

Høgni Kalsø Hansen

Associate professor, Head of Studies for Geography and Geoinformatics
Geography Section, Department of Geosciences and Natural Resource Management, University of Copenhagen
hh@ign.ku.dk



Peripheral Denmark, population development and labour market dynamics

Keywords: peripheral development, human capital, regional development

Many countries in the global north are witnessing uneven development across regions on the national level. What is seen is that urban areas increase in population and jobs while peripheral areas decline. This paper discusses regional development of peripheral areas in Denmark before and after the financial crisis in 2007–2008. This is done by applying empirical analysis of register data on development of population and employment in four different categories of regions in Denmark from 2002–2013. Moreover, by focusing on different categories of education and how formal qualifications of the labour force is related to employment growth or decline, it is discussed whether aiming towards attracting highly educated labour is the only way forward for peripheral areas.

Introduction

In today's economy, processes of urbanization have gained interest from many researchers and politicians around the world. It is estimated that more than half of the world's population today resides in cities, and that this share will increase to two thirds by 2050 according to UN's Department of Economic and Social Affairs. Most of the estimated growth of urban areas is expected to take place in Asia and Africa, but in the global north and in Scandinavia we are also witnessing a tendency for people to gravitate towards urban areas and from smaller cities to larger ones.

However, while the urbanization processes bring challenges to urban areas, they also bring challenges to peripheral areas which to a large extent are witnessing a declining and aging population. Thus, this study will look at the population development in peripheral areas in Denmark and shed light on linkages that can be used to develop policies to improve the economic conditions of many peripheral areas in Denmark. This is done by using register-based microdata on individual level.

Migration patterns and the role of job opportunities

Migration drivers hold interest among scholars within regional studies due to evidence of strong linkages between migration and regional development. Both volume of migrants in and out of a region along with the competences held by the migrants have attracted interest by scholars (Florida, 2002; Scott, 2008; Glaeser, 2011). Basically, the interest in people migrating due to job related competences build on the assumption that in today's economy, knowledge is a key input factor in order to be competitive on innovation and producing new knowledge. Traditionally, we considered resources such as coal, a good harbour, minerals etc. to be localized. In today's economy, knowledge has become superior to natural resources. Knowledge is within the head of the labour force and thus

a resource that can potentially be allocated from one place to another. Thus, in this view local fortune is no longer based on natural resources located in the local environment but rather on the ability for regions to attract and retain e.g. highly skilled labour.

One often highlighted approach to understanding economic development and migration dynamics is the amenity-driven growth paradigm. It builds on the assumption that people primarily move due to better amenities. This can be green areas, proximity to water, forest or nice liveable neighbourhoods. The amenity-driven growth paradigm is closely linked to analytical frameworks motivated by urbanisation economies and urban competition (Florida, 2002; Clark et al. 2002; Lorentzen 2009; Smith-Jensen et al, 2009). Inspired by the thoughts of Jacobs (1969) who in her work argued that the diverse characteristics of cities have positive effects on innovation, Florida argues that “creative people are not moving to [...] places for traditional reasons [...] What they look for in communities are abundant high-quality amenities and experiences, an openness to diversity of all kinds, and above all else the opportunity to validate their identities as creative people” (Florida 2002, 218).

Florida (2002; 2005) states that in a time of global competition on knowledge, regions need first and foremost to attract and retain highly skilled labour to be able to attract and retain capital investments. He argues that an input of human capital becomes more and more important for production in the northern hemisphere. Because of the rather foot-loose character of creative and human capital and by providing the right atmosphere, regions can attract creative people and with them investments in high-tech and knowledge industries.

Along the line of reasoning, Chen and Rosenthal (2008) indicate that amenities have different meanings and different importance for different groups of people, and, hence, it is far from an unambiguous strategy to produce urban amenities. Chen and Rosenthal find that households generally look for non-metropolitan areas and cities in warm coastal locations, while firms tend to prefer large growing cities. In a more lifecycle perspective, young people and young couples seek towards places that have thick labour markets to prevent co-location job problems. Married couples older than 50 years seek towards places with high concentrations of consumer amenities.

A number of studies have presented critical views on the amenity-driven growth paradigm (e.g. Storper and Scott, 2009; Hansen and Niodomysl, 2009; Clifton et. al, 2013). Stor-

per and Scott (2009) raises a central and vital critique of the amenity growth paradigm by pointing to the lack of a theoretical understanding of how the economic dynamics and social and industrial structures impact the growth and decline of cities and regions. Regions are not detached from the overall technological regimes and phases of capitalism. Regions are highly influenced by history and the regional economic and industrial development that is path-dependent and follows specific trajectories (Essletzbichler & Winther, 1999; Winther, 2001). Labour markets and labour qualifications do not change overnight, and organisations, institutions and regulations that underpin past and current production structures take time to change (Peck, 1996).

The essence of this critical view on the amenity growth paradigm is that industries produce regions rather than regions producing industries (Storper and Walker, 1989; Storper, 1997). Changing the dominating economic dynamics of regions through regional policies is a long and very difficult process as firms and industries are also highly connected to national, international and global production networks (Henderson et al. 2002). Along this line of argument, Hansen and Aner (2017) showed that the triggering effect of moving from an urban to a peripheral area for highly educated people was a job opening.

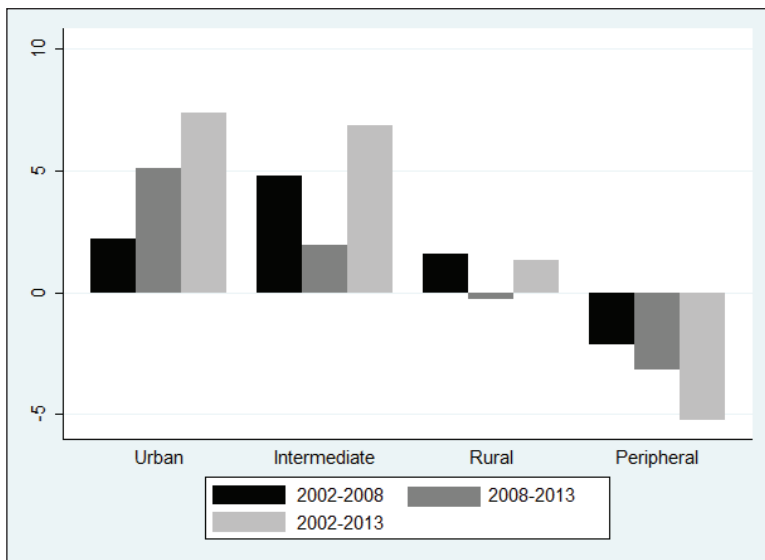
In the following section, the development in population and employment in different categories of municipalities is shortly introduced. Also, data on the relationship between educational levels and employment growth will be exposed.

Describing migration and development in urban and peripheral Denmark

As in many other countries in the global north, Denmark witnessed an unequal development during the last decades. The average picture is that the major urban areas have grown while the peripheral areas have declined.

By use of register-based microdata on individual level, the coming section will demonstrate population development, job growth and linkages between growth and educational levels in primarily two types of municipalities in Denmark, namely municipalities categorised as urban and municipalities categorised as peripheral. The data covers a period from 2002–2013. In addition, data is also divided into two sub-periods. The period from 2002 to 2007 is a growth period in the Danish economy. In 2008 the worldwide financial crisis occurred adding a relatively

Figure 1. Change of population in four different categories of municipalities in Denmark, (%). The figure shows the change in three time periods: the whole period of time (2002–2013) as well as the sub-periods of 2002–2008 and 2008–2013. Source: Own calculations based on microdata from Statistics Denmark.



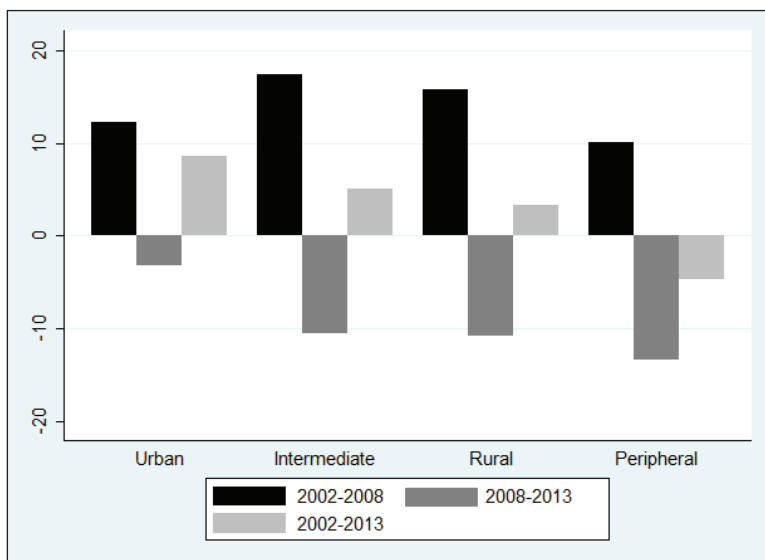
strong shock to the Danish economy. The period from 2008–2013 can be described as a difficult period in the Danish economy in the aftermath of the financial crisis.

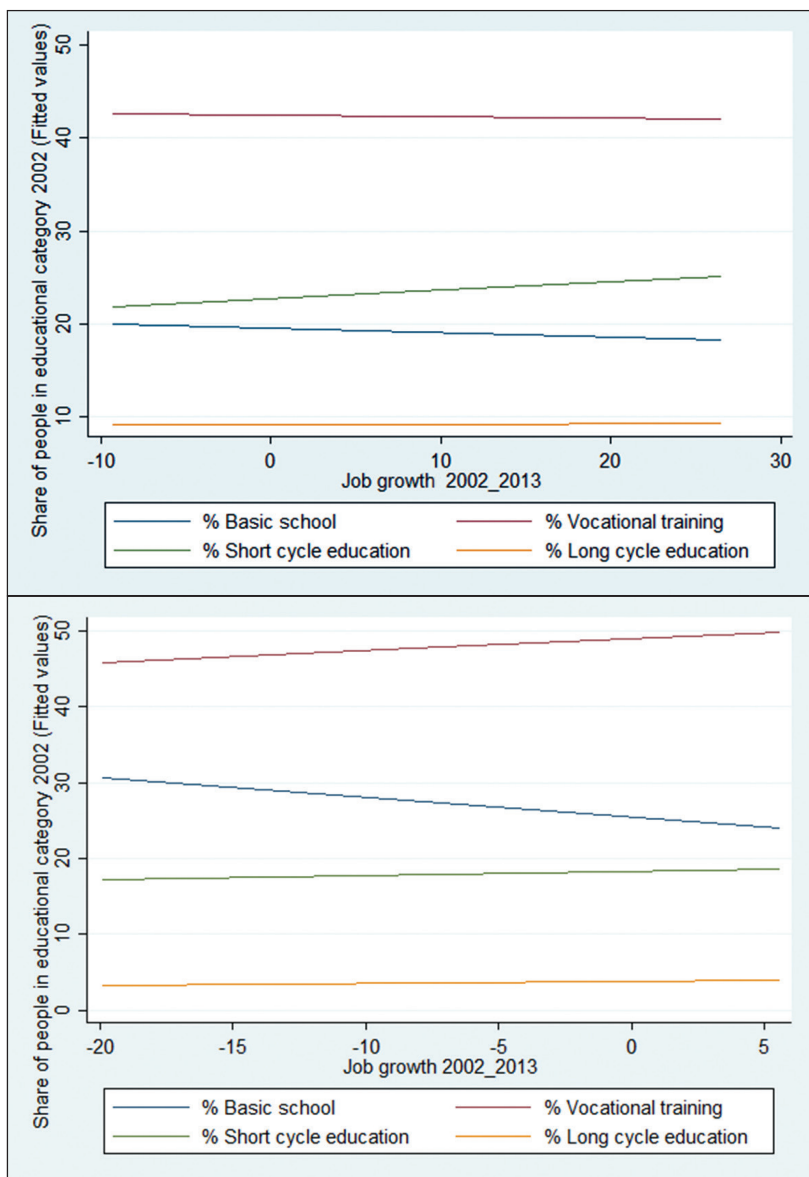
Figure 1 shows the change of population in the four different categories of municipalities in time-period 2002–2013 as well as in the sub-periods 2002–2008 and 2008–2013. The figure shows that urban areas have been growing in population during the whole period, but looking at the two sub-periods it is clear that especially in the aftermath of the economic shock in 2008, the population grew by 5% compared to 2.5% in the early period. Contrary to the urban municipalities, the peripheral municipalities witness a constant decrease during the period as a total. Only

this category of municipalities witness a decrease in population during the whole period. Looking at the two sub-periods, it is again clear that the peripheral municipalities have suffered relatively more in the aftermath of the financial crisis in 2008 compared to the period prior to the crisis.

Turning to the development in workplaces, Figure 2 shows that all types of municipalities suffered from loss of workplaces since the financial crisis in 2008. However, what the figure also show is that there is a significant difference in how tough the throwback from the crisis is. Looking at urban municipalities, a small decline can be identified in the time-period 2008–2013 whereas the overall development during the period 2002–2013 is

Figure 2. Change of workplaces in four different categories of municipalities in Denmark, (%). The figure shows the change in three time spans: the whole period of time (2002–2013) as well as the sub-periods of 2002–2008 and 2008–2013. Source: Own calculations based on microdata from Statistics Denmark.





basic school level = primary or lower secondary education (7–9 years of schooling)

vocational training = basic education followed by a crafts-based training plus some lower jobs in health care and retail

short cycle = profession-oriented education mixing theory and practice, typically academy or business academy lasting 1–2 years

long cycle = at least university master's degree

Figure 3. Proportional share (%) of four main educational background of labour force (basic school, vocational training, short cycle education and long cycle education) by the proportional change of the number of workplaces (%). Upper graph is in urban municipalities, lower graph is in peripheral municipalities. Source: Own calculations based on microdata 2002–2013 from Statistics Denmark.

positive by a growth of approximately 9% in workplaces. Looking at the peripheral municipalities, we also see a growth of almost 10% in the time-period 2002–2013. This growth happened in spite of dramatic decline in sub-period 2008–2013 (the decline was more than 13%) and more milder decline in sub-period 2008–2013 (the decline was approximately 5%). This illustrates the challenges that peripheral regions face. They not only struggle with a declining and aging population but workplaces also disappear; especially after 2008 the number of workplaces was reduced significantly, probably due to industrial transformation towards a more knowledge-based production – also in peripheral areas.

This pattern has made many politicians focus on developing policies that can attract highly educated labour to develop the local industrial structure. In the peripheral areas this is also seen as a cure to revitalise the more remote parts of the country. However, the theoretical dynamics presented in the earlier section of this study are primarily based on studies from urban areas. Thus, it is relevant to ask whether other policies to promote peripheral growth can be argued for. In the field of regional studies, we have a long tradition for advocating for place-based approaches to regional development. At the same time, politicians and to some degree researchers end up recommending amenity-inspired policies

to turn around the development. This is probably due to lack of better alternatives.

However, the basic assumptions of the amenity-driven argument is that volume in combination with high educational levels matters, but this precondition is difficult for peripheral regions to meet. Thus, it is meaningful to question whether volume and highly skilled labour form the only road to successful development among peripheral municipalities. To come closer to answering this question, Figure 3 is a plot of the relationship between proportional change of the number of workplaces in urban and peripheral municipalities in 2002–2013 and the share of employed people within 4 different educational categories. The top graph shows the relationships in urban municipalities, the lower graph in peripheral municipalities.

Urban municipalities show a weak negative relation between growth of workplaces and a high share of employed with basic school educational and vocational training levels. Also, urban municipalities show a positive relationship between growth of workplaces and short, medium and long cycle education levels. This indicates a positive relationship between growth of workplaces in urban municipalities and what can be coined theoretical educational groups. This fits very well with the assumptions the before-mentioned theoretical approaches to regional development build upon.

When addressing the peripheral municipalities, the same pattern more or less arises (Figure 3). Theoretical educational levels show a positive relation to growth of workplaces. Again, it fits with what we would expect based on the mainstream theoretical arguments. However, the most positive relation between growth of workplaces and a category of education is the vocational training. This of course can partly be ascribed to the industrial structure of most peripheral municipalities. However, it also shows that focusing on attracting and retaining highly skilled may not be the only road to regional development for peripheral regions. Investigating the industrial structure and targeting people with applicable skills, e.g. vacation training skills, might show just as promising, or even more, compared to focusing solely on labour with higher educational skills.

Concluding remarks

This article has shown the current development in peripheral Denmark as an example of the tendencies that can be found in many countries across Northern Europe. It shows that especially since the financial crisis in

2008, peripheral regions have been struggling with depopulation and a dramatic decline in job growth. This brings challenges to peripheral areas, and since most theoretical arguments build on findings from urban areas, peripheral areas can easily apply development policies that rely on dynamics that are not found in peripheral areas. Thus, other policies need to be developed. The results from this study shows that vocational training also shows promising relationships with employment growth in peripheral areas; accordingly, one thought is that development policies of peripheral areas should focus more on the skills at place and the closely related skills rather than aiming at high end educational skills exclusively.

References

- Chen, Yong & Stuart S. Rosenthal (2008). Local amenities and life-cycle migration: Do people move for jobs or fun? *Journal of Urban Economics*, 64(3), 519–537.
- Clark, Terry Nichols, Richard Lloyd, Kenneth K. Wong & Pushpam Jain (2002). Amenities drive urban growth. *Journal of Urban Affairs*, 24(5), 493–515.
- Clifton, Nick, Phil Cooke & Høgni Kalsø Hansen (2013). Towards a reconciliation of the 'Context-less' with the 'Space-less'? The creative class across varieties of capitalism: new evidence from Sweden and the UK. *Regional Studies*, 47(2), 201–215.
- Essletzbichler, Jürgen & Lars Winther (1999). Regional technological change and path dependency in the Danish food processing industry. *Geografiska Annaler: Series B, Human Geography*, 81(3), 179–196.
- Florida, Richard (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*. New York: Perseus Book Group.
- Florida, Richard (2005). *The Flight of the Creative Class*. New York: Harper Business.
- Glaeser, Edvard L. (2011). *Triumph of the City – How Urban Spaces Make us Human*. Basingstoke: Pan Macmillan.
- Hansen, Høgni Kalsø & Louise G. Aner (2017). On the location dynamics of highly educated people migrating to peripheral regions of Denmark. *Population, Space and Place*, 23(8), 1–12.
- Hansen, Høgni Kalsø & Thomas Nedomysl (2009). Migration of the creative class: evidence from Sweden. *Journal of Economic Geography*, 9(2), 191–206.
- Henderson, Jeffrey, Peter Dicken, Martin Hess, Neil Coe & Henry Wai-Chung Yeung (2002). Global production networks and the analy-

sis of economic development. *Review of International Political Economy*, 9(3), 436–464.

Jacobs, Jane (1969). *The Economy of Cities*. New York: Random House.

Lorentzen, Anne (2009). Cities in the experience economy. *European Planning Studies*, 17(6), 829–845.

Peck, Jamie (1996). *Work-Place: The Social Regulation of Labor Markets*. New York: Guilford Press.

Scott, Allen John (2008). *Social Economy of the Metropolis*. Oxford & New York: Oxford University Press.

Smidt-Jensen, Søren, Christine Benna Skytt & Lars Winther (2009). The geography of the experience economy in Denmark: Employment change and location dynamics in attendance-based experience industries. *European Planning Studies*, 17(6), 847–862.

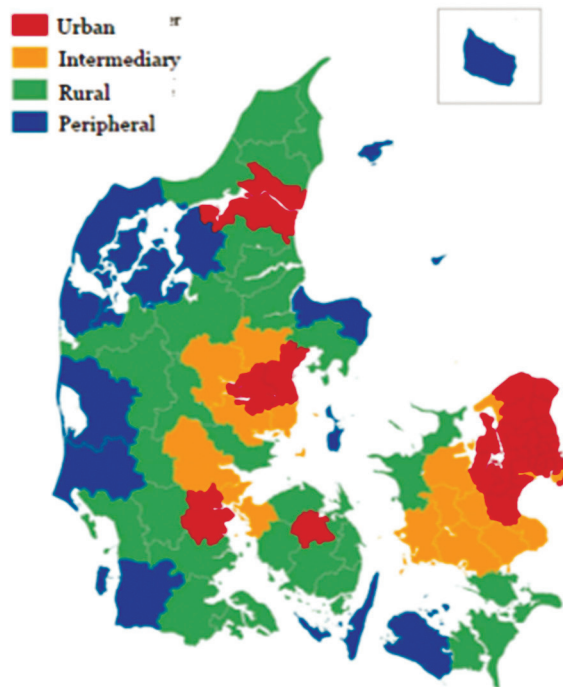
Storper, Michael (1997). *The Regional World: Territorial Development in a Global Economy*. New York: Guilford Press.

Storper, Michael & Allen J. Scott (2009), Rethinking human capital, creativity and urban growth. *Journal of Economic Geography*, 9 (2), 147–167.

Storper, Michael & Richard Walker (1989), *The Capitalist Imperative: Territory, Technology, and Industrial Growth*. Cambridge: Blackwell Publisher.

UN (2019). Available: <https://www.un.org/en/development/desa/population/index.asp>. Accessed 02.01.2020.

Winther, Lars (2001), The economic geographies of manufacturing in greater Copenhagen: Space, evolution and process variety. *Urban Studies*, 38(9), 1423–1443.



Geographical areas of Denmark based on 14 different characteristics (Danish Ministry of Housing, Urban and Rural Affairs, 2007).