the national average level in the Tampere Region. The industrial structure of a region essentially influences its average labour productivity. For example, most manufacturing industries produce clearly more value added per employee than do typical service industries. In all, labour productivity easily tends to be lower in service-dominated regions than in manufacturing-dominated regions.

#### Conclusion

Over the last three decades, economic activity in Finland has increasingly become concentrated in the Helsinki Region, which already produces one-third of Finnish GDP. In the Tampere and Oulu regions, too, growth has been vigorous. Yet the Helsinki Region is the only region where a clearly growing share of national GDP has in the long term coincided with growth in relative value added per capita, or regional GDP per capita divided by the national one. And as a rule, economic growth has been stronger in the larger economic regions than in the smaller ones. The share of national GDP held by smaller economic regions has declined by almost ten percentage points in three decades. This development illustrates the productivity advantages connected with accumulation.

Intangible capital as well has accumulated in growth centres, above all the Helsinki Region. Helsinki alone holds one-third of Finnish corporate intangible capital, and the Helsinki Region as a whole holds half of it. There is reason to believe that investment in intangible and human capital raises productivity in companies more than wages - whereby the profitability of business enterprise goes up. Intangible capital comes about from the skills of employees, and good education is needed for the birth of new intangible capital. Our findings suggest that, especially in organisational activity, the proportion of intangicapital should be increased, ble raising productivity further in the long term.

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#### PÄIVI KIPPO-EDLUND & MARKUS LUKIN

# Vital environmental challenges and environment policy in Helsinki

Helsinki has usually done well in international comparisons of sustainable development. One reason is that Helsinki was the first European capital to publish, in 2002, a complete action plan for sustainable development. Since then, the promotion of sustainable development has become an integral part of the city's strategy and planning work to the extent that no separate programme for sustainable development has been needed. Environmental policy and the programmes for various sectors of environmental care as well have continued the living tradition of sustainable development in Helsinki.

### Helsinki in European environmental comparison

In 2009, Helsinki ranked seventh on Siemens' extensive European Green City Index, which accounts for the most vital sectors of environment protection. Thirty cities were compared. All Scandinavian cities included ranked among the top ten. Helsinki was number four among Scandinavian cities. The top two were Copenhagen and Stockholm.

In recent years, the weighting of matters relating to energy use and climate protection has clearly grown in international comparisons, in which Helsinki has not done quite so well as in comparisons of sustainable development.

The freshest and largest environmental comparison of cities is the Urban Ecosystem Europe indicator survey conducted as part of the ICLEI Informed Cities project. 50 city regions were compared. This survey did not rank cities as a whole in a hierarchical order. In other words, it did not rank the various sub-sectors of environment protection. Instead, it presents each indicator in the form of separate comparative tables.

According to the Urban Ecosystem Europe Survey, the strengths of Helsinki were:

- the efficiency of waste water treatment
- the extensiveness of green areas
- the length of the bicycle path network
- passenger volumes in public transport
- low-emission bus fleet
- carbon dioxide emissions
- the extensiveness of the district heating network
- waste volumes and the waste recycling rate.

According to the same survey, Helsinki was below average in the following respects:

- water and electricity consumption
- proportion of renewable energy sources in community heat production
- procurement of green electric power for public consumption
- self-production of renewable energy in public buildings
- energy consumption of public buildings

- the proportion of ecological food at the city's staff restaurants
- environment systems of offices and departments
- proportion of low-emission vehicles among city-owned vehicles.

If Helsinki is compared with northern Europe only, some of the strengths become challenges. In northern Europe, Helsinki also lags behind in terms of the number of residents exposed to noise, the length of the bicycle path network and the number of energy audits of public buildings.

In terms of greenhouse gas emissions – a factor that has in recent years become an increasingly vital environment protection issue and an accelerator of climate change – Helsinki still trails behind Stockholm and Copenhagen, when emissions are regarded per capita. Compared with these cities, Helsinki's emissions are increased by, above all, the large proportion of fossil fuels in energy production and consumption.

Cities can be compared in terms of climate policy as well. Helsinki's goal of reducing greenhouse gas emissions by 20 per cent by 2020 is very typical among European cities: 1,370 cities in Europe have at least that high a goal. 129 European cities have set out to reduce these emissions by 40 per cent by 2020. It has to be noted, however, that the comparison of climate goals is being complicated by a discrepancy in goal years; Helsinki, for example, aims at carbon neutrality by the year 2050.

