The impact of the establishment of a university on the regional labour market for graduates

Gerwin Evers
Aalborg University
Business and management/IKE group
evers@business.aau.dk

Abstract

Competition has changed over the last decades from being centred around capital endowments and labour costs, to be based on the access and the capabilities to utilize knowledge (Chinying Lang, 2001; Malmberg & Maskell, 2002). Knowledge has become the key resource that enables organisations to adapt, innovate and compete in a rapidly changing environment (Grant, 1996; Riesenberger, 1998). Universities are expected to play an important role in the change to a knowledge based economy (Etzkowitz & Leydesdorff, 1995). Although universities can fulfil this role by directly supplying knowledge to other actors in their environment, the main university mission revolves around the training of a high skilled labour force, which is crucial for a knowledge based economy (Charles, 2006). The number of universities and students grew rapidly in the 20th century and by the mid of last century the majority of the larger cities were hosting a university (Perkin, 2007). Following this trend, stakeholders in peripheral regions saw an increasingly low relative university attendance due to commuting distances (Frenette, 2004; Looker & Andres, 2001), and a brain drain from their region due to students moving out for study and subsequently working in other cities (Groen, 2004; Liping & Kunfeng, 2014). These both developments left their industries with a less trained workforce compared to more central regions (T?dtling & Trippl, 2015), which also makes it harder for businesses to tap into a university knowledge reservoir (D ‘este, Guy, & lammarino, 2012). Awareness of these developments spurred lobby initiatives by stakeholders in peripheral regions for the establishment of a university or a branch campus in their region (Charles, 2016). After attracting a university, peripheral regions showed an increased university attendance among local youth (Frenette, 2009), and effects of universities on human capital development (Abel & Deitz, 2012). In addition, having a university in the region might have even a bigger impact on the educational opportunities for people at a later age, when family responsibilities reduce their mobility and thereby their opportunity to study in another region (Charles, 2016). Hereby universities can increase the absorptive capacity of local companies which in turn can revitalize peripheral regions (Charles, 2006). However, Charles (2016) show that the establishment of a university is not a straight forward process and is neither irreversible. While new founded universities might succeed in creating a steady flow of graduates to the labour market, there needs to be a demand
from the local labour market in order to let the region benefit from the university.
Considering that universities were first assigned to the more central and developed regions, the peripheral regions without a university are often characterized by an industry structure skewed to SME and R&D non-intensive companies (T?dtling & Trippl, 2005). Therefore, it is questionable whether there is sufficient local labour market demand to absorb all graduates that are coming from a new university. It might be that the first graduate cohorts can fill existing shortages, but that the structural demand is too low in the long run. This could affect the wages earned and mobility rates of graduates from the new university. However, it is unclear in which direction these labour market affects work, e.g. wage decrease or increase, and how these effects develops over time, is unclear. Therefore, this paper will focus on the following question in order to study this in more detail:
What impact does the establishment of a new university have on the labour market for graduates in peripheral regions over time?
An answer to this question will be provided by a quantitative case study on the North Denmark region and its in 1974 founded university. The availability of micro-level register data provides the opportunity to study the impact of a new university on the regional labour market in great detail.

The results indicate that Aalborg University delivered from its early days graduates for which a labour market demand existed. This study offers some insights from which policymakers and universities can draw a lesson; a new established university is able to deliver graduates to the labour market that meet a certain demand, and thereby offer their local industries highly skilled workers. This shows once again the important role the university can play in building human capital in peripheral regions.
The impact of the establishment of a university on the regional labour market for graduates

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Gerwin Evers
Innovation, Knowledge and Economic dynamics (IKE) group, Aalborg University
Role of Universities in Regional Innovation and Development (RUNIN) training network
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Abstract

Universities are expected to play an important role in the change to a knowledge based economy. Although universities can fulfil this role by directly supplying knowledge to other actors in their environment, the main university mission revolves around the training of a high skilled labour force, which is crucial for a knowledge based economy. Over the years, most central regions were able to create a university, which was followed by university establishments in peripheral regions. Although these universities contributed to the creation of human capital, however, to which extent this human capital matches the demand in peripheral regions, that tend to be characterized by SME and non-knowledge intensive industry structure, is questionable. A mismatch from supply or demand could potentially affect the wages or mobility of the graduates of the new university. To examine this, we raise the following question:

What impact does the establishment of a new university have on the labour market for graduates in peripheral regions over time?

Danish interlinked micro data on the individual and firm level is employed to answer this for the case of Aalborg University. We expected university graduates from the early cohorts, are likely to be a good position on the labour market, having a positive effect on wages, due to a limited supply and some existing demand that was in place otherwise the university would not have been established in the region. However, taken into mind the fast growth that most new established universities experience, and the expectation that the knowledge intensity of the regional industry structure is not able to develop in the same pace, we are expecting that supply will grower faster than demand, decreasing the positive effect on wages that the early cohorts experienced. Next to that, we are expecting that as a result of the same dynamic mobility out of the region will increase over time.

Our study finds that if controlling for labour market experience, cost of living and social capital, graduates from the new university earn significantly more than their counterparts from other regions with the same degree. As expected we also find that there is convergence over time, which points at the weakening of the advantage. However, this seems not to stimulate mobility by local graduates. The study shows policymakers that establishing a university is beneficial for the region from a short-term perspective since it is meeting a labour market demand. Next to that, the university showed in the long-run the ability to become a supplier of high skilled graduates on the national level. This study has shown the important role new universities can play in delivering the required human capital to the industries in peripheral regions.
1. Introduction

Competition has changed over the last decades from being centred around capital endowments and labour costs, to be based on the access and the capabilities to utilize knowledge (Chinying Lang, 2001; Malmberg & Maskell, 2002). Knowledge has become the key resource that enables organisations to adapt, innovate and compete in a rapidly changing environment (Grant, 1996; Riesenberger, 1998). Universities are expected to play an important role in the change to a knowledge based economy (Etzkowitz & Leydesdorff, 1995). Although universities can fulfil this role by directly supplying knowledge to other actors in their environment, the main university mission revolves around the training of a high skilled labour force, which is crucial for a knowledge based economy (Charles, 2006).

The number of universities and students grew rapidly in the 20th century and by the mid of last century the majority of the larger cities were hosting a university (Perkin, 2007). Following this trend, stakeholders in peripheral regions saw an increasingly low relative university attendance due to commuting distances (Frenette, 2004; Looker & Andres, 2001), and a brain drain from their region due to students moving out for study and subsequently working in other cities (Groen, 2004; Liping & Kunfeng, 2014). These both developments left their industries with a less trained workforce compared to more central regions (Tödtling & Trippl, 2015), which also makes it harder for businesses to tap into university knowledge (D’este, Guy, & Iammarino, 2012).

Awareness of these developments spurred lobby initiatives by stakeholders in peripheral regions for the establishment of a university or branch campus in their region (Charles, 2016). After attracting a university, peripheral regions showed an increased university attendance among local youth (Frenette, 2009) and also offers people at a later age the opportunity to get a degree when their mobility is limited by family responsibilities (Charles, 2016). Hereby university contribute to the development of human capital (Abel & Deitz, 2012), which can be utilized by local companies and can support the growth of knowledge-intensive industries in these regions, that traditionally tend to rely on SME’s and non-knowledge intensive companies (Tödtling & Trippl, 2005). However, the extent to which regions are able to transform their industries, and capture the benefits of the university by offering enough employment to the fast growing supply of graduates to the local economy, is questionable given that these processes tend to be gradual (Whitley, 1992). A non-responding labour market would lead to an inevitable mismatch between the supply and demand for graduates in the region, which in turn could influence wage development and mobility of these graduates.

Currently, there is little known about the extent to which the regional labour market is able to respond to the establishment of a university, and therefore we are focusing this study on answering the following question:

What impact does the establishment of a new university have on the labour market for graduates in peripheral regions over time?

An answer to this question will be provided by a quantitative case study on the North Denmark region and its in 1974 founded university. The availability of micro-level register data provides the opportunity to study the impact of a new university on the regional labour market in great detail. These insights can offer policymakers a better understanding of the impact of the establishment of a new university in the region.

The following sections will address subsequently the theory, in which some hypotheses are developed, the methodology, in which the use of register data is explained, followed by the results. The paper ends with a discussion and conclusion.
2. Literature review

Peripheral regions are often characterized by innovation systems that are suffering from organisational thinness in which the industrial composition is skewed to SMEs, which tend to engage less in knowledge intensive activities like R&D and innovation (Tödtling & Trippl, 2005).

A regional focus on activities that are knowledge non-intensive reduces the demand from the local industry for graduates (Paul, 2011). However, the establishment of a university requires an initial demand in the region, otherwise it is hard to justify the location of a university, since funding of higher education is increasingly coupled to the potential benefits to the economy (Perkin, 2007). Therefore, national governments often do not start from scratch, but build from pre-existing higher education institutions, that can be merged and upgraded to a university status. After the successful establishment of a university, universities tend to experience a fast growth in which a doubling of students numbers within a few years is not uncommon (Times Higher Education, n.d.). This might be caused by an increased university attendance among local youth (Frenette, 2009) combined with incentives from the higher education funding systems that reward universities for delivering graduates (Chatterton & Goddard, 2000) and an non-local outlook that universities characterize as organizations.

2.1 Graduate wages

The first cohorts of graduates are entering the labour market at a time when there is unmet demand for high skilled people or else the university would never have been founded in that region. This makes it likely that there is an above average demand in the region for the first cohorts of graduates positively affecting their wages. On the contrary could be argued that the first cohorts of graduates are in a disadvantageous situation due to the lack of track record of the new university, which normally functions as quality indicator of the graduate. However, this is probably less the case for brownfield universities, which can benefit from the reputation of the preceding higher education institutions.

Before making any hypotheses regarding the effects on wages, we should take in mind two structural factors that affect wages. First, multiple studies have found a positive relationship between experience on the labour market and wage growth (Altonji & Williams, 1992; Medoff & Abraham, 1980). By gaining experience on the labour market, employees develop skills due to learning by doing, which improve their value on the labour market. Second, wages tend to vary between regions, with a specific trend that employees in metropolitan areas are earning more than in other parts of the country. A study of the US Bureau of Labor Statistics found an hourly wage premium of 3 dollars for employees in metropolitan areas, compared to their counterparts in other regions (Cover, 2004). The wage difference might be necessary to compensate for the higher cost-of-living. Considering the reasoning above, we have to control for labour market experience and cost-of-living.

Following the reasoning above, we come to the first hypothesis:

H1: Being part of the first graduate cohorts has a positive effect on the received (controlled for degree, labour market experience and cost-of-living)

When the initial demand is saturated, and every year more and more graduates are entering the regional labour market, the regional industries need to increase their knowledge intensity in order to maintain the demand for these graduates. However, increasing the knowledge intensity of the regional innovation system takes time (Maskell, Eskelinen, Hannibalsson, Malmberg, & Vatne, 1998; Tödtling & Trippl, 2015; Whitley, 1992). Therefore, it is questionable whether the regional demand for graduates can keep pace with a fast growing supply of graduates by the new university. Next to that, universities tend to be non-local in their
outlook, and aim by specializing in specific disciplines to attract students from outside the region and to serve to national and global labour markets. This can lead to a weakening of the initial match between the regional labour market and graduates, and an overproduction of graduates for some degrees.

Micro-economists have some assumptions about the effects of overproduction. First, overproduction can drive prices down, which means in this case lower wages for graduates (Pindyck & Rubinfeld, 2013). Eventually we might see that the wage premium that the early cohorts received, is diminishing over time. The reasoning above leads to the second hypothesis:

H2: The positive effect on relative graduate wages in a region with a new established university will weaken over time (controlled for degree, labour market experience and cost-of-living)

2.2 Graduate mobility
Second, overproduction will eventually not only reduce the wage premium, but can also stimulate mobility (Pindyck & Rubinfeld, 2013). Frenette (2009) found for example that the establishment of a university increased the likelihood of local young people moving out of the region after graduation. This implies that moving to another region, in this case when employment conditions are becoming less attractive, is definitely an option for graduates. The combination of a lower relative wages, employment in a job not related to the study, or even unemployment, might increase the likelihood for graduates to move to other regions. However, graduate mobility is not only influenced by wages, but also the role of family ties needs to be kept into consideration, which implies that the personal optimum is not achieved if earning a premium wage requires migration((Costa & Kahn, 2000; Eliasson, Lindgren, & Westerlund, 2003; Green, 1997; Mincer, 1978; Nilsson, 2000). However, these effects could be limited by the high quality of infrastructure in countries like Denmark.

