WOMEN AND MEN’S EMPLOYMENT IN THE RECESSIONS OF THE 1990s AND 2000s IN SWEDEN

Anita Nyberg
Gender Studies, Stockholm University, Stockholm, Sweden

The segregation hypothesis predicts that women are sheltered in recessions, since they are over-represented in the public sector and this sector is less affected by the economic cycle, than are male-dominated manufacturing and construction. Gender segregation in the labour market is strong in Sweden, especially as the local government sector is big and many women work in this sector. It could then be expected that women's employment should be protected relative to men’s. However this has not been the case. On the one hand, employment has been lost in local government, while on the other hand women have found jobs to a greater extent than men in the private sector. This is partly because of employment transfers from local government to the private sector, due to privatisation, outsourcing, etc. But structural transformations towards a bigger private service sector and the recruitment of employees with higher education may also benefit women.

Keywords: Sweden, Recession, Gender segregation, Employment, Public sector, Private sector.

At the onset of an economic recession, men tend to lose comparatively more jobs than women. The reason is that the labour market is gender segregated, with a greater concentration of male workers in cyclically sensitive sectors, such as construction and manufacturing. In contrast, women are over-represented in less volatile areas such as care, health, education and the public sector in general (Applebaum, 2011; Bettio et al., 2012; McKay et al., 2013; Rubery and Rafferty, 2013). In fact the overall level of gender segregation in a country is positively associated with
the difference in employment losses for women and men. In the EU-27, men experienced comparatively higher employment losses than women in countries where gender segregation was greater during the recession of the late 2000s.

If employment in care, health, education and the public sector in general shelter women in a recession, then women’s employment in Sweden could be expected to be relatively secure. Gender occupational, and especially gender sectoral, segregation is higher in Sweden than for average EU–27, although declining (Bettio and Vershchagina, 2009, p. 33–34).1 Sweden, together with other Nordic countries, has the highest share of employees in the public sector of the OECD-countries (Statskontoret, 2011, p. 23) and a very big majority of those working in the public sector are women.

However, for the same reasons that women may be protected in a recession, they may be at a disadvantage in the aftermath of a recession. Stability in employment is a benefit during the downturn, but the downside may be that the increase in employment is slower when recovery sets in. Another concern of the above-mentioned researchers is the risk that budget consolidation and austerity policies will mean cuts in public employment, which will affect women more than men. A highly gender segregated labour market, a big public sector and women’s over-representation in this sector may then turn into a disadvantage especially for women in Sweden. The aim of this article is to assess and compare the development of women and men’s employment between 1990 and 2013 with a focus on two recessions: one in the first half of the 1990s and the other in 2009. The article also deals with whether women have fared better or worse relative to men in the whole economy and in three different sectors: the private sector, local government and the state sector. It examines whether there is any evidence that employment in the public sector has shielded women.

The next section deals with economic approaches to gender and recessions, including theories and methodological issues. Section 2 presents the Swedish context concerning economic policy and employment in the whole economy, and Section 3 deals with

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1. The IP index for occupational segregation for Sweden, in 2007, was 27.0 and 25.9 for the EU-27: for sectoral segregation for Sweden it was 21.3, and 18.4 for EU-27 (Bettio and Vershchagina, 2009, Figure 2 and 4).
women and men’s employment in the private sector, local government and the state sector.

1. Economic approaches to gender and recession

Research into the gender effects of recessions began to develop in the context of the 1970s and the development of women’s and gender studies (Benston, 1971; Bruegel, 1979). A number of theories have been developed to explain why – and measure how – women and men may be differently affected by the economic cycle (Bettio et al., 2012).

1.1. The segregation hypothesis

This article looks especially at the segregation hypothesis (Milkman, 1976). According to this theory, segregation between women and men’s work is strong and women’s employment is protected to the extent that it is less dependent on cyclical fluctuations. Women’s employment decreases less than men’s, does not decrease at all or even increases in recessions. One reason is that women are over-represented in health, care and education, and in the public sector in general (Applebaum, 2011; Bettio et al., 2012; McKay et al., 2013; Rubery and Rafferty, 2013).

Bettio et al. (2012) chart the impact of the economic crisis on those working in the EU–27 Member States, as well as some other European countries. The report examines a range of issues including employment, and covers the period from the second quarter of 2008 to the first quarter of 2012. It was found that, in the first years of the recession, labour market segregation effectively sheltered women’s employment. The segregation involves an over-representation of women in service employment (including public sector jobs) and an under-representation in manufacturing, construction and the male dominated branches of the financial sector. The overall level of segregation in a country is linked positively and significantly with the difference in employment losses for women and men. Men experienced comparatively

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2. But there are also other theories, including: the added worker hypothesis, the discouraged worker, the buffer hypotheses, the substitution, and the segmentation hypotheses (Bettio et al., 2012).
higher employment losses than women in countries where segregation is stronger. But labour market segregation may eventually expose women to deteriorating labour market conditions more, when fiscal consolidation significantly curtails public sector jobs.