#### Helsinki's environmental policy outlines

The environmental programme for the whole city has earlier been a central implement of environmental management in Helsinki. In recent years, however, the City of Helsinki has drawn up several programmes for various sub-sectors of environment protection, such as energy policy outlines, an air protection programme, an action plan for noise reduction and an action programme for safeguarding wildlife diversity. The sectorisation of the work on environmental programmes together with the environmental policy outlines in the city's strategy have led to a situation where there is no longer any need for a comprehensive environmental programme at concrete measure level. This trend is also backed by the fact that the city's offices and departments have strongly developed their own environmental management. In 2011, 15 city offices or departments had either an environment system or programme of their own.

On the other hand, the city's environmental policy is today a document which defines the central environmental policy outlines of the city. The environmental policy was approved by Helsinki City Council in September 2012. The environmental policy sets the central environmental goals for the city in both the medium term (up until 2020) and the long term (2050).

The new environmental policy also specifies a goal set in the city's strategy, namely that Helsinki wants to be a frontline actor in global responsibility and environment protection. The environmental policy defines the city's goals in the following fields:

- climate protection
- air protection
- noise protection
- water protection
- wildlife and soil protection
- public procurement, material efficiency and waste
- environmental awareness and responsibility
- environmental management and partnerships

A vital new policy in climate protection is the above-mentioned goal, according to which the city aims at carbon neutrality by 2050. A goal to reach by as early as 2020 is to improve energy use efficiency per capita by 20 per cent.

The goal of the city's environmental policy is that by 2020, those who live in noisy zones will be 20 per cent fewer than they were in 2003. Another goal is that no residents would then be exposed to strong noise (above 70 dB in daytime). The goal in air quality is to stay within the limits of the national recommendations and goals up until 2020.

The goals of water and wildlife protection aim at safeguarding Helsinki's attractive maritime atmosphere and varied urban wildlife. As a part of this, the aim is to safeguard the diversity of wildlife in cultural environments and to maintain a good state of the maritime environment off Helsinki's shores up until 2020. A new implement introduced by environment policy is a compensation procedure that compensates for natural environment values in cases where it is necessary to build on green areas.

The city wants to upgrade the synergy between the environment and economy in many ways. For example, by setting environmental criteria for public procurement, costs can be cut: appliances and goods that are more energy-efficient with a long service life can be purchased. The goal of environmental policy is that, by 2020, all purchases made by the City would contain environment criteria. To reduce the amounts of waste of the city, quantitative goals have, for the first time, been set: the goal that should be reached by 2020 is to reduce waste volumes by 10 per cent and to improve the rate of material recycling by 10 per cent.

Partnerships with, for instance, the business community are seen as an overall theme without which the goals of environmental policy cannot be reached. The environmental management of the city's own organisation is strengthened by, for example, applying less formal environmental management systems and including environmental issues in the city's systems of reward.

According to the City of Helsinki's environmental policy, Helsinki is to be made one of the top European capitals in terms of residents' environmental awareness. The commitment of residents and city employees to environmental policy is being encouraged by means of, for example, environmental education and eco-supporting persons.

#### Forward by using strengths

The policy outlines formulated in the city's environmental policy are strongly based on Helsinki's strengths.

Over the decades, the city has created and implemented many successful environmental measures that benefit the state of the environment. These include efficient cleaning of community waste water, functional public transport and combined production of electricity and heat. Emissions into the air from buildings, energy production and manufacturing have been reduced and air quality thus improved. Helsinki is known for its greenness. Residents and tourists, both from Finland and abroad, are aware of the forests and the archipelago, besides the architecture. The importance of a diverse wildlife to human wellbeing has been clearly brought to the fore by scholars.

Environmental attitudes among Helsinki residents have been studied four times since 1989. Each survey has shown that environment protection has had high priority in people's minds. In the 1990s, a problem was still that favourable attitudes were not put into practice. But in recent years, the situation has changed, and the widespread concern about climate change and impoverished wildlife diversity is beginning to turn into deeds. Thus, there is fruitful ground for accelerated environmental action.