Following the reasoning above, we still expect an increased mobility in hypothesis 3:

H3: University graduates in regions with a new established university are over time more likely to move to other regions for employment
3. Methodology & case study overview

This section will give insight in the case and describe the data, variables, and data analyses of this study.

3.1 Empirical context

North Denmark is a region in the northern tip of continental Denmark. Population numbers show that North Denmark is the smallest Danish region with nearly 600,000 inhabitants, from which more than a third are living in the main city Aalborg (Statistics Denmark, n.d.-a). The region shares many of the characteristics that are typical for a peripheral region; a focus on small non-knowledge intensive companies, a negative migration balance, relatively high unemployment numbers and a lower educated workforce. To turn the tide, local stakeholders successfully lobbied for a university, which was established in 1974 in the region. The region hosted prior to the establishment of the university a few technical higher education institutions that formed the foundation for the new university. This meant that the university did not need to start from scratch and the institution had already some legitimacy in the region. The change to a university status led to a sharp increase in student numbers from 1,635 in 1974 to a quadrupled number in 1990 (Aalborg University, n.d.-a). Nowadays, Aalborg University (from now on AAU) is the fourth university of Denmark, based on the number of full-time students (20,506 in 2016), and spreads among three cities, but with a strong focus on the Aalborg campus which hosts 81% of the students. The university counts with five faculties (Humanities, Social Sciences, the Technical Faculty of IT and Design, Engineering and Science, Medicine) from which the Faculty of Social Sciences with 6,212 students is the largest. However, the heritage of the preceding higher education institutions is still visible in the strong technical character of the university (between 39% or 48% of the students are enrolled at one of the technical faculties, depending on whether the Faculty of Medicine is included (Aalborg University, n.d.-b). The technical character forms a good match with regional specialisations in manufacturing industries and construction.

The other Danish universities are located in the other urban centres with Copenhagen in the Capital region (hosting University of Copenhagen, Copenhagen Business School, IT University of Copenhagen and Technical University of Denmark), Roskilde University in Zealand, Aarhus University in Central Denmark and the University of Southern Denmark in Odense. Compared to the other universities, a large share of the AAU graduates is moving to other regions: only 54% of Aalborg University graduates (with a bachelor, master or PhD degree) who found their first job after graduation between 2000 and 2010, did so in North Denmark, the lowest regional average. This trend is related to the small size of the local labour market, vis a vis the number of students trained at the university. However, North Denmark is also the region with the largest percentage inflow of graduates from other regions (49%), and more than a third of them finds their first job after graduation in the region ((Drejer, Holm, & Nielsen, 2014a, 2014b).
3.2 Data, variables and analyses

The data source used in this study is register data from the Danish Integrated Database for Labour Market Research (IDA). This database contains interlinked micro data from all Danish firms and inhabitants, starting from 1980 until nowadays, with 2013 as latest year that the data is available for research purposes. The main advantage of the IDA database is that it allows to use the whole population for the analyses without sampling, and contains a wide set of objective variables (Timmermans, 2010). However, a significant industrial recoding in 2007, and the lack of availability of data for some variables for some years, limited our analyses to the timespan between 1987 and 2007. Although the first students that completed their degree at Aalborg University did that in the late 1970s, the data allows still tracking the development of the graduates from 1987, which allows us to study the graduate labour market in great detail 30 years back in time.

University graduates are defined as people that received their highest completed degree from a university. For the main part of the analyses, we are interested in degrees that are taught at the AAU campus in Aalborg, since the major impact of the AAU will be on the labour market for people with those degrees. For our analyses we focused on graduates employed in the private sector, which includes all sectors except the primary and public sector. This decision has been made since the private sector is more interesting from a scientific and policy perspective. The first two hypotheses are focused on wages. For wages hourly earnings are used since it reflects the value on the labour market better than total wage would do, since total wage would be significantly influenced by the prevalence of part-time employment contracts. However, for a part of the population a valid estimate of number of working hours is lacking, and therefore this parts of the population is excluded from the analyses (Statistics Denmark, n.d.). The wage analyses makes use of the AAU graduates and a control group that is composed of people with the same degree and labour market experience, but whom received their degree from an university outside North Denmark. AAU graduates for which no ‘control graduate’ was available are excluded from the analyses. Labour market experience is based on the number of years since graduation, and is divided into four categories; 0-4 years experience, 5-10 years experience, and more than ten years experience. An additional category is created for people with a missing graduation year. The 5-10 years category is substantial larger, but that is acceptable given that the majority of the wage growth takes place early in the career (McCue, 1996). Both groups include only local graduates, which means that prior, during and after their study these graduates resided in North Denmark for the AAU-group, and outside North Denmark for the control group. This decision is made to filter out social capital effects on wages of graduates; comparing graduates that entered the labour market with a well-developed local network due to having studied and lived in the region to graduates that moved from other regions, would insert a bias in the analyses. To control for the ‘cost-of-living’ effect a yearly cost-of-living index is calculated based on hourly wage differences between North Denmark and the rest of Denmark, while controlling for education, labour market experience and sector. It turns out that wages in North Denmark are about 8% lower (small variation over time is observed) than in the other regions. The cost-of-living effect is excluded by multiplying the wages of the graduates from outside North Denmark with the yearly cost-of-living index, which result in a wage controlled for the cost-of-living effect. Subsequently the mean the wages is calculated for both the group of AAU graduates and the control group. Comparing these groups will enable testing hypotheses 1 and 2. Appendix I gives further explanation on the definition of the used variables.

For the mobility analyses, based on the location of residence 5-7 years prior and 3-5 years after graduation, four migration patterns are distinguished for AAU graduates; locals (prior and after study living in North Denmark), leavers(prior in North Denmark but after study outside North Denmark), visitors(prior and after study outside North Denmark) and stayers (prior outside North Denmark but after study in North Denmark). A comparison between these groups is used to give insight in the absolute net mobility and the relative share of graduates that are staying in the region after graduation, which will enable testing hypotheses 3.
4. Empirics

This chapter will start with given some descriptive statistics, followed by the analyses of wage and mobility development.

4.1 Descriptive statistics

The Danish population grew from 5.1 million in 1987 to 5.5 million in 2007, around 550 thousand from them living in North Denmark. The sample includes 51 graduates in 1987 until 2428 in 2007. The mean wage of the studied AAU group developed from 120 DKK in 1987 to 251 DKK in 2007 (1€ = 7.43 DKK, 2017).

4.2 Graduate wages

Figure 2 gives an overview of the wage development of the AAU group and the control group, in which controlled is for the price-level index. A linear regression shows a similar development of the wage of both groups, more than doubling over the studied period. Although this increase is substantial, controlling it for inflation rate of 85% over the studied period would explain most of the wage growth. Figure 3 gives the comparison of the same data, in which the control group functions as index. It is clearly visible that in the early days AAU graduates earned a wage premium, compared to graduates with the same degree and experience but living in other areas. This leads to the confirmation of hypothesis 1.

However, if we study the wage development over time, we see that the wage premium of the AAU group is disappearing, ending up with a lower wage than the control group. This is in line with hypotheses 2.

4.3 Graduate mobility

For the mobility analyses, we are looking at a slightly modified sample. In the previous analyses, we only included graduates from North Denmark that were staying there after graduation. Since we are interested in mobility patterns, we have included also people from different mobility patterns.

Figure 4 shows how the number of AAU graduates of every yearly graduate cohort over the four mobility patterns. Locals are forming together with leavers the majority in the early graduate cohorts. This indicates that AAU in the early years had mainly a regional function aimed at increasing the human capital level of the
local youth. However, over time we also see that the number of visitors is increasing rapidly, which indicates that AAU is over time also able to develop a function as a supplier of human capital to the other regions of Denmark. Even some of the students from outside decide to stay in the region, and their share is increasing over time.

Figure 5 gives an overview of the development of the net mobility, which is the difference between leavers and stayers. Over the whole studied time period there is a quite stable brain drain from the region to other regions in Denmark. However, this is not unexpected given the fast growing student numbers. Therefore, figure 6 shows net outward mobility as share of the graduates that are originally from North Denmark. This calculation excludes visitors, which is necessary since visitors are seen as a separate group that are just coming to a region because the university is offering a degree they like, and therefore a growth in visitors does not reflect in anyway outward mobility due to labour market conditions.

For a more detailed insight in this downward trend we look in figure 7 at the likelihood of graduates staying in North Denmark after graduation, and make distinction between graduates originally from North Denmark, and graduates that came from outside. We observe for both categories a slight increase in the share of people that is staying in the region over time.

Considering the presented evidence, we need to reject hypotheses 3.
5. Discussion

The results seem to point at an above average labour market position for graduates from the early cohorts of a peripheral university. However, this difference seems to disappear over time. This shows that creating knowledge-intensive industry structure that can offer jobs to graduates in the long run is not a given, and although technological change may be perceived as happening and a fast speed, the results of this study, in line with Whitley (1992) and many others, point at that creating a sustainable knowledge-intensive industry structure takes time. We do not find an increased outward mobility over time. Apparently, people are still satisfied with the wage conditions in North Denmark, which when controlled for price-level index are still just a few percentages lower than in other parts of Denmark. This minor difference would not be a large enough motivation for some to move away out of their social network, to explore opportunities elsewhere. It could be that if wage differences become more substantial over time, mobility rates will take off. Another interesting observation is that the university started with a strong regional character attracting mainly students from the North Denmark region, but overtime was able to become a national recognized university, attracting many students to the region, from which a substantial part decided to stay after graduating.

The generalizability of these findings is limited to peripheral regions, since a university will have more impact on a small labour market, than in a larger well developed labour market with already a varied supply of high skilled labour. These findings may be somewhat limited by the fact that the used data allows studying the graduate population from 1987, while the first graduates entered the labour market just before 1980s. Therefore, it would also be interesting to apply the followed methodology on other universities to see if the impact on the labour market is similar, preferably having data from the moment the first graduates entered the labour market. Next to that, it would be interesting to revisit the study of the impact of Aalborg University on the graduate labour market in the future and assess how the effects on wages and mobility might develop, with a specific interest in testing whether further growing wage differences could stimulate mobility.

6. Conclusion

After seeing the establishment of universities in the more peripheral regions, we were wondering what an increase in the supply of graduates would do with the local labour market. Therefore, we raised the following question:

What impact does the establishment of a new university have on the labour market for graduates in peripheral regions over time?

A study, employing interlinked micro data from Denmark, showed the impact of the establishment of Aalborg University on the local labour market. The results indicate that Aalborg University delivered from its early days graduates for which a strong labour market demand existed. However, this effect disappeared over time, which would point at a gradual changing industry structure that develops in a slower speed than the supply of graduates by the new established university. We do not observe effects on mobility of graduate over time, which would indicate that the North Denmark region has also something to offer to them.

The study shows policymakers that establishing a university is beneficial for the region from a short-term perspective since it is meeting a labour market demand. Next to that, the university showed in the long-run the ability to become a supplier of high skilled graduates on the national level. This study has shown the important role new universities can play in delivering the required human capital to the industries in peripheral regions.
7. Acknowledgements

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8. References


9. Appendix

This section provides more insight in the used variables of the IDA micro data, which might especially be relevant for people with access to similar databases.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>IDA variable</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAU graduate</td>
<td>HFINSTNR</td>
<td>HFINSTNR indicates the institution of highest completed education. Following codes indicate AAU: 280776, 851416, 851446</td>
</tr>
<tr>
<td>Degree</td>
<td>HFAUDD</td>
<td>HFAUDD indicates the highest completed degree</td>
</tr>
<tr>
<td>Labour market experience</td>
<td>HF_VFRA</td>
<td>HF_VFRA indicates the year of graduation. Experience is calculated by extracting the graduation year from the year in question.</td>
</tr>
<tr>
<td>Hourly earnings</td>
<td>TIMELON</td>
<td>However, only observations with a valid estimation for number of hours worked are included in the wage analyses (Statistics Denmark, n.d.-b, 1991)</td>
</tr>
<tr>
<td>Region of residence</td>
<td>KOM</td>
<td>Kom indicates the the municipality of residence. Municipality codes are recoded into region codes, using the 2007 geographical lay-out of Denmark</td>
</tr>
<tr>
<td>Sector</td>
<td>PERSBRC</td>
<td>PERSBRC indicates the NACE rev1 sector code for the employer. Only the first two digits are used to assign everyone to one the following sector groups: Agriculture: 1-5, Mining: 10-14, Manufacturing: 15-37, Utilities: 40-41, Construction: 45, (Whole)sale: 50-52, Horeca: 55, Transport and communication: 60-64, Business and services activities: 65-74, Defence: 75, Education: 80, Health: 85, Other: 90-99 Underlined sectors are parts of the private sector.</td>
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