Rubery and Rafferty (2013) explore the immediate trends in women’s employment during the recession and continuing government debt crisis in the three years from the end of 2007 in the UK. It was found that gender segregation across sectors is the prime factor shaping outcomes in employment. Women’s jobs have traditionally been protected in the public sector, owing both to the type of work undertaken and the tendency for governments to maintain public expenditure to counteract recessionary effects. Up until the end of 2009, this recession was no exception as public sector jobs grew and women benefited in proportion to their sectoral employment share. However in 2009-10, the protective role of the public sector had already begun to decline. Women lost jobs in both the public and private sectors, while male employment recovered slightly before stabilizing. Although in 2011 men lost jobs, the female share of overall job losses remained higher than in 2007–09. Once the 2010 budget cuts in the public sector, estimated to lead to job losses by 2013–15, begin to bite, women’s employment is expected to fall further. The authors point out that sectors protected in one period may become vulnerable or flexible in another. This is particularly evident in the recession of the late 2000s, where the crash was first concentrated in the banking sector – in the past an area of stability and growth – and now in the public sector. Although normally a source of protection, the public sector is poised to become a source of women’s vulnerability to both job losses and downgrading.

Very similar conclusions are drawn by McKay et al. (2013). The initial impact of any economic downturn tends to be borne mostly by men because there is a greater concentration of male workers in cyclically sensitive industries, such as construction and manufacturing. Other sectors – particularly the public sector – are not as vulnerable to the effects of the economic cycle. Women’s employment increased in both the health and education sectors in the initial phases of the UK recession, and overall within the public sector. However, what distinguishes the recession in the late 2000s from previous ones is not just its causes and severity but,
perhaps more importantly, the reaction of governments to the initial financial crisis. The UK Conservative-Liberal Democrat coalition government’s approach to recovery has focused firmly on the reduction of public sector expenditure.

1.2. Methodological issues and indicators

In *The impact of the economic crisis on the situation of women and men and on gender equality policies* Bettio et al. (2012) use as an indicator the peak-to-trough variation in employment in a downturn: i.e., the difference between the highest employment value around the onset of the recession and the lowest (“trough”) value reached after the recession has begun. Subsequent developments are measured by trough-to-latest variation, which are the difference between the latest available figure and the trough value. However, the full gender impact of a recession cannot be assessed without taking into consideration not only the downturn but also the upturn. We need to know to what extent employment is restored after a trough and after how much time. Also, trough-to-peak indicators will be identified, i.e. the change in employment between the trough year and a new peak year, or in some cases latest available data (2013). In this article, data are taken from the Swedish Labour Force Survey compiled by Statistics Sweden (SCB), mainly from seasonally adjusted time series of monthly data for employment, by sector and for the whole of the Swedish economy. These data have been recalculated on an annual basis. Thus, peak-to-trough indicators will rely on annual and not on quarterly data, as in Bettio et al. Peaks and troughs are defined by identifying the year when the level of employment was at its highest, and the year when the level of employment was at its lowest in the recessions of the early 1990s and the late 2000s.

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3. A recession can be defined as “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retails” (National Bureau of Economic Research, 2014).

4. A formula for the recalculation was received from Jacob Hansson, Statistics Sweden, 12 April, 2013.

5. The main reason for using annual instead of quarterly data is that the recession in the 1990s stretched over several years. Another reason is that the timing of a recession differs between women and men. By using quarterly data there is a risk that the effects on men’s employment is overestimated compared to women’s.
First, the peak-to-trough and trough-to-peak indicators for women and men’s employment (of the 16-64 year-old age group) will be investigated for the whole economy. Secondly, the peak-to-trough and trough-to-peak indicators will be identified for women’s and men’s employment in three sectors: the private sector, local government and the state sector. To assess whether women are doing better than men or vice versa, the percentage change in the number of employed women and men will be compared. If the negative percentage change is bigger for men in the downturn, then men are considered to do less well than women, and if the positive percentage change is bigger for men in the upturn, then men are considered to fare better than women. Additionally an increase in the share of women in employment in the whole economy and in the different sectors will be interpreted as women doing better than men. If the number of employed women in the public sector is maintained in recessions, then women’s over-representation in this sector is understood as sheltering women’s employment.

2. The Swedish context

To frame the discussion concerning the impact of recessions on women and men’s employment in Sweden in the 1990s and 2000s, it is useful to consider some long-term changes in women and men’s employment, as well as society’s view on women’s employment and gender equality.

2.1. Women and men’s employment prior to 1990

In the 1960s, there was a discussion in Sweden whether the government should support women’s care work by a cash-for-care allowance or by expanding publicly financed childcare centres and women’s employment (Abukhanfusa, 1987; Hinnfors, 1992; Bergqvist and Nyberg, 2001; Klinth, 2002; Lundqvist, 2007). However, towards the end of the 1960s and in the beginning of the 1970s, a third alternative was being recommended – the dual-earner/dual-carer family. This alternative not only concerned women but men too. Not only should the government support mothers’ employment, but also fathers’ care for their children. In the 1970s, a number of policies were enacted in order to facili-
tate this kind of family, for example in 1971 separate income tax assessment for wives and husbands was introduced, and in 1974 maternity leave was transformed into parental leave and a decision to expand publicly financed childcare was taken. In 1979, rights to six hour day for parents with small children were established, and in 1980 a law against sex discrimination in employment and an Equal Opportunities Ombudsman was set up.

But the most important factor for women’s employment was the rapid expansion of the public sector. Female employment has to a large extent been a positive response to growing demand within traditional areas of women’s employment: education, health care, child and elderly care and social welfare. Considering the rigid sex-typing of occupations, industries and sectors, it is not surprising or contradictory that women’s employment rate increased dramatically without big changes in gender segregation in the labour market (Jonung, 1997; Löfström, 2004). The public sector simultaneously created demand for female labour and facilitated the combination of paid work and a family by providing for example parental leave, child and elderly care. Between 1964 and 1990 employment in local government grew by around 870,000 employees, of whom 743,000 were women and 128,000 were men. At the same time, the number of female employees in the private sector grew by 73,000, while the number of men did not increase at all. In the middle of the 1970s, half of the employed women worked in the public sector.

