Tilde Marie Bertelsen, Per H. Jensen, Kristian Kongshøj and Rasmus Juul Møberg

Degree and structures of women’s labor market integration: the case of Aalborg, Denmark

FLOWS: Impact of local welfare systems on female labour force participation and social cohesion
About the FLOWS project:

The FLOWS project has been funded under the EU FP7 program, grant Agreement no: 266806. The project started January 1 2011 and ended April 30 2014.

The FLOWS project analyses the causes and effects of women’s labour market integration, which is an issue that represents a major challenge for the European Union and its member states, and is supposedly also a precondition for the sustainability of the European social model. The overall aim is to analyse (1) how local welfare systems support women’s labour market participation, as well as (2) the extent to which (and under which conditions) female labour market integration has contributed to the strengthening social cohesion. The project focuses on how public and private welfare services such as care and lifelong learning intended to support women’s labour market integration have been designed; on how women of different classes, qualifications, ethnicities, and geographical locations have grasped and made use of such policies, and on how the increase in women’s labour market integration has affected structures of inequality and social cohesion.

The study is based on in-depth analysis of eleven cities, i.e. one city in eleven different countries. The cities/countries are: Brno/Czech Republic, Aalborg/Denmark, Tartu/Estonia, Jyväskylä/Finland, Nantes/France, Hamburg/Germany, Székesfehérvár/Hungary, Dublin/Ireland, Bologna/Italy, Terrassa/Spain, and Leeds/UK.

The FLOWS project is composed by 6 academic work packages:

WP 1: Degree and structures of women’s labour market integration
WP 2: Local production systems
WP 3: The local welfare system
WP 4: Local policy formation/local political actors
WP 5: Survey questionnaire
WP 6: Women’s decision making
WP 7: Social structures: cohesion or cleavages and segregation

This working paper series reports work conducted in the seven work packages.
1. Introduction

The aim of this report is to describe the degree and structures of women’s labour market integration in the Danish municipality of Aalborg. Data from Aalborg will continuously be compared with national data for Denmark in order to give a clear profile of Aalborg in a broader national context. Aalborg has been selected for an analysis of women’s formal and informal work patterns for several reasons:

First, female employment rates are rather high in Aalborg. In 2009 female employment rates amounted to 71.3 % (Statistikbanken). As such, Aalborg complies with the FLOWS city-selection criteria. It has been decided to select a city with an employment rate for women with more than 60 % by 2010. This 60 % threshold mirrors an overall target decided in March 2000 at the Lisbon European Council meeting. From a European perspective one can therefore expect that Aalborg exhibit promising practices in the area of female employment. Labour force participation in Aalborg is furthermore close to – but slightly below – the Danish average. In 2009 female employment rates in Denmark amounted to 73.4 %.

Second, transitions from an agricultural to an industrial economy supports the formalisation of women’s work (Pfau-Effinger, 2004), and this trend is further propelled in transitions from an industrial to a post-industrial economy; especially if formal employment growth in the post-industrial society takes place in the public service sector rather than in the private (fast food etc.) service sector (Olofsson, 1994). Aalborg has been selected for this study because Aalborg makes up a natural case for an analysis of the effects from de-industrialisation on women’s formal employment pattern. Aalborg is moving fast from a traditional industry based economy towards a (public based) service economy. Since 1967, the municipality of Aalborg has been the largest employer in the city of Aalborg. The percentage of all employees employed in the service economy in Aalborg in 2006 was 81.7 %, while 82.5 % for the nation as a whole. Proportionally, sectors such as telecommunication, education, health and social institutions (including child and elderly care) are larger in Aalborg than in the rest of the country or in the other three big cities in Denmark, i.e. Copenhagen, Aarhus and Odense. Accordingly, in terms of educational achievements Aalborg is above the national average; in 2006 25.1 % of the population had a higher education, whereas this figure was only 23.8 % for the country as a whole. Also life-long learning is above the national average. The percentage of people in working age participating in one or more adult and further education programs in the year of 2008 was 15.5 % in Aalborg and 14.1 % nation wide.