For 20 years, work has been done in Helsinki to raise people's awareness of the environment. Successful action models have been created through cooperation and active search for synergy effects. An example would be the eco-supporting person activity, which started in 2006 and fosters a culture of environmental responsibility at the city's offices and departments. The climate advisory centre, which opened in October 2010, unites various actors in cooperation to provide residents and companies with inspiring service over the same counter.

The City of Helsinki has been exercising environmental management ever since 1999. In recent years, this work has been developed under the coordination of a group of environmental management experts. It comprises a strong, large and skilled network of environmental experts at offices and departments. According to an environmental management assessment made in 2008, the majority of departmental and divisional managers feel that environmental issues are taken into account in management and are being implemented with foresight. A vital part of environmental management has been environmental reporting. Ever since 2001, the city has made an annual environment report to the City Council.

Helsinki has taken an active role in checking and adapting to climate change and cooperated with six other large Finnish cities to develop environmental reporting and strengthen partnerships. Among the most important actions aimed at fostering environmental protection partnerships are a challenge campaign for the Baltic Sea launched by the mayors of Helsinki and Turku and the Eco Compass environmental management system, counselling for small and medium-sized companies in the Helsinki Metropolitan Area, and the Climate Partners network between the city and the business community. At present, this network includes 35 mostly large companies and research communities.

## Aiming to repair and improve challenges and reduce their impact

One of the major challenges for implementing the environmental policy outlines is to check climate change and thereby especially to transform energy production and reduce emissions. In future, this will entail large and expensive investment in the production of district heating and electricity. Helsinki Energy Ltd is engaged in, among other things, two large-scale wind parks currently being planned. In 2010, Helsinki Engergy presented a development programme on the basis of which the City Council will make decisions on the future of energy production.

Another big challenge is how to engage and activate residents and companies in climate work. The fostering of energy saving is particularly important.

Vital environmental challenges in Helsinki also include the effects of transport and traffic, especially air and noise pollution. The most significant polluters of the air that we breathe in the city are motor vehicles. Diesel vehicles have increased, and their nitrogen dioxide emissions have particularly grown. At the same time, polluting emissions from cars have been reduced by improved combustion technology and sharpened EU emission norms. However, with the exception of the last few years, traffic has grown in Helsinki. In vehicle-generated nitrogen oxide emissions, the proportion of direct nitrogen dioxide has also grown thanks to new technology in recent years. In addition to nitrogen dioxide emissions from traffic, air-borne particles are still a problem. Both those particles that emanate from combustion and those from street dust have been found to be harmful to human health. Dust content has been found to cause diseases of heart and respiratory organs. Particularly susceptible are asthmatics, elderly people suffering from coronary disease or chronic obstructive pulmonary disease, and children.

The most important generator of noise pollution in Helsinki is street and road traffic. Roughly one-third (34%) of Helsinki residents live in areas where the daytime mean noise level exceeds 55 bB. The noisiest places, where residents are exposed to strong noise, are along the highways and the busiest main streets. The most crucial challenges in terms of noise are those old neighbourhoods that, due to growing traffic and/or insufficient noise protection, are exposed to too much noise. Noise, too, has been found to be harmful to human health and wellbeing. Susceptible are, above all, sensitive population groups such as children. Noise may disturb or complicate work, rest, sleep, communication and learning. Long-term exposure to traffic noise may also increase the risk of heart and vascular diseases.

A challenge not yet tackled energetically enough by the City of Helsinki is the reduction of environmental harm caused by procured products and services. Each year in Finland, the public sector purchases €20 billion worth of goods and services. Thus, controlling the environmental impact of these procurements is also largely a matter of controlling administration and, in that sense, of achieving cost savings (for example by purchasing energy-saving equipment). There are several challenges relating to the accounting of environmental impact caused by purchases, challenges that concern both the organising of the public procurement authority in large organisations and the diversity of products (services and goods) purchased. A large proportion of public purchases are put out to tender by centralised public procurement authorities. These tender procedures lead to framework contracts, but in addition to products procured that way, there are many kinds of products that offices and departments purchase on their own. That is why environmental skills are needed in the joint procurement organisations and at offices and departments.

Another challenge relating to procurement skills is that the products procured by the City are of very many different kinds. Each group of products has its own environmental impact that the purchaser has to look into. On the other hand, legislation on public procurements sets certain limitations to what environmental criteria can be applied on procurements. Thus, skills in both procurement and environmental issues are needed for environmental decisions relating to procurements.