Women’s employment rate (16-64 years) increased from around 50 percent in the beginning of the 1960s, when the first labour force surveys were conducted in Sweden, to 81 percent in 1990. Although the increase in women’s employment rate slowed down in recessions, it did not stop but continued to expand. During the same period men’s employment decreased from 88-89 percent to 85 percent (see Figure 1).

In 1990, men’s employment rate was 85 percent and women’s 81 percent. Then came the recession of the early 1990s and women as well as men’s employment rates declined sharply. Thereafter, women and men’s employment rates have followed each other

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relatively closely (the gap has been 3-5 percentage points). Besides dramatically increased unemployment, another important reason for the decline in employment in the early 1990s was that young people started to study much more, especially at university (Öhman 2011). Other reasons are related to the increase of both foreign-born persons and the elderly in the population, categories with lower employment rates, even though participation has been increasing among the elderly. The number of so called “housewives” is extremely low. In 1990, 4.3 percent of the women aged 16-64 declared that they were working in the home, a rate that fell to 1.4 percent by 2013.7

2.2. The Swedish economy from 1990-2012: including two recessions

Between 1990 and 2012, there were two recessions in Sweden in which there was a contraction of growth equal to 5 percent: one in the beginning of the 1990s and another in 2009 (see Figure 2).

The development of employment losses in Sweden in the recession of the 1990s can be divided into three phases according to Per Lundborg (2000). Waves of employment losses affected different

Figure 1. Employment rate of women and men (16-64 years), 1963-2013*

* There are breaks in the data series.

7. Calculated from SCB, AKU, 1990, Table 1 and 31 and SCB, AKU, 2013 Table 1 and 16.
sectors of the economy at different times, and spread over the whole economy. The “international phase” was characterized by a combination of international recession and an internal spending crisis. The problems in the export sector were worsened by the policy of supporting a strong Swedish Krona (SEK): the loss of employment hit the export sector and its subcontractors hard. In the “real interest rate phase”, the fixed currency exchange rate policy pursued in a period of relatively high inflation led to high interest rates. This led to a fall in consumption and an increase in savings, which in turn led to employment losses, especially in goods producing sectors selling into the domestic market. When the Swedish krona was allowed to float in November 1992, employment in the export sector grew. The international phase of loss of employment ended, even though the real interest rate phase continued.

![Figure 2. Annual GDP growth, 1990-2013](image)


Substantial losses in private sector employment caused increased costs in unemployment and decreased incomes from taxes. This led to greater public expenditure, as well as reduced revenues. Budget consolidation measures were implemented, including cuts in public expenditure. These in turn intensified employment losses in the public sector. This became the third phase of the recession, the “budget consolidation phase”,

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with high total employment losses in spite of the recovery of employment in the private sector after 1993. The Governments’ main goal was to fight inflation rather than unemployment. According to Lundborg (2001) an alternative could have been an expansionary financial policy. Instead, budget consolidation was carried through by very harsh cuts in spending. This policy, introduced by a Conservative/Liberal/Centre/Christian Democratic government, was based on tough layoffs in the public sector. The latter was subsequently followed up very heavy-handedly by the Social Democratic government. It created long-term balance in the budget, but at the price of a reduction in employment in the public sector. There were cuts in resources to childcare, schools, elderly care and care for the disabled (SOU 2001:79, chapter 1.5) and the number of employees in health and social work declined considerably (Statistisk Årsbok 1997, Table 196 and Statistisk Årsbok 2002, Table 284). After the recession of the early 1990s, it was considered necessary to reform the fiscal policy framework in order make it sustainable in the long term (SOU 2011:11, p. 55). This led to wide-ranging work to develop the budgetary process. A number of retrenchment programs were carried through from 1993 to 1998, and by 1998 the budget had achieved a balance of revenues and expenditure comparable to the prevailing situation before the recession (Kautto, 2000, p. 31).

In 2009, GDP fell by 5 percent. At the beginning of the recession, the Alliance Government resisted stimulating the economy, but eventually allocated grants to the local governments and introduced labour market measures. The floating exchange rate led to a fall in the krona during the recession, and boosted exports. Combined with a relatively expansionary financial policy (against the background of a relatively low public debt), this had a positive effect on the Swedish economy and recovery was fast: GDP increased by 6 percent in 2010 (McKinsey Sverige, 2012). The situation during this recession was very different and was also handled differently than the recession of the early 1990s. The changes in the fiscal policy framework led to a marked structural strengthening of public finances, which was helpful in the latter crisis.

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8. The Alliance consists of the Moderate (conservative), Liberal, Center and Christian Democratic Parties.
Despite the economic downturn in the late 2000s, there were only small budget deficits -0.9 percent of GDP in 2009 and -0.3 percent in 2010 respectively (Swedish Fiscal Policy Council, 2011; IMF, 2011).

The deterioration in Swedish public finances was thus surprisingly small. One of the main reasons was the relatively small decline in employment compared to the substantial fall in GDP. This maintained tax revenue. Another reason was due to the implementation of reforms resulting from a long-term strategy by the Alliance Government. Reduced state funding of unemployment insurance and lower benefit levels stopped unemployment expenditure from increasing sharply as employment fell. At the same time, the sickness insurance reforms led to a reduction in the number of sickness benefit recipients and in a decline of early retirement. Since local governments were affected by decreasing tax revenue, due to the fall in employment and the rise in unemployment, the central government granted them with temporary cyclical support, in order to maintain employment and the quality in welfare services (SALAR, 2011). The local government sector ended up with a large surplus in 2010, partly because local authorities were surprised by a stronger than expected macroeconomic improvements, and partly because of the temporary grants. The Swedish Agency for Public Management has estimated that the temporary grants saved about 8,500 jobs in the local government sector, in 2010 (Statskontoret, 2012).