Third, it is nearly undisputed that welfare state policies and welfare institutions condition the entry of women into the labour market. Especially cheap and high quality child and elderly care institutions may help to bridge the opposition between wage work and family care obligations. As to child care, coverage in Aalborg (67.7 % for children aged 0-2 and 97.0 % for children aged 3-5) in 2009 was slightly more extensive than in Denmark as a whole (65.3 % for children aged 0-2 and 96.8 % for children aged 3-5). Also the coverage of elderly care institutions are more extensive in Aalborg than in the rest of the country. In 2009 coverage of home help was 13.2 % for people aged 65-79 and 57.4 % for people aged 80+ (the equivalent national figures are 8.6 % and 42.5 %, respectively), whereas the coverage of residential homes was 3.8 % for people aged 65-79 and 24.8 for people aged 80+ (equivalent national figures 3.6 % and 22 %). Thus, Aalborg with its extensive child and elderly care institutions has been selected for this study because welfare services in the form of child and elderly care are of particular interest in relation to female employment.
Fourth, immigration impact the formalisation process of women’s work, as overall employment rates for immigrants and their descendants are much lower as for native Danes. Aalborg, however, has a low density of immigrants. In 2009 immigrants only made up 7.6% of total population in Aalborg, whereas the national average was 9.5% and as much as 21.2% in Copenhagen. In 2009 the employment rate for female immigrants in Aalborg was only 48.3%.

In sum, Aalborg makes up an interesting case, as female employment rates are rather high. Employment rates, however, could have been expected to be higher. Female employment rates are below the average in Denmark, even though factors such as educational achievements, care institutions and the ethnic composition of the populations should lead us to expect that employment rates are higher in Aalborg as compared to the average in Denmark.

The report is structured as follows: First a description is made of the size and patterns of women’s labour market integration in Aalborg city in comparison with national experiences. This is followed by a description of women’s and men’s working time patterns. Next the main activity of people in working age (18-64 years of age) who are not in formal employment is accounted for. Finally, wage structures and the quality of leave schemes in the context of welfare programmes are described.

The data in the tables are mostly based on data from Statistics Denmark. The main part of the statistic from Statistics Denmark calculate the total number of employed locally for instance on the basis of the municipality of residence. Thus, it is not possible to make a distinction between the two concepts “Inlandskonzept” and “Inländerkonzept”; people who are employed in the city, but may also live outside the municipality and people who live in the city but may be employed outside the municipality. Data is therefore based on people living in the city and do not take into account whether they are employed inside or outside the municipality.

1.1 Data

The data in this report come mainly from access to Danish registries via Statistics Denmark, processed with IBM SPSS Statistics. The registries to which we have had access cover a range of personal data for everyone in the population aged 18-70 years (of which we have used the data for persons aged 18-64 years. Data for tables 3-9 in the WP1 guideline (and all figures in this report) have been obtained this way. In addition to this comes employment for women by age of youngest child in table 1 and working time patterns in table 2, except the time series for table 2 at the national level.

Data for the rest of tables 1 and 2 have been obtained via publicly available data from the website of Statistics Denmark. These data are also based on registries, except in the case of full-time/part-time rates for Denmark (table 2), which are survey data collected according to the methods used in the European Labour Force Survey.

In addition, whenever data is provided for further education in WP1, these come from UNI-C, The Danish IT Centre for Education and Research, which handles the statistical data collection for the Ministry of Education. Not all tables have information regarding further education, since these data are separate from our available registries, and so we have only been available to break these data down according to the classifications already given to us by UNI-C (such as gender and age, for example).
2. Size and patterns of women’s labour market integration

The employment rate of women in Aalborg is relatively high. In 2009 the employment rate of women aged 16-64 was 71.3. Employment rates, however, were even higher in Denmark as a whole, i.e. 73.4. The high employment rate in Aalborg/Denmark is an out-come of a continuous growth in female employment since the 1960s. Between 1981-2009, female employment rates in Aalborg grew from 59.6 to 71.3 and from 67.0 to 73.4 in the country as a whole. As such, female employment rates in Aalborg are catching up with female employment rates in the rest of the country. The Aalborg-Denmark female employment gap has thus decreased from 7.4 to 2.1 since the early 1980s.

Simultaneously, the gender gap in employment has decreased over the last decades. The decrease in the gender gap in employment can in part be explained by the growth in female employment, in part by an overall decrease in the employment rate for men. Between 1981-2009, the employment rate for men in Aalborg declined from 76.9 to 75.2 and from 81.6 to 77.8 in the country as a whole.

Growth in female employment is mirrored in the influx of women into the labour market. Female labour force participation rates have grown more or less continuously since the early 1960s. This growth in female labour force participation rates, however, has not been unbroken. Since 1995 female labour force participation rates in Aalborg has declined several times, i.e. between 1995-1997 (from 74.3 to 72.4), between 1999-2000 (from 73.8 to 73.3), between 2002-2003 (from 74.1 to 72.7) and from 2007-2009 (from 74.5 to 72.6). In other words, most recently the financial crisis has had a discouraging effect on female labour force participation rates. Nation-wide female labour force participation rates fell from 76.3 to 74.4 between 2008-2009.

As in the rest of the country female employment rates in Aalborg differ in different age groups. Employment rates tend to increase with age. Employment rates for women in Aalborg aged 15-25 is 65.4, but 77.0 for women aged 25-39, and as high as 82.6 for women aged 39-55. When women approach retirement age (which is 65 years of age in Denmark), however, employment rates tend to decrease dramatically. In 2009, the employment rate of women 55-64 years of age was 51.4. Men more or less follow the same pattern as women, although marked differences exist between employment rates of men and women 55-64 years of age. In this age group the employment rate of men is 63.4. Thus, the gender employment gap for people aged 55-64 is 12.1. This gender gap is caused by the fact that people retire in couples in Denmark (Friis, 2011); i.e. women married to an older man leave the labour market when the spouse retire.

It is often assumed that care and upbringing of small children is incompatible with labour force participation, and the experience in Aalborg shows that women with very small children are less attached to the labour market than women with older children. Still, women whose youngest child is 0-2 years of age exhibit relatively high employment rates. Women, whose youngest child is 0-2 years of age have an employment rate of 71.4, while the overall country wide figure is 74.0. Employment rates of women increase as the age of the youngest child increases. The employment rate in Aalborg is 80.0 for women whose youngest child is 3-6 years of age, 84.8 for women whose youngest child is 7-9 year of age, 86.1 for women whose youngest child is 10-14 years of age, and 85.5 for women whose youngest child is 15-17 years of age. Nonetheless, the employment gap between women with young and old children is not overwhelming. Figures seem to indicate that wage work is compatible with care and upbringing of small children. It is notable, that the employment rates for women with children aged 3-17 is actually higher than the averages employment rates for women. Extensive
child care facilities may account for this phenomenon, combined with the fact that most of these women probably are found in age groups where employment usually is at its highest.

Women with small children, however, tend to be more unemployed as compared to women with older children. In 2009 labour force participation rates in Aalborg for women whose youngest child was 0-2 years of age was 77.7, while employment rate was 71.5; i.e. the labour force-employment rate gap was 6.6. This gap was on 5.1 for women whose youngest child was 3-6 years of age, and this gap further declined for women with older children.

3. Working time patterns

As to the working time patterns two statistical sources are available; i.e. register data and survey data. The two data sources calculate working time patterns in different ways.

Register data distinguish between people working full time and part time. People who work 30 hours or more are registered as working full time, while people working 29 hours or less are registered as part time working. According to this definition 43.6 % of all women in Aalborg (and 43.4 % in Denmark) were working part time in 2008. As to men 29.6 % were working part time in Aalborg and 29.1 % in Denmark as a whole in the same year.

The survey data provided by Statistics Denmark employ a different definition of full time versus part time work. In survey data people working 37 hours a week (or more) are registered as full time working, while the category “part time” is composed by two sub-groups. Thus, people working 15-36 hours per week are registered as working “between half-time and full-time”, while people working less than 15 hours per week are registered as “less than part time working”. Based on this definition, the working time patterns are shown in Table 1.

Table 1: Working time patterns in Denmark, 2009 (per cent)

<table>
<thead>
<tr>
<th></th>
<th>Aalborg</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Full time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between half-time and full-time</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Less than half-time</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Statistics Denmark

As can be seen from Table 1 a relative small proportion of males and females work short part time: 8 % of men and 11 % of women work less than half-time. Gender differences are much larger when it comes to long part time work patterns; 10 % of men but 34 % of women work “between half-time and full-time”. 82 % of men but only 55 % of women work full time.

Survey data furthermore seem to indicate that women as well as men are increasingly assuming part time work. Between 1995-2009 the proportion of women in Denmark working part time increased from 39.4 % to 45.3 %, while men working part time increased from 12.9 % to 18.3 %. This is a new trend. Beginning in the 1960s, women used part-time work as a bridge to the labour market.
Until the 1980s, however, part-time work became more and more uncommon, but it seems as though it has regained attractiveness in recent decades.

4. Main activity of people in working age (18-64 years of age) who are not in formal employment (Aalborg)

In this section focus is on how people, who are not in formal employment, are distributed among different activities. Please note, however, that people enrolled in the educational system are included in the analysis, and that the major parts of these students are not fully in “non-employment”. A major part of all students have a formal part time or full time job while they are studying in order to finance their subsistence. It should also be noted, that these numbers exclude people engaged in further education, since data regarding this have not been obtained via access to registries, and so have not been possible to analyse in our data sets, and it is assumed that most of these can also be found in other groups, such as people in employment.

Figure 1 shows non-employment of women in Aalborg. As can be seen the vast majority of women in non-employment are enrolled in the educational system. In total, 38 % of all women in “non-employment” are enrolled in the educational system. 9 % are unemployed, 2 % on maternity leave, 3 % on sickness leave, 16 % have been granted disability pension, 14 % have retired early. Others make up 12 %. Others (here and in the following) cover different categories: people outside the labour force (including women with a status as house-wife), people on leave from their job, people on welfare benefits (but not on unemployment benefits) who are activated, people in unpaid employment etc.

Figure 2 shows that relative more men than women in “non-employment” are enrolled in the educational system. In total 39 % of all men aged 18-64 years of age in “non-employment” are enrolled in the educational system. 12 % are unemployed. Very few have taken out paternity leave, close to zero per cent, while the proportion of men who are on sickness leave equals that of women, i.e. 3 %. 15 % have been granted disability pension, while 11 % have taken out early retirement. In total, 36 % of men and 30 % of women in non-employment have retired from the labour market. As to others, 20 % of all men in “non-employment” belong to this category.
In general, Figure 1 & 2 seems to indicate that men and women in “non-employment” in Aalborg are rather equally distributed among different “non-employment” activities. There is a marked difference though regarding parental leave. 511 women but only 13 men had taken out parental leave at this point in time in 2008.

5. Main activity of women (18-64 years) by age of youngest child (0-17 years)
On average, in 2009 women in Denmark got their first child when they were 29.1 years of age, and Figure 3 shows the main activity of women by age of youngest child.

![Figure 3: Main activity of women (18-64 years) in Aalborg by age of youngest child (0-17 years of age), 2008](image)

Figure 3 show that the presence of small children has a moderate effect on mother’s main activity. In all categories the vast majority of mothers are engaged in formal employment (series 1).

The proportion of women working is a bit lower among women with children aged 0-2 and 3-6 as compared to mothers with children 7-17 years of age, and this is especially true for mothers with children age 0-2. This peculiarity, however, can be explained by the fact that women with children aged 0-2 are entitled to maternity leave.

Mothers with children between 0-2 and 3-6 are more unemployed and more enrolled in the educational system as compared to mothers with children aged 7-17. In turn, mothers with older children are more enrolled in the sickness and disability schemes. Only mothers with children aged 15-17 have used the early retirement scheme; in total only 3 mothers with children age 15-17 have
retired from the labour market. Finally, the proportion of mothers in “others” is higher for mothers with young children as compared with women with older children.

It is furthermore worth mentioning that mothers with young children tend to work part time, whereas women with older children tend to work full time, cf. Table 4; here part time is defined as people working less than 30 hours per week.

6. Main activity of people by age group (18-64 years), 2008

In this section the main focus is on the main activity of people by age group (18-65). Figure 5 shows the main activities of women, while Figure 6 shows the main activity of men.
Figure 5 shows that full time employment for women tend to increase with age. It peaks in the age group 40-54 and tend to decrease for the group aged 55-64. Still, the proportion of women working full time in the age group 55-64 is higher as compared to the age groups 18-24 and 25-39. In turn, the proportion of women working part time decreases with age.

Women aged 25-39 are proportionally more unemployed as compared to the other age groups, while absence due to sickness peaks in the age group 40-55.

Logically, the proportion of women enrolled in primary education is high among women aged 18-24. It decreases markedly with age, and hardly any women age 55-64 are enrolled in primary education.

The proportion of women on maternity leave increases from age group 18-24 years of age to age group 25-39 years of age. As mentioned, women in Denmark (2009) on average got their first child when they were 29.1 years of age.

The proportion of women enrolled in the disability scheme increases with age. A relatively large proportion of women aged 55-64 years of age have been granted disability pension. An even larger proportion of women aged 55-64 have chosen to make use of the early retirement scheme. Entitlement to early retirement commence at the age of 60.
There are no marked differences between different age groups with regard to the proportion of women who are engaged in “others”, including being a housewife (Series 10). Others, however, tend to peak for women in the age group 40-55 years of age.

Figure 6 shows the main activity of men by age group, 18-64 years, 2008.

Figure 6 shows the main activity of men by age group (18-64). The pattern is more or less the same as for women. Major differences are that the proportion of men enrolled in the disability and early retirement schemes are much lower for men than for women, and once again, very few men can be found on maternity leave.

7. Main activity of people by educational achievement (18-64)

In this section focus is on main activity by educational achievement. Figure 7 shows main activity of women in Aalborg.
The proportion of women with a primary/elementary degree in Aalborg gainfully employed is very low. Proportionally many women are suffering from unemployment, disability, early retirement, just as the proportion of “others” in this group of women is relatively high. By contrast, a very large proportion of women in Aalborg with a middle to higher level of higher education are gainfully employed, but hardly any women are unemployed. Also many women who have achieved an upper secondary school level are gainfully employed, while the proportion of gainfully employed women with a short/lower level higher education is surprisingly low; in turn, a high proportion of women in this category are enrolled in “further” education.

Figure 8 shows how the main activity by educational achievement is distributed among men. The activity pattern among men is more clear-cut than among women. Figure 8 clearly shows, that the more educated, the more men tend to be gainfully employed or enrolled in “further” education. Low educated men suffer from unemployment, disability, early retirement and “others”. Still, Figure 8 also shows that a high proportion of low educated men are enrolled in the educational system (Series 4). I.e. many men are here and now low educated, but they are in the processes of improving their educational level.
8. Main activity of people (18-64) with youngest child under 6 years by parental status

Focus in this section is the main activity of people with youngest child under 6 years by parental status. A distinction is made between women living with a spouse and lone mothers. In 2008, in Aalborg there was 9,691 mothers (with youngest child under 6) living with a spouse or in a partnership, while 1,710 mothers, i.e. a total of about 15%, were living alone. Figure 9 shows that the main activity of women with youngest child under 6 differs a lot, dependent on whether the women is living with a spouse or is living alone.
The proportion of mothers in full time and part time employment is much lower for mothers living alone as compared to mothers living as a couple. Figure 9 furthermore shows that the proportion of single mothers who are unemployed, enrolled in the educational system, on sick leave or appear as “others” is much higher as compared to women living with a spouse. In turn, the proportion of women living with a spouse on maternity leave is higher as compared with single mothers.

Figure 10 shows the main activity of men with youngest child less than 6 years of age (in Aalborg). A distinction is made between fathers living with a spouse and single fathers. Total number of single fathers is rather low, i.e. only 114 out of a total of 9,668 fathers are living alone.
As the number of single fathers in Aalborg is rather low, one should not make to hasty conclusions. It is clear however, that almost 90% of fathers living with his partner in a couple with youngest child less than 6 years are gainfully employed, while this is only the case for about 65% of single fathers. Furthermore, single fathers are far more extensively unemployed, enrolled in the educational education system, enrolled in the sickness benefit system, enrolled in the disability scheme, and others as compared to fathers living in a couple. In turn, no single fathers have taken out paternity leave, but again it should also be remembered that we do not know if the single parents in this analysis are living with the child or alone by themselves. The low number of single fathers on maternity leave may also reflect that most of the children of these single fathers may be living with their mother.

9. Main activity of people by ethnic group (18-64 years)

In this section the aim is to analyse the main activity of people by ethnic group. Women (Figure 11) and men (Figure 12) are analysed separately.
As can be seen from Figure 11 major differences exist as to the main activity of women by ethnic groups. A large majority of the ethnic Danish women in Aalborg are self-supporting in the form of gainful employment as full or part time workers, while this is only the case for less than half of the immigrants, especially the female immigrants from Middle East countries. Female immigrants furthermore differ markedly as to the proportion of women in “others”. More than 20% of all immigrant women belong to this category as compared to only about 5% of Danish women in Aalborg. Immigrants are more enrolled in the educational system than ethnic Danes, while about 5% of ethnic Danish women in Aalborg – but hardly any immigrants – are enrolled in the early retirement scheme. Immigrant women form Middle East countries, especially, are severely suffering from unemployment, whereas there are no major differences between Danes and immigrants and when it comes to maternity leave or sickness/disability leave, while a relative high proportion of women from the Middle East countries have been granted disability pension.

Whereas Figure 11 shows the main activity of women, Figure 12 shows the main activity of men by ethnic groups in Aalborg. Male immigrants suffer from many of the same labor market problems as female immigrants, but we can see that Middle Eastern men do much better than their female counterparts.
As compared to immigrants very few ethnic Danish men in Aalborg belong to “others”; a small proportion of ethnic Danes have retired early, while a relative high proportion of men in Aalborg from Middle East countries have been granted disability pension. The proportion of sick men from the Middle East countries is also higher compared to the other groups.

10. Gross salary of employed women/men, 18-64 years of age

Figure 13 shows the wage structure for part-time working men and women in Aalborg.
As can be seen from Figure 13 Aalborg is marked by an unequal wage structure. Regarding hourly wages, 78.5% of part-time working women earn less than 30 EURO per hour, while only 61.7% of part-time working men earn less than 30 EURO per hour. When it comes to gross annual salary for part-time workers, 79.6% of women earn less than 40,000 EURO per year, whereas only 63.8% of part-time working men earn less than 40,000 EURO gross annually.

In Figure 14 the wage structure for full time working men and women is illuminated. As can be seen, gender inequalities are more or less the same as for part-time workers. Only about 7.3% of all full time working women earn more than EURO 60,000 per year annually in Aalborg, whereas the same figure for men is 24.4%.
11. Women in leave schemes

Not available