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Office Work in Sweden in the Mid-1930s

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Pay Differentials and Gender-Based Promotion Discrimination in a Dual Labour Market

Office Work in Sweden in the Mid-1930s

Lars Svensson

Abstract

Historical studies indicate that determinants of the gender wage gap have varied through history. This paper suggests that employment discrimination dominated over wage discrimination in clerical work in Sweden in the mid-1930s. Women were largely excluded from career paths in the offices. This is explained within an analytical framework, in which segmented labour market theory, notably concepts related to internal labour markets, is combined with a simple model of statistical discrimination. The analysis suggests that rational employers allocated men and women to different segments of this particular labour market on the basis of differences in predicted tenure. Men were typically selected to career paths where firms invested in their human capital, because men's predicted long spells of employment in the firm increased the probability of gathering the returns to these investments. Shorter predicted tenures made it rational to allocate women to dead-end jobs with early productivity crests, where high turnover rates were advantageous for the firm.

Introduction

Historically women earned lower wages than men. This could be due to wage discrimination, but only if women were equally productive in the jobs they performed. Usually women and men also worked in different occupations with women clustered in low paid jobs. If this was the result of a process where equally productive or potentially productive workers were assigned to jobs of different skill levels the wage gap was determined by employment discrimination. Recent work by Joyce Burnette suggests that in industrial revolution Britain as well as in nineteenth century New England the female-to-male wage ratio reflected relative productivity. Burnette also argues that occupational segregation by sorting women into jobs with low physical strength requirements actually benefitted female incomes (Burnette 2007 and 2008).

These findings are in line with what has been proposed by Claudia Goldin. In her history of American women's paid work Goldin maintains that wage discrimination was insignificant before 1900 but increased during the first half of the twentieth century. In the nineteenth century most jobs were part of a "spot market", where workers generally were paid the value of their labour's marginal product. This changed as women increasingly moved to jobs in the service sectors and to white-collar work in manufacturing. "Observable characteristics" explained 80 per cent of the gender wage gap in manufacturing around 1890, but only 45 per cent in office work in 1945 (Goldin 1990:114-115).

This paper aims at adding a piece of evidence to the claim that discrimination was a significant determinant of the gender wage gap in the twentieth century. The study is about office work in the private sector in Sweden in the mid-1930s. The inter-war years were a period of considerable progress for women in the Swedish labour market. A major reform in 1927 gave female students access to most state financed secondary schools, and local authorities established lower secondary schools for girls. The number of female students in secondary education increased more than threefold between 1920 and 1940. This meant that increasingly more young women matched the skill demands from an expanding service sector. In addition, an administrative reform that took effect in 1925 opened up positions in public administration and public utilities for women (Svensson 2003:377-78).

This development is probably the most important explaining factor behind the significant reduction of the gender wage gap in the inter-war period. Between 1920 and 1940 the aggregate female relative wage

increased from 58 to 68 per cent of the male wage. This was mainly due to the fact that women increasingly found employment in relatively well-paid sectors. The number of women employed in low-paid domestic services decreased from 39 to 25 per cent in that period, while the share of the female labour force employed in better-paid sectors such as Public services and Trade & commerce almost doubled to 21 per cent. But in spite of the fact that the cohorts of young women who entered the labour market in the 1930s were better educated than their mothers and demand for their labour was growing, within-sector gender wage gaps in fact increased in most sectors (Svensson 2003:375).

Public services, including public utilities, experienced an increase in the wage gap from 25 to 34 per cent. Political and ideological factors may partly explain this puzzle. In the public sector wages and terms of employment were largely regulated by political decisions. Power relations, vested interests and perhaps ideological inertia may have worked against and neutralized the effects of market forces that were favourable to women. Women's position in the labour market was contested during the period, which showed for example in parliamentary debates and propositions submitted to the parliament (Frangeur 1998). Only in the second half of the 1930s did a couple of parliamentary decisions serve to promote gender equality in the labour market. Equal pay for female and male school-teachers - a principle that had been abandoned in 1906 - was reintroduced in 1937, and in 1939 employer's right to dismiss female employees at the time of marriage was repealed through legislation (Svensson 2003:179).