2.3. Peak-to-trough and trough-to-peak change for women and men, from 1990 to 2012

As mentioned above, women’s employment rate increased from the 1960s up to 1990 even in recessions. But in the beginning of the 1990s, not only did the employment rate of men decrease dramatically, but so did that of women (see Figure 3). This meant a reversal in the long-term upward trend of women’s employment, and since then both men and women’s employment rates have fluctuated with the economic cycle.

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9. The support accounted to SEK13 billion (around €1.3 billion) in 2010, and SEK3 billion (around €300 million) in 2011, provided to the municipalities (Prop 2010/11:100, p. 154). The county councils were given a temporary grant of SEK5.1 billion for 2009 and 2010 (SALAR, 2011, Table 20).
The first peak in the employment was in 1990, for both women and men. This was followed by the recession of the early 1990s, which consisted of three overlapping waves of employment losses (as described above). In 1994, there was a trough for men, whose employment dropped by 13.5 percent (about 316,000 jobs) between 1990 and 1994. The trough for women took place in 1997: their employment dropped by 12.7 percent (about 272,000 jobs, see Table Appendix A). In spite of a small peak in the middle of the 1990s, expansion did not really take off until after 1997. As expected, men’s employment grew faster than women’s. The second peak year for men was in 2001: men’s employment increased by 9.2 percent (185,000 jobs) compared to 1994. Women’s second peak year was in 2002, but the increase in women’s employment (up 8.9 percent or about 167,000 jobs) was slightly smaller than for men. The recession of the early 1990s lasted for a long time and it took more than ten years before there was a new peak. The decrease from peak-to-trough was much bigger than the increase in employment from trough to peak, which means that employment for both women and men was lower in the beginning of the 2000s than in 1990.

In 2004, the dotcom bubble had burst and economic growth slackened, but it was not negative and will not be discussed here in

Figure 3. Number of women and men employed (16-64 years), 1990-2013
(‘000s)

Source: Calculated from SCB, 2014c.
spite of the fact that employment decreased somewhat. Also, recovery after the dotcom crash was rapid and employment rose. In 2008, there was a new peak, but already in 2009 there was a trough for men and in 2010 for women. In this recession the peak-to-trough change in employment was -2.9 percent (68,000 jobs) among men and -1.9 percent (40,000 jobs) among women. The highest absolute number of employed persons was then reached in 2013: men’s employment increased by 3.9 percent (88,000 jobs) while women’s employment increased slightly more with 4.2 percent (87,000 jobs). In this case, the number of employed was a bit higher in the second peak than in the first, and the number of employed is at about the same level as in 1990, but as the population has also grown the employment rate is lower (see Figure 1).

It can be seen that both women and men lost jobs in both recessions, but men lost jobs faster and more extensively than women. However, after the first recession, men gained employment faster and to a larger extent than women, though not in the second recession. Women were clearly faring better than men in the beginning of the 1990s – or rather men were doing worse than women. The share of women in total employment increased since losses of employment were bigger among men. This was also the case in the recession in 2009. In both 1990 and 2013, women’s share in total employment was 48 percent. Whether this is in any way connected to the development of the public sector will be looked at below.

The timing of the peaks and the troughs differs for women and men. This is important to acknowledge when trying to establish if women are protected or not and to what extent. If 1994 and 2009 (the years of greatest GDP contraction) are used as trough years, then men seem to be more affected than women. If instead we use 1997 or 2010 as trough years, then the gender difference is smaller. Men’s employment declines closer to the fall in GDP than women’s, which may mean a male bias in the way a recession is defined.
3. Women and men in the private sector, local government and the state sector

Changes in the number of employed women and men will be investigated here in three different sectors: the private sector, local government and the state sector. Different peaks and troughs were identified above for women and men. As we have seen, there is a difference in timing of peaks and troughs between women and men in the whole economy, which mainly results from women and men being employed in different sectors. If we look at different sectors, then the peaks and troughs take place more or less at the same time for women and men. Here, common peaks and troughs will be identified for all employees: i.e. for women and men together, in the private, the local government and the state sectors.

The Swedish economy is export oriented, high-tech and diversified. Paper, pulp, steel, and water power were the foundation of the economy, which has since developed to include a big service sector, the IT industry, and telecommunications. Sweden has a small domestic market and is extremely dependent on trade with the rest of the world. Almost half of GDP was accounted for by the export of goods and services in 2012, compared to around 30 percent in 1990 (Ekonomifakta 2013). Sweden has one of the world’s largest public sectors, both in terms of expenditure relative to GDP and in terms of the share in employment (Statskontoret, 2011). This is due to an extensive local government sector, while the central government state sector is relatively small. The activities of the central state include the judicial system, defence, international aid and foreign policy, higher education and research, and physical infrastructure (Statskontoret, 2011, p. 11). In contrast, Sweden’s 20 county councils’ main responsibility is health care. There are 290 municipalities, whose most important mandatory tasks are child, elderly and disability care, education before university (including adult education) and Swedish lessons for immigrants. Data about the number of employed are here divided into the private, local government (municipalities and county councils) and the state sectors. While changes in employment in the private sector are a result of changes in market demand, falls in employment in the local government and state sectors have several other sources. For example in rela-
tion to shrinking employment in the private sector, policies may either aim at upholding employment in the public sector by expansionary financial policy, or at favouring budget consolidation which may decrease public employment.

Gender segregation in the labour market is an important explanation as to why women and men are affected differently in recessions. De-segregation has been going on in Sweden for a long time (Jonung, 1997; Löfström, 2004). However, even in the 1990s, Sweden was still one of the high-employment high segregation countries (Bettio and Verashchagina, 2009). The Swedish labour market has since then undergone further de-segregation, but it remains strongly gender segregated: as already mentioned, occupational and especially sectoral gender segregation is higher in Sweden than average for EU-27.

### 3.1. The private sector

In the 1990s, Sweden experienced its worst economic recession of the post-war period, which led to significant restructuring and jobs disappearing from industry (ESO, 2013). For the whole economy, the trough took place in 1994, but in the private sector it occurred in 1993. Figure 4 below shows the development of the number of women and men employed in the private sector between 1990 and 2012. Between the peak in 1990 and the trough in 1993, the relative decline was bigger among male employees than among female. About 15 percent of men lost their jobs (295,000), while this was the case for around 13 percent of women (139,000) (Table Appendix B). It can be pointed out that the number of employees declined, while the number of entrepreneurs/self-employed increased. For the whole economy, we found that men’s employment increased slightly faster than women’s during the expansion following the recession in the 1990s. This is not the case if we only look at the private sector. Women’s relative employment increased faster than men’s: 16.9 percent (155,000) compared to 13.4 percent (221,000) between 1993 and 2001, the new peak year.
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The 2009 recession (after the GDP peak in 2008) was much milder, and recovery came faster than in the recession of the early 1990s (see Figure 4 and Table Appendix B). Men again lost more jobs than women in the downturn between 2008 and 2009, respectively -3.6 percent and -0.6 percent. Also, women gained more jobs than men between 2009 and 2013, respectively 8.7 percent compared to 3.6 percent. Women’s employment even increased more than men’s in absolute numbers: 98,000 versus around 69,000. The share of women among all employed women working in the private sector increased in both recessions, rising from 49.0 percent in 1990 to 52.5 percent in 2001, with a dip in between. This growth continued over the economic cycle in the 2000s, and the share of women rose from 54 percent in 2008 to 57.1 percent in 2013. Women did better relative to men in both recessions, and the share of women among all persons employed in private sector rose continuously from 35.2 percent in 1990 to 36.4 percent in 2001, and from 36.6 percent in 2008 to 38.4 percent in 2013.

The Expert Group for Studies in Public Economy (Expertgruppen för studier i offentlig ekonomi ESO, 2013) has recently presented a study concerning the restructuring of the Swedish economy during 1990-2009. The study does not focus on recessions and gender is not mentioned at all, but it does give some clues as to why women
were doing better than men during this period. It shows that the number of employed in the private sector, in firms with at least three employees, increased by about 350,000 persons between 1990 and 2009. This increase took place exclusively in services, while manufacturing lost employment. If firms with less than three employees are included, the increase in employment in the private sector is about 450,000 persons. During the period 1996-2009 (i.e. after the first crisis), the number of jobs increased by around 400,000 jobs in the service sector, while it decreased by around 100,000 in manufacturing. There are no data regarding the number of women and men employed in private service production, for the relevant time period. But we can safely conclude that the number and the share of women in private service production are higher than in manufacturing. For example, the share of women in manufacturing was 27 percent in 1990 and declined to 24 percent in 2004; in the retail sector, it was 67 percent in 1990 and 64 percent in 2004.10

The structural transformation towards services in the private sector is an important feature in this period, as is the increase of educational levels of employees (ESO, 2013). During the period 1991-2009, the number of employed with only pre-secondary education in the private sector halved, while the number of those with secondary education decreased at the beginning of the 1990s, before increasing subsequently. The number of people with post-secondary education grew continuously and more than doubled until 2009. After the turn of the millennium, there were more persons employed with post-secondary education than with pre-secondary education in the private sector. However the biggest category concerns persons with secondary education. Women’s educational levels are higher than men’s, both among the employed and in the whole population. In 2013, 12.5 percent of employed men and 8.5 percent of employed women had pre-secondary education, while 39 percent of the men and half of women had post-secondary education.11 At university, 60 percent of students are women and 40 percent are men (Högskoleverket, 2012, p. 8). The share of the population which has taken a degree

10. Calculated from SCB, 2014d, AKU. There was a change in definitions in 2005.
11. Calculated from SCB, 2013, AKU, Table 23.
after at least three years of study has increased considerably, especially among women: at the age of 35, 35 percent of women had such a university degree, versus 21 percent of men.

These two structural transformations (the shift to services and higher educational levels) favour women’s employment, since the share of women in services is higher than in manufacturing, and women’s educational levels are higher than men’s. Judging from the share of women in private sector employment, women fared better than men both in the downturns and the upturns. The private sector has become ever more important for female employment. Contributory factors to this may be the expansion of the private service sector, were more women work than in manufacturing (a male-dominated and shrinking sector), and the demand for employees with higher education. There are other factors that will be discussed below.

3.2. The local government sector

Now let us turn to the local government sector, i.e. the municipalities and the county councils. The demand for welfare state services, which mainly consists of care, education and health, increased twice as fast as private consumption for several decades after World War II. The demand for publicly financed childcare has expanded continuously especially since the 1970s, so that today supply more or less meets demand (Nyberg, 2013b). Elderly care expanded in the 1960s and 1970s, but in the 1980s and 1990s the decrease was almost as large (Szebehely, Ulmanen and Sand 2013), while during the 2000s one in four places in homes for the elderly disappeared. The number of persons receiving home-help services increased, but this did not compensate for the reduction of places in homes for the elderly. This has meant a decreasing number of employees in local government, and increased pressure on relatives (see Figure 5).

As in the private sector, employment peaked in local government in 1990. But the trough came later in the local government, in 1997. In the downturn, the relative loss in employment was the same for women and men (14.6 percent), but in absolute numbers it was much higher for women, since this sector is female-dominated. Actually, women lost almost as many jobs in local government as they did in the private sector (Table Appendix B).
The occupational groups that were hit the most were occupations assisting nurses, of which more than 90 percent are women (Eliason, 2011; SCB 2012, p. 62). Between 1993 and 1999, employment declined in these two occupational categories by 34 and 38 percent respectively (Landstingsförbundet 2002). After the 1997 trough, the number of employees picked up somewhat, and a new peak was reached in 1999. Relatively, men gained a bit more than women (up 4.4 percent and 3.1 percent respectively). But the increase was much smaller for both sexes than earlier losses. At the end of the 2000s, there was a loss of employment from the peak year 2007 to the trough in 2010. This time, the relative decline in women’s employment was much bigger than men’s (almost 7 percent), while men hardly lost anything (0.2 percent). Recovery with a peak in 2011 was very modest, but a little better for women (1.5 percent) than for men (0.7 percent) (Table Appendix B).

If women were doing well in the private sector, this is not the case in local government, i.e. in the sector that produces care, health and education. The long term increase in the number of employed in the public sector, which has served women’s employment well, ended abruptly in 1990. We can thus conclude that women have not been protected by the public sector. The number of female employees in local government fell in both recessions,
the recoveries were very modest and the share of women among all employed women working in local government declined from 44-45 percent in the 1990s, to 38.4 percent in 2011. In the local government, women did not do worse than men in the recession of the early 1990s, but their share in the sector decreased from 79 percent in 2007 to 77.9 percent in 2011.

Employment losses in the local government sector are a result of budget consolidation but also of other political decisions. Since the early 1990s, local government (municipalities and counties) has increased possibilities of outsourcing the production of welfare services to private providers (Hartman, 2011). The Conservative/Liberal/Centre/Christian Democratic Government in 1991-1994 opened up competition in local government. During the following years of Social Democratic government (between 1994 and 2006), changes slowed down but there were no serious attempts to reverse policy. When the Alliance government came into power in 2006, policies favouring more competition and private entrepreneurs again received impetus. As a consequence, local governments have been increasingly outsourcing welfare services to private operators. For instance, schools have been privatised, health care has been contracted out to private care givers and care companies have taken over elderly care. Some employees in the private sector are therefore financed by public money. But there has been an employment transfer: the number of employees in local government has declined, while it has increased in the private sector. This means that some of the employment losses in the public sector and gains in the private sector are not related to recessions, but result from changed political preferences.

Data disclosing how many employees are working in the private sector supply of welfare services (paid by the taxpayer) is not readily and continuously available. Several estimations have been made, but none of them distinguish between female and male employees. If the persons employed in the publicly financed companies are added to the employees in local government, the decrease in the number of employed is smaller. But there is still a reduction in the number of publicly financed employment in local government: between 2007 and 2009 it declined by around 33,000 persons, i.e. by 3 percent (von Greiff, 2010, p. 8). This can be compared to the estimated 8,500 jobs saved in the local govern-
Women and men’s employment in the recessions of the 1990s and 2000s in Sweden

ment sector in 2010, by the temporary grants mentioned above. In 2009, the number of publicly financed employees in the private sector reached around 122,000, which is about 11-12 percent of the number of employed in local government. Around 94,000 were financed by municipalities and 28,000 by the county councils. The total number of employed in elderly care, disability care, individual and family care, pre-schools and schools in non-profit organisations, public organisations and publicly owned companies was relatively constant between 2003 and 2010, while the number of employed in profit-making enterprises increased from 11.1 percent in 2002 to 17.2 percent in 2010 (Hartman, 2011, Table 1.1 and 258). The share is largest in care of disabled and young persons, as well as persons addicted to alcohol or narcotics, where almost half of the employees work in the private sector. The share is around 10 percent for schools and elderly care, and 20 percent for preschools.

The above figures demonstrate that it is delicate to conclude about changes in private and public employment, since some of the apparent employment losses in the public sector and gains in the private sector are mere employment shifts. The number of employees in the local government is smaller today than in 1990: 1,236,000 in 1990 compared to 1,028,300 in 2013. This is mainly a result of employment losses but also of employment transfers. We can assume that, due to the occupational gender segregation, a transfer of care workers and teachers for example from the public to the private sector will be a transfer of women workers, which to a certain extent explains the increasing number of employed women in the private sector. The relocation means that more women today work in the private sector, which may mean that they will be more exposed to the economic cycle.

Whether it matters for the employees if the employer is the municipality or a private provider is not clear. In elderly care for example, the costs reducing measures and decreasing resources have meant deteriorating quality both in public and private elderly care. The Swedish Municipal Workers’ Union (Kommunal) (2012) has investigated differences between employees in elderly care in the municipalities and in private organisations. They did not find any differences between the two sectors in the share of employees who consider: i) low staffing to be a risk for the elderly, or a
problem in attending to their needs, or ii) who feel employees face greater difficulties in taking a break, or finally iii) in the share of employees working part-time. Two smaller differences were found, namely that employees in municipalities felt more that staffing was inadequate, and they also tend to have a higher level education in elderly care than employees in the private sector. The National Board of Health and Welfare (Socialstyrelsen) (2012, Diagram 4) found that there were fewer employees per manager when the provider of elderly care was private than when the provider was a municipality, while the municipalities had a larger share of employees with adequate occupational education, a smaller share of employees paid by the hour, and lower staff turnover.

Women’s employment in the public sector has been perceived as secure employment sheltering women in recessions and it is seen as an important factor as to why women have fared better than men. If this had been the case, then women in Sweden should have been protected since the public sector is large and many women work in this sector. But this is not the case. Local government could maybe be considered stable as long as it expanded, but starting in the 1990s layoffs and outsourcing became a reality. Additionally, in local government, working conditions are quite often not very secure since temporary employment, involuntary part-time work and relatively low wages are common.

3.3. The state sector

The state sector is relatively small in Sweden. About 5-6 percent of employees work in this sector (see Table Appendix B). There had been a big decrease in staff numbers, beginning in the early 1990s and lasting until 1999/2000 (Figure 6). 1992 was a peak year and 1999 a trough year. Men lost relatively more employment in this sector than women (-16.4 compared to -14.2 percent) (Table Appendix B). Then there was new peak in the total number of employees in 2004; in the recovery women gained relatively more than men (12.3 and 6.9 percent respectively).
Before the crisis, there had been a peak in employment in 2006. The employment trough was in 2008, with a very similar decrease for women and men of around 5 percent. This decline can be related to the change of Government in 2006: the Alliance government that came into power aimed at lessening the state bureaucracy and the number of government authorities (Prop. 2006/07:1, p. 48). In their first Budget Bill, they proposed that several government organisations should be closed down starting in 2007. This was the case with the Immigration Institute (Integrationsverket), the Institute for Working Life (Arbetslivsinstitutet) and the Institute for Prevention of Cruelty to Animals (Djurskyddsmyndigheten). Additionally, the Swedish Work Environment Authority (Arbetsmiljöverket) was slimmed down considerably. However, by 2013 the number of employees had again increased, and women gained more than men: 15.2 and 10.8 percent respectively, between 2008 and 2013.

Employment in the state sector did not hold up in the recessions, but there have been increases afterwards. The total number of employees in the state sector fell after the recession of the early 1990s and did not return to its previous level until 2013. Also, in the state sector there have been movements to the private sector, not as a result of fiscal consolidation but due to political decisions aimed at deregulating and converting public utilities into
independent subsidiary companies. Large privatisations of state-run companies started in 1989. They have proceeded over time and have involved companies in a large number of areas: steel production, telecommunications, banking, forestry, medicine, production of liquor etc. (Calmfors, 2012). Employees in air traffic control, electricity generation and distribution, postal services, railway and other transport, who were previously considered as state employees, are today included in the private sector. These are areas in which male-dominated, full-time jobs, with relatively good wages and secure employment and even life-time employment before, existed even among workers. The data used in this article have been reclassified and the employees in state owned companies have been included in the private sector. However, if old data are compared with new reclassified data, we find that in the beginning of the 1990s almost 100,000 men and 50,000 women working in the state sector were turned into private sector workers.\(^\text{12}\) For example in 1994, more than 50,000 persons employed by the Post office were transferred from state to private employment (SCB, 2002, p. 10).

Employment in the state sector decreased in both recessions, but women were doing better than men. The share of women in state sector employment increased during both downturns and upturns. The share of women was 46.5 percent in 1992 and 48.4 in 2004, and 49.8 percent in 2006. In 2013, they constituted a majority (51.0 percent) of state sector employees.

### 3.4. The three sectors

Let us finally look at the whole period and compare the overall peak year of 1990 with the latest year 2013, in each of the three sectors and the whole economy. Employment was lost in the private sector during the recessions, but there was also growth, and over the whole period of time, there has been an increase in the number of employed in this sector (see Table 1). Additionally women have been doing better than men in the private sector. The number of employed women increased much more than the number of men, which meant that the share of employed women rose in this sector. This was not the case in the local government

\(^\text{12}\) Calculated from SCB, 2002, p. 10 and SCB 2014b.
sector, where both women and men lost jobs in the recessions, while the expansions were very weak. Seen over the whole period, the number of employees in local government decreased especially among women. Women lost slightly more jobs in local government than they gained in the private sector. For men, the situation has been the reverse, but the numbers are much smaller. However, some of the employment gains in the private sector are not true gains and some of the losses in local government are not true losses, but mere employment shifts from the public to the private sector. In the state sector, employment also declined in the recessions and the gains in recoveries were weak, until the last couple of years. For the whole period of time, men lost jobs, while women gained some. Some of the job losses in the state sector have also been the result of job transfers to the private sector.

Table 1. Change in absolute numbers ('000s) and percentage shares of persons employed, and share of women (in percentage points), 1990 to 2012

<table>
<thead>
<tr>
<th>Change</th>
<th>Private</th>
<th>Local</th>
<th>State</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Total</td>
<td>7.1</td>
<td>212.9</td>
<td>-16.8</td>
<td>-207.7</td>
</tr>
<tr>
<td>Men</td>
<td>1.9</td>
<td>36.1</td>
<td>-10.1</td>
<td>-26.1</td>
</tr>
<tr>
<td>Women</td>
<td>16.8</td>
<td>176.8</td>
<td>-18.6</td>
<td>-181.6</td>
</tr>
<tr>
<td>Share of women</td>
<td>3.2</td>
<td>-1.7</td>
<td>3.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Calculated from SCB, 2014c.