An additional challenge in accounting for environmental aspects in procurements is that, in some product groups, environment-friendly products are more expensive than non-environment-friendly products.

In Helsinki, the level of awareness is not an obstacle to environment protection. The challenge is more a matter of how to act so that residents do not feel they are the only ones making environment-saving choices.

These last few years, environmental management in Helsinki has been assessed by two external actors. Net Effect Oy Ltd assessed the structures and effectiveness of the city's environmental management. Findings suggest that environmental management lacks tools and encouragement incentives. The need to develop monitoring data on energy and waste management at offices and departments also came up. Today, larger administrations especially have practically no opportunities to make covering reports of their own energy consumption or waste output.

In a comparison of environmental management made together with the City of Rotterdam, the main focus was on the effectiveness of various sectors of environment protection, but it also assessed environmental leadership. According to the assessment, what especially needs to be developed are the creation of partnerships and their integration into the city's cooperation network.

In its assessment report, the City of Helsinki Audit Committee drew attention to developing the environmental management and environmental reporting of the city's associated organisations, where development has been slower than in offices and departments. On the other hand, the very smallest but also the very largest administrations (such as the Health and the Social Service departments) still face challenges in the field of environmental management, and need support in this work.

#### Where do we have to be successful?

The city wants to apply its environmental policy to strengthen the synergy between the environment and economy in many ways. To be successful, the transition into a Helsinki with a greener economy and a more efficient use of resources requires both old and new measures. To meet the needs of the city, its residents and business community – and to meet new environmental challenges – new and optimal action models for environmental issues must be used.

What is essential is how environmental matters are managed and monitored. Are crucial environmental aspects included in the city's strategy programme, the strategies of offices and departments, budgets, action plans and staff bonus systems? Is environmental management planned and goal-oriented? Is the achievement of environmental goals monitored? A danger is that costs of unexpected magnitude may arise if preparations with regard to climate change, for example, are not made systematically. Heavy rains or floods, for instance, may cause tens of millions of euros worth of damage.

There is reason to develop environmental management using encouraging incentives. It is important to include extensive environmental goals in the staff bonus systems of offices and departments and to give these goals a weighting that is strong and appealing enough. If exemplary execution of environmental management were rewarded, this would bring about positive environmental competition between offices and departments.

The environmental systems of offices and departments (such as the less formal Eco Compass environmental system) enable more planned and thereby more efficient environmental work. With the aid of the environmental system, attention and actions focus on significant environmental impact, which ensure that resources are used efficiently and for the kind of environmental measures whose effectiveness is high.

The network of around a thousand eco-supporting persons at the city's offices and departments is a good resource as an implementer of environmental measures. Another crucial sub-factor of success is to create prerequisites and opportunities for residents, companies and other organisations.

Systematic development and enlargement of a promising business life and the city's Climate Partner concept are important. With the aid of cooperation that, at its best, benefits all parties, it is even possible to create new environmental business enterprise. The Eco Compass counselling and its environmental system enable systematic management of environmental issues for small and medium-sized businesses. Climate info plays an important role as a provider of advice and expertise for small and medium-sized businesses. The Baltic Challenge campaign, too, is an action model worth using in other sectors of environment protection in future. The management of environmental issues at organised large events is important for both the organisers and the audiences of the events - as indeed for those that do not participate in the events. An action model currently being developed, the Eco Compass event, is also a promising partnership "tool".

Climate Info advises, directs and guides residents and small and medium-sized companies in energy and climate matters by wrapping matters into appealing and easy-to-use packages. Judging from the environmental attitude survey, there is huge demand for the services of Climate Info.

There is a need to develop cooperation across administrative borders between offices and department and the coordination of this cooperation. Close cooperation is needed between, for example, the procurement and the environmental authorities when developing environmental issues relating to procurements. The checking of and adaptation to climate change is managed in various offices and departments depending on which office is responsible for which matter. The promotion or coordination of cooperation has not yet been assigned to any particular office. Obviously, there has to be sufficient economic and other resources available for the management of environmental issues. Exactly how large resources are available depends on what priorities councillors and board members give to environmental issues. Many potential cost savings (such as energy saving) in environmental affairs have not yet been implemented. There could also be more economic guidance in environmental issues. Again, economic steering measures are not always decided by the city. An example of this is how traffic is priced.