From 1925 positions in government services and public utilities were in principle, and with few exceptions, open to women. Female employees were integrated into the existing male wage scales mainly according to the principle of equal pay. This contrasted with the conditions that prevailed before 1925, when women employed in lower level positions in the public service sector frequently performed the same tasks as men, although at a substantially lower remuneration. This was particularly the case in mail services and telecommunications. If the principle of equal pay were to be applied to the new situation, and given that male wages were left unchanged, this would bring a significant increase in labour costs and, consequently, in government expenditures. For state-financial reasons, the parliament decided to design a system in which each task was divided into two positions that were put in two different salary grades, one higher and one lower. Men were typically placed in the high-grade and women in the low-grade positions. Consequently, the gender pay gap was preserved or even

widened. Only afterwards, and serving to justify the existing job segregation and pay differentials, were differences in tasks and educational requirements between positions introduced.

The gender wage gap in clerical work in the private sector stayed constant at 42 per cent during the entire inter-war period. The question is whether this lack of progress was also determined by labour market segregation. If so, the determinants of that segregation were probably different. Decisions taken by employers exposed to competition in both commodity and factor markets had to be based on some kind of economic rationality. This paper addresses these issues by analyzing pay differentials and its determinants in a sample of Swedish private sector clerical workers in the mid-1930s.

Clerical work

Clerical work was an integrated part of the total production of goods and services in a firm. The scope, scale and nature of this work were determined by the division of labour in the production process at large. This is probably most clearly demonstrated with respect to industrial production. From 1920 to 1940 the proportion of white collar workers in the manufacturing industry increased from 10 to 14 per cent of the total workforce (SOS Industri 1920 and 1940). The expansion of clerical work, which was part of this development, was an effect of the splitting up of the work process, notably the increased vertical division of labour with work tasks detached and moved from shop floor to office. The process was also one of feminisation. The female share in clerical work increased from 28 to 43 per cent between 1920 and 1940 (Sociala Meddelanden 1922:532; Lönestatistisk årsbok 1940: 73). The simultaneous expansion of retail trade, banks and insurance companies was part of the same process of diversification.

The early decades of the twentieth century brought great changes in technology and organisation of clerical work. Not only were work tasks transferred from shop floors to offices, but new forms of “scientific management” were also introduced in office work (Greiff 1992, ch. 4). The mechanisation of office work had started before the turn of the century, but only along with the new forms of work organisation introduced in the inter-war period did it exert a major influence on the work process. It seems as if Tayloristic division of labour was applied not only to the firm at large but also to the more limited field of clerical work.

The data

Three different reports from the mid-1930s contain data on employment and salaries of private sector salaried employees in Sweden. In 1938 the Swedish Board of Social Welfare published an investigation covering wage and employment conditions in 1936 of a selected group of white collar workers. The total sample included 9000 salaried employees, half of them employed in clerical work. Another survey by statistician and sociologist Fritz Croner was based on a sample of 7377 employees, of which 4300 were employed in clerical work. Finally, the employers' organisation of the banking sector initiated a study in 1937 of the pay structure, which included all salaried employees in the sector.

The analysis in this paper is primarily based on the study accomplished by the Board of Social Welfare, since it contains the most detailed information on employment and salaries. The data are group data. This means that we have information about the number of people employed and the average salaries in groups of employees holding different positions. On the basis of a primary grouping data is reported for 17 positions. Employees in these positions are further divided into subgroups on the basis of gender, number of years of employment in the *sector*, in the *firm* and in *current position*. In addition there is information about the distribution of the employees in these subgroups on industrial sectors, on age groups and on civic status.