The number of persons employed in the whole economy increased by around 9,000, or 0.2 percent between 1990 and 2013. Men gained about 4,000 jobs and women 5,000: i.e. women and men lost about the same number of jobs. The share of women of all persons employed in the private sector and in the state sector increased by 3.2 percent and decreased in local government by 1.7 percent. The share of women in total employment was 48 percent in 1990, as well as in 2013. It should however be pointed out that even if the number of employed women and men did not change much between 1990 and 2013, the share of employed women and men declined quite substantially during the period, by about eight percentage points for both sexes, as the population has increased.
4. Conclusion

The segregation hypothesis predicts that women are sheltered in recessions because they are over-represented in the public sector and this sector is less affected by the economic cycle, than are male-dominated manufacturing and construction. Gender segregation in the labour market is strong in Sweden, the local government sector is big and many women work in this sector. It could then be expected that women’s employment should have been protected in Sweden. However this has not been the case.

To start with, we can conclude for the whole economy that women did not lose more employment than men. However, the reason for this is not women’s over-representation in care, health and education in the local government sector, which is a big and important sector in Sweden. Both in the recession in the 1990s and in the 2000s, employment declined in local government, as well as in the state sector, while recovery was weak in both sectors, except for during the latest couple of years in the state sector. Women also lost employment in the private sector during recessions. But in this sector, growth was strong and the number of employed women expanded more than for men. This is partly because of an employment transfer from local government to the private sector, due to privatisation, outsourcing, etc. But structural transformations towards a bigger private service sector and employees with higher education may also benefit women.

Women fared better than men in the recessions and the recoveries in both the 1990s and 2000s, in terms of an increase in the share of female employees among all persons employed: in the whole economy, in the private sector, and in the state sector, but not in local government. The downsizing of the local government sector and the state sector is both a result of budget consolidation, especially in the 1990s, but also of changed political priorities. For the 1990 to 2013 period as a whole, the most significant change has been the loss of female employment in local government, and the growth of female employment in the private sector. Female and male employment increased by about the same amount of jobs and the share of female employees (48 percent) was the same in 1990 and 2013. But, a significant change has been the decline in the employment rate of about eight percentage points for both sexes, in this period!
### Appendix A

Table: Change in absolute numbers (‘000s), and in percentage points between peak 1-to-trough and between trough-to-peak 2, employed men and women, and women’s share of the employed: the 1990s recession and 2000s recession.

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Women's share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change</td>
<td>Change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>Numbers</td>
<td>%</td>
</tr>
<tr>
<td>Peak 1, 1990</td>
<td>-13.5</td>
<td>-315.7</td>
<td>48.0</td>
</tr>
<tr>
<td>Trough, 1994</td>
<td></td>
<td></td>
<td>48.6</td>
</tr>
<tr>
<td>Trough, 1997</td>
<td>-12.7</td>
<td>-272.3</td>
<td>47.9</td>
</tr>
<tr>
<td>Peak 2, 2001</td>
<td>9.2</td>
<td>185.1</td>
<td>48.0</td>
</tr>
<tr>
<td>Peak 2, 2002</td>
<td>8.9</td>
<td>166.7</td>
<td>48.2</td>
</tr>
<tr>
<td>Peak 1, 2008</td>
<td></td>
<td></td>
<td>47.7</td>
</tr>
<tr>
<td>Trough, 2009</td>
<td>-2.9</td>
<td>-68.1</td>
<td>48.0</td>
</tr>
<tr>
<td>Trough, 2010</td>
<td>-1.9</td>
<td>-40.2</td>
<td>47.7</td>
</tr>
<tr>
<td>Peak 2, 2013</td>
<td>3.9</td>
<td>88.2</td>
<td>4.2</td>
</tr>
</tbody>
</table>

*Source: Statistics Sweden 2014c, seasonally adjusted monthly data, recalculated to annual data with a formula provided by Jacob Hansson, Statistics Sweden, 12 April 2013.*
Appendix B

Table: Change in absolute numbers (‘000s), and in percentage points between peak 1-to-trough and between trough-to-peak 2, employed women and men, and women’s share of the employed in the sector, share of employed women among all employed women, and share of employed men among all employed men: the 1990s recession and 2000s recession.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Men</th>
<th>Women</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak 1, 1990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trough, 1993</td>
<td>-15.2</td>
<td>-295.4</td>
<td>-13.2</td>
</tr>
<tr>
<td>Peak 2, 2001</td>
<td>13.4</td>
<td>220.8</td>
<td>16.9</td>
</tr>
<tr>
<td>Peak 1, 2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trough, 2009</td>
<td>-3.6</td>
<td>-70.5</td>
<td>-0.6</td>
</tr>
<tr>
<td>Peak 2, 2013</td>
<td>3.6</td>
<td>68.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Local government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak 1, 1990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trough, 1997</td>
<td>-14.6</td>
<td>-37.8</td>
<td>-14.6</td>
</tr>
<tr>
<td>Peak 2, 1999</td>
<td>4.4</td>
<td>9.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Peak 1, 2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trough, 2010</td>
<td>-0.2</td>
<td>-0.4</td>
<td>-6.9</td>
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<td>Peak 2, 2011</td>
<td>0.7</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>State</td>
<td></td>
<td></td>
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<tr>
<td>Peak 1, 1992</td>
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<tr>
<td>Trough, 1999</td>
<td>-16.4</td>
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<tr>
<td>Trough, 2008</td>
<td>-5.6</td>
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<td>-5.0</td>
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<tr>
<td>Peak 2, 2013</td>
<td>10.8</td>
<td>12.3</td>
<td>15.2</td>
</tr>
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</table>

Source: Calculated from SCB 2014c.
References