All in all, the vitality of the Helsinki area will be strengthened as residents' environmental awareness grows even further, as environmental skills and thereby competitiveness improve, the environmental management of the city organisation develops, and the environmental awareness and skills of city employees improve. An improvement in the state of the environment as a result of efficient environmental work is another central factor in vitality. *Päivi Kippo-Edlund*, M.Phil., works as Director of Environment Protection at the City of Helsinki Environment Centre. She is in charge of the Environment Protection and Research Unit, whose functions include the promotion of the city's environmental policy and environmental management, providing expert assistance for public offices and SMEs, and the city's environmental reporting and statistics. She is Chair of the city's environmental management and environmental reporting working groups. She has previously worked in different management functions in the environmental sector, both in the public and private sectors, including the Association of Finnish Local and Regional Authorities and Efeko Oy (nowFCG Finnish Consulting Group).

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#### TIMO CANTELL & ARI JAAKOLA

# The publication Helsinki's Present State and Development 2013

Helsinki's Present State and Development 2013 is a volume addressing crucial developments and changes in Helsinki and the Helsinki r egion. It spans both the previous term of office of the City Council (2009–2012) and, at a broader level, changes and trends seen in the first decade of the 2000s.

For preparation of the book, a work group was appointed wherein experts from the City Planning Department, Education Department, Social Services Department, Economic and Planning Centre, Health Department, and Environment Centre gave their views. The report was written by experts from City of Helsinki Urban Facts, the City Planning Department, and the Environment Centre. This article sums up a few central points made in the book.

#### Population growth continues

In August 2012, Helsinki's population reached 600,000. Population growth has been brisk: the half-million mark was passed in 1993, and the population figure is expected to be at almost 680,000 by 2030. It is estimated that by then, the Helsinki region will have grown into an area of 1.6 million residents. The number of Helsinki residents has grown steadily after a slower period in the first few years of the 2000s: by 6,200 people per annum in 2008–2012, on average.

This population growth is primarily due to three factors. First, Helsinki's net in-migration from the rest of Finland has increased, which is explained in part by decreasing migration from Helsinki. For many decades, Helsinki has been attractive as a migration destination, but at the same time some of the city's inhabitants have moved to the other municipalities of the Helsinki region. In recent years, this out-migration has decreased.

Another factor in population growth is increased numbers through foreign migration, which has grown steadily, especially after 2005. In 2007–2011, foreign-migration gain was 3,300 people, on average, per annum. With migration, almost 30% of foreign-mother-tongue residents in Finland have settled in Helsinki, and almost half in the Helsinki Metropolitan Area.

The third factor behind population growth is natural population growth. In recent years, annual birth figures in Helsinki have been between 6,500 and 6,700, while the average in 2000–2007 was 6,150. Meanwhile, deaths have averaged 5,000 per year. Thus natural population growth nets Helsinki 1,500 people a year.

The most recent population forecast (reported on in the current issue of Kvartti on pages xx-xx) describes in greater detail the present state and the expected future of population development in Helsinki. In this context, we may highlight the fact that Helsinki now has more families with children than before, which is seen in a growing number of children and adolescents.

We should also note that the largest age groups in Helsinki are not the traditionally large post-war generations but the 20–30-year-olds, many of whom have come to Helsinki to study or work. These young adults contribute to keeping Helsinki a dynamic and active place, which will be one of the city's strengths in future as well.

#### A large proportion of small households

A third of Helsinki's adult population live alone. The proportion of singles has decreased slightly since 2008. If we look at households in Helsinki, we find that every second one consists of just one person. Single- or two-person households account for almost 80% of households. This proportion has remained the same since 2005.

Families with children (i.e., with at least one child under 18 years of age) total 55,400 in Helsinki, making up almost one fifth (18%) of the households. The proportion of households consisting of families with children has fallen slightly since the beginning of the 2000s. At that time, families with children accounted for 21% of households in Helsinki.

#### Helsinki residents – healthier than other Finns but dying younger

In bigger cities, many phenomena often are seen in their most extreme forms. In Helsinki, this manifests itself in very good health indeed among many people whilst at the same time those in a weaker position die younger and are in poorer health than others. As a whole, morbidity among Helsinki residents was lower than the national average in 2011. The age-adjusted morbidity index of the Social Insurance Institution of Finland (Kela) was 90 in Helsinki whilst the value for Finland as a whole was 100. The morbidity index is based on three register variables: mortality, the proportion of disability-pension recipients among the working-age population (people of age 16–64), and the proportion of the total population entitled to special reimbursement for medicines. Compared with the other

municipalities of the Helsinki Metropolitan Area, Helsinki's population had a higher morbidity index – in 2011, the index for Espoo was 77.2, Vantaa 89, and Kauniainen 64.6.

Quite large differences can be seen within Helsinki. The morbidity index varies by district between 64 and 115. Six districts are above the national average. In these areas, the education level of the population is relatively low, the unemployment rate fairly high, and the proportion of low-income earners large. In turn, Helsinki has six districts where morbidity is very clearly below the city's average – indeed, more than 20 points below.

More and more Helsinki citizens use both public and private health-care services. In almost all age groups in Helsinki, outpatient care from basic health-care physicians was the most common doctor's service. In 2010, 47% of Helsinki residents utilised these services and 31% those of physicians providing special health care as outpatient services. In the same year, 35% of Helsinki residents consulted private doctors.

# Top marks from health-centre clients, while residents at large are more critical

The City Service Survey of 2012 asked clients at Helsinki health-care stations how satisfied they were with the services rendered. Availability of hospital care has always received good marks. Although some health centres have closed or merged over the years, there is a health centre relatively near all neighbourhoods or within easy reach. The most important finding is that the care itself gets the best marks. The usefulness and quality of care at health centres are considered excellent by those having received it – clearly more so, in fact, than in 2005. Yet residents in general find room for improvement where getting an appointment is concerned.

Opinions about public health services are often more favourable among those who had used these services than among the public at large. About 43% of Helsinki residents considered physicians' services at health centres to be good. Every fifth respondent had no experience of health stations. If we exclude these 'Don't know' responses, just over half of Helsinki residents thought physician's services at City of Helsinki health stations were good.

## Differentiation of neighbourhoods – part of major cities' development

When speaking of local differentiation in city regions, we refer to development leading to differences between districts in terms of background, life situation and ways of life, and where various groups of residents tend to settle with their peers in the same areas. This differentiation is linked to larger social structures and connected also to local differences in structures of housing – and to population growth and relocation decisions within certain groups of residents. Differentiation of districts by inhabitant demographics, architecture, or breakdown of housing stock is a typical feature of development in major cities.

Differentiation is not only a negative trend. Differentiation in the resident and housing breakdown create the general public image of a neighbourhood, which in the best cases can animate and enrich the cityscape. Negative effects may come about if differences between neighbourhoods multiply and begin creating greater local differences in well-being in any given region of the city. Local accumulation of, in particular, deprivation – poverty, unemployment, and social problems – may have serious human and social consequences.

Helsinki has been a homogeneous city in terms of social and spatial development. By international standards, socio-economic differences have been small in Helsinki, and its neighbourhoods have been heterogeneous in their resident demographics and housing stock. As recently as the beginning of the 1990s, deprivation was not strongly concentrated in specific neighbourhoods. It could be found in certain buildings or on specific blocks in a given part of town. However, the deep economic recession of the early 1990s and the subsequent time of growth changed the urban structure of Helsinki and brought out differences between neighbourhoods in well-being and socio-economic structure more than earlier. After the recession, some neighbourhoods clearly did not keep up with the rest in terms of income and employment.

# A growing and internationally oriented motor of the national economy

The Helsinki region forms a solid commuting zone with a considerably stronger concentration of jobs than of housing. One of the characteristics of the region's labour market is strong mobility across municipal borders. Over the decades, the commuting area of Helsinki and the Helsinki Metropolitan Area has expanded significantly. Also, the demand for labour in the area has contributed to increasing international migration to this area.

Over the last few decades, the Helsinki region has taken on an increasingly important role in business in Finland. Between 1980 and 2008, the region's share of Finnish GDP grew from a quarter to more than one third. Thirty per cent of the entire Finnish GDP is produced in the Helsinki Metropolitan Area (i.e., the four central municipalities of the Helsinki Region – namely, Helsinki, Espoo, Vantaa, and Kauniainen), which covers only 0.25% of Finland's area but is home to 19% of the country's population.

Behind this development we find a trend of structural change in the economy, in which certain industries experiencing strong growth have become increasingly concentrated in a few larger urban regions. These growing industries are well represented in the industrial structure of the Helsinki region. In addition, the industrial structure of the Helsinki region is varied, which is an asset in a globalising and ever-changing economy. Thanks to these growth industries and a varied industrial structure, the Helsinki Metropolitan Area made it through the economic slowdown a few years ago and the aftermath of the international financial crisis with relatively small losses of jobs.

Helsinki has been successful of late by international comparison. Its residents are content with their city's cultural services and outdoor recreation opportunities, even by international standards. Also, Helsinki residents find this city a safe and secure place to live. In various comparisons, Helsinki stands out – to its advantage – in terms of overall quality of life, safety, and functionality of public transport. From the angle of business enterprise and employees too, Helsinki does well in international comparisons.

Although development in Helsinki and the Helsinki region is looking good in many respects, it is not immune to economic fluctuations. Somewhat on the contrary: the economy of the region is strongly linked to global economic trends. Global fluctuations in manufacturing, for instance, are visible in the Helsinki region. The decline in total production seen in 2009 is one example of a trend that was just as strong in Helsinki as in the country as a whole, on average.

In view of today's uncertain economic climate, future development in the region is hard to predict. Yet it is clear that the situation is challenging. As with other municipalities, public finances have become tighter in Helsinki, and the City of Helsinki's income has not been great enough to cover expenses. Budgets have had to be balanced by taking on new debts and by selling assets. Municipal business departments such as Helsinki Energy have played a crucial part as stabilisers of municipal finances. The ageing of the city's population increases the demand for public services provided at city level, and, in addition, the growth and development of the city call for strong future investments. From the standpoint of municipal finances and services' production, it is crucial that economic activity and employment be kept as high as possible.

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News

#### Fresh information about the leisure time of young people

The Young People in Helsinki 2011 study examines the leisure time and hobbies of young people as well as their everyday life through home, school and friends. The research material was collected by means of an online questionnaire in the spring of 2011. Responses were given by 1,433 young people from 42 schools around Helsinki. The leisure time of young people was also studied in Helsinki by means of extensive pupil surveys in 1982, 1990 and 2000. The results of the 2011 survey were published as articles on the study's website in the autumn of 2011 and spring of 2012. A printed version has been edited based on the articles.

Of young people's creative hobbies, those whose popularity has increased the most are photography and the playing and singing of popular music. Girls are particularly enthusiastic about photography and singing.

Cycling is the most commonplace form of exercise among young people. Every second young person cycles regularly. Winter sports have clearly gained popularity in the past decade or so. The proportion of young people who get no physical exercise at all was smaller in 2011 than in 2000.

About one-fifth of people between 11 and 19 years of age regularly read books and magazines in foreign languages. Reading newspapers or tabloids online or using, for example, Wikipedia is now the third most common form of reading. About 39% of young people in Helsinki play computer games daily. In 2000, the percentage was 29%. The popularity of computer games has increased the most among girls. Young people have embraced social media as they embraced mobile phones a decade ago. Almost everyone spends time in front of the screen every day.

Young people avidly strive to have an influence on the learning environment at school. One-fifth of people between 11 and 19 years of age have taken part in student union activities – girls more than boys. Young people like to attempt to influence matters that are important to them, also online.

Of young people living in Helsinki, 62% live in a nuclear family. Every tenth young person is a multiple-family child living alternately with the mother and the father. Every tenth young person is the only child in the family, and the same proportion have a large family, with four to six siblings.

Young people's attitudes toward the use of intoxicants have become clearly more negative in the past 10 years or so. Their view of smoking is now particularly negative.

Fears among young people regarding the future have become more common. The respondents are most afraid of a lack of money, losing a loved one and unemployment. Young people's plans for further education are in stark contrast to actual placement in the labour market and the projected demand for labour. While nearly two-thirds of all comprehensive school pupils wish to study at university, fewer than one-third eventually end up there. In contrast, less than 10% of young people have their sights set on basic vocational education, even though a multitude of such specialists are needed in working life.

#### Source:

Vesa Keskinen & Anna Sofia Nyholm: Nuoret Helsingissä 2011. Vapaalla, koulussa, vaikuttamassa. City of Helsinki Urban Facts. Researches 2012:3. 192 p. Summary in english.

http://www.hel2.fi/tietokeskus/Nuoret\_Helsingissa\_2011/



Helsinki has a long tradition of using opinion and satisfaction surveys targeting its residents to gain feedback on the services provided by the city. Helsinki has participated in national Public Services Satisfaction Surveys eight times since 1983. The Public Services Satisfaction Survey is carried out once per council term.

The most recent questionnaire was in 2012 and was responded to by 1,564 Helsinki residents aged between 18 and 70.

#### Infrastructure in order

The same things have mainly been most satisfying for Helsinki residents in the 2000s.

In 2012, these included the quality of drinking water (96% were satisfied), municipal library services (92%), cultural amenities (89%), safety of residential areas (87%) and public transport (87%). Improvement in overall safety must be highlighted with regard to Helsinki. In 2005, the matter reached the Top 10 of best managed things from 21st position. In 2008, overall safety was in 8th position on the "satisfaction list" and 9th in 2012. The same thing is indicated by the safety of residential areas, which was also among the "best managed things" in Helsinki in 2012.

#### **Smooth sailing**

A key finding of the Public Services Satisfaction Survey 2012 was that changes in satisfaction with public services were clearly smaller between 2008 and 2012 than between 2005 and 2008. Satisfaction was measured with regard to 66 subjects or things. In 2008, some 20 things showed significant changes in satisfaction (8–22%) one way or the other. Between 2008 and 2012, only nine items showed significant changes.

## Reduced moving intentions – new homes sought nearby

Up to 63% of the respondents in 2008 indicated intentions to move. In the spring of 2012, 40% of respondents were potentially moving. In recent years, the migration of families and so-called good taxpayers to neighbouring municipalities has been a source of concern for Helsinki. The popularity of the adjacent municipalities has, however, clearly declined in the past couple of years as a new location for a home. Most people now seek a new home within the City of Helsinki. Over the past years, people on the move have taken a sharp turn in the direction of the capital city. The number of Helsinki residents exceeded the limit of 600,000 in August 2012. Maybe this "popularity of the capital city" also impacts the moving plans of those already living here. In the neighbouring city of Espoo, 36% of households indicated intentions to move.

#### **Unemployment scare**

Questions regarding everyday problems brought forth both good and bad news. In 2012, a third of Helsinki residents did not suffer from any of the everyday problems raised. In 2008, the same share was 28%. On the other hand, the most recent survey indicates that the global recession of 2009 and the subsequent European financial crisis have made their mark on the everyday life of Helsinki residents. Unemployment or the threat thereof gave cause for concern to clearly more Helsinki residents in 2012 than back in 2008.

#### Source

Vesa Keskinen: Smooth sailing. Satisfaction of Helsinki residents with public services in 2012 and 2008. City of Helsinki Urban Facts. Report draft 2012. To be published in early 2013.

The purpose of the study was to examine the development of entrepreneurial activities amongst immigrants, the factors affecting this development and the success of businesses in Finland. The study examines the opportunity structures that Finland has offered immigrants as well as factors affecting the offering of entrepreneurship, such as motives towards entrepreneurship and the resources of immigrants. The study is based on many types of materials. The analysis of the operating environment and the development of the number and structure of entrepreneurial activities of immigrants are based on statistics and previous studies. Differences affecting the entrepreneurial activities of immigrants from different regions and different nationalities, the prevalence of forced entrepreneurship and the success of entrepreneurial activities in terms of employment and survival of companies were studied using register data. Motives for entrepreneurship, methods of operation and success in terms of financial livelihood were studied by means of questionnaires and interviews.

A central finding of this study is that while forced entrepreneurship is more common than average among immigrant entrepreneurs, they have succeeded in finding employment and staying in business as commonly as entrepreneurs from the Finnish original population. Although shutting down the business is linked with a higher risk of unemployment among immigrant entrepreneurs than among Finnish entrepreneurs, entrepreneurship has been a channel for finding employment for some immigrants as well. The methods of operation of immigrant entrepreneurs were quite similar to those of Finnish entrepreneurs. The differences found were related more to the situation of immigration and the choice of business sector than to the ethnic culture of immigrant entrepreneurs.

#### Source:

Tuula Joronen: Maahanmuuttajien yrittäjyys Suomessa. City of Helsinki Urban Facts. Researches 2012:2. 259 p. Summary in english. http://www.hel.fi/hki/Tieke/fi/Etusivu