Theoretical framework

The economy wide gender wage gap fell during the interwar years. Women moved from low paid to better paid sectors but relative wages remained more or less constant within sectors. In clerical work in the private sector the gender wage gap in stayed constant at 42 per cent during the entire period. In contrast to the public sector this was only to a minor extent the result of wage discrimination, that is to say unequal pay for equal jobs. Rather, it was mostly due to the fact that men and women occupied different positions in the employment structure. Controls for position and experience (years of employment in the sector) reduce the wage gap from 42 to 19 per cent. Was this the result of employment discrimination? In other words, were equally productive or potentially productive female and male workers assigned to jobs of different skill and wage levels?

Obviously, the unequal distribution of women and men on positions in the occupational structure of the office had very little to do with differences in formal education. In fact, female employees had accomplished more formal schooling than their male colleagues but occupied mainly low paid positions in the lower segment of the occupational structure. 51 per cent of the women had achieved more than basic education and 62 per cent also some vocational training. The corresponding figures for men were 38 and 55 per cent. On the whole, as pointed out by Croner (1939:153), formal education did not have any significant impact on salaries, and consequently did not contribute to the gender differences in pay.

This means that differences in human capital and potential skill differentials will not be able to explain occupational segregation by gender and gender wage differentials. Hence standard human capital theory will not be suited for the present analysis. Hence we shall employ a framework which utilizes a sociologically based conception of the labour market. More specifically, we shall rely on a theory of segmented or dual labour market models.

The conceptual characteristic of a dual labour market, laid out in Doeringer & Piore (1971), Thurow (1979), Piore (1979) and Okun (1981), is that it can be described by the presence of an upper and a lower segment.¹ The upper segment exhibits the characteristics of an internal labour market. Positions are ordered on internal career ladders with a pay structure according to seniority on each step, and individuals are recruited to positions on the career ladder through a firm-internal process. Job ladders are entered through positions at lower levels within the firm. The lower segment consists of dead-end jobs with low pay, poor working conditions and high labour turnover.

Candidates are assumed to compete for entry to career ladders leading to upper tier positions. A frequently used metaphor is the employment queue. Applicants are ranked in some order related to an assessment of their future productivity, and employers then hire along the queue until they have filled their requirements.

The assessment of individual applicants' relevant characteristics is based on a calculation of training costs in relation to future productivity. In comparison with human capital models the importance of schooling is

¹ Reviews of the segmented labour market literature in recent papers indicate that not much has been added to the pioneering theoretical work from the 1970s and 1980s, notably by economists such as Piore, Doeringer, Okun and Thurow and sociologists such as Kalleberg and Osterman (see e. g. Leontaridi 1998, Camuffo 2002 and Launov 2004).

played down. Individual labour productivity is assumed to be basically determined by the technology and organisational structure of production, firm-internal training, and by the complementarity between capital and skills.. "Marginal products are associated with jobs and not with individuals. The operative problem is to pick and train workers so that they can generate the desired marginal product of the job in question with the least investment in training costs." (Thurow, 1979:18.)

The permanency of employment is crucial factor that conditions the assessment of training costs to future revenues. This forms the rational for creating significantly strong ties between employee and employer in the upper segment of the labour market in the shape of long-term implicit contracts or other institutional arrangements (Doeringer and Piore, 1971:76-77, Okun 1981:81-85). It makes the connection between wages and the marginal productivity of labour, although still governed by the "competitive constraint", a lot weaker than in the standard neo-classical model. Neither employees nor employers have to concern themselves with the relations of labour costs, earnings, and productivity *at any specific point of time*. This is rather a relationship to be considered in terms of the whole working career in the firm.

For jobs in the upper segment of the labour market, employers prefer workers to have long expected tenure. In contrast to human capital theory, segmented labour market theory assumes that employers pay for the training of workers in internal labour market careers. In the initial phase of employment, employers offer wages above the marginal productivity of the workers. Training costs will be recouped in a later phase when marginal productivity exceeds the wage.

In a first step of the subsequent analysis we shall address the question whether private sector clerical work in Sweden in the 1930s showed the characteristic features of a dual labour market. In a next step we shall analyse the distribution of men and women on over segments and positions in the office work. The third step will examine the proximate determinants of gender pay differentials in order to detect how much of the gap that can be attributed to position and to individual differences in human capital endowments respectively. Finally, the process of gender based segregation is discussed in a model of statistical discrimination, where rational employers use negative discrimination to allocate men to the upper segment of the labour market but also take active measures to allocate female labour to the lower tier.

Did clerical work constitute a dual labour market?

The characteristic features of a dual labour market were listed in a previous section. Hence the labour market of office work in Sweden in the 1930s exhibited a dual structure if our data show that

- it comprised an upper and a lower segment
- recruitment to upper level positions was mainly a firm-internal process
- pay differentials were tied mainly to positions
- individual differences in human capital was not a major determinant of pay differentials
- positions in the upper segment were ordered on a career ladder
- employees in the upper segment were remunerated according to a seniority principle
- the lower segment consisted of typical dead-end jobs

The very denominations of the different positions in office work suggest that these formed a hierarchy of positions and constituted a considerably heterogeneous group. In terms of salaries there was a span between 8500 kronor per year for the most experienced group of office managers and 1255 kronor per year for the least experienced group of female employees performing “ordinary independent tasks” (SOS 1938: 112). These two characteristics, denomination and average pay, is the basis of a preliminary ranking of positions. We assume at this point that the positions can be grouped into an upper and a lower segment, but which positions belong to which group will only be determined after and on the basis of the results of the subsequent scrutiny of the extent to which the characteristics of different positions meet upper and lower segment criteria.

Table 1 Median years of employment

Years of employment in	
current sector	14.6
current firm	12.9
current position	7.9

Source: Own computations from SOS Undersökningar rörande arbetstidsförhållanden och lönevillkor för privatanställda. Socialstyrelsen, Stockholm 1938.

Information on length of employment in sector, firm, and position do give, by comparison, some indirect evidence of internal recruitment and career ladders. *Table 1* demonstrates that the average length of employment in the sector was only 1.7 years longer than in the current position, while the difference between time in current firm and time in current position amounted to 5 years. Hence there was more mobility within than between firms. Differences between positions at different levels in the hierarchy (*Table 2*) indicate that within-firm mobility may be interpreted as internal career ladders.

Table 2 Median years of employment by level of position

	In current sector	In current firm	In current position
Upper level	17-27	17-27	7-12
Middle level	11-16	9-15	7-9
Lower level	7-11	6-9	5-7

Source: see Table 1

Note: In the survey carried out by The Board of Social Affairs employees were classified into 16 different positions. I have used the median salary to form these into three groups. The upper group is composed of the top 25 per cent in the income distribution, the lower group of the bottom 25 per cent and the middle group of the remaining 50 per cent.

Length of employment consistently increased with position level. But differences were bigger with respect to time of employment in the firm than to time in current position, implying that employees at the upper level usually had spent a considerable amount of time in the firm before they reached the current position. Differences between length of employment in the firm and in the sector were small, which indicates limited movement between firms.

Employees in positions at the lowest level exhibited small differences between time of employment in position, firm, and sector. A mobility pattern of this type with high mobility between positions within the firm but low mobility between firms is a typical feature of internal labour markets.

Moreover, employment in these low level positions tended to be relatively short term, which means that few employees stayed in these positions. Either they moved on up the career ladder or left the firm. This suggests that these positions for some employees served as the lower rungs of a career ladder, while for others they became dead-end jobs.

The female share of employment varied significantly between positions. Of the stenographers were 95 per cent women, compared to less than two per cent of the composite group of office managers, departmental

heads and chief accountants. The skewed gender distribution of positions was systematic: the higher the position, the larger the proportion of men. *Table 3* demonstrates that women had very limited access to positions at the upper level, while disproportionately few men were found in lower level positions.

Table 3 Distribution of office employees by gender and position levels

	Share of total labour force	Share of female employees	Share of f male employees	Proportion female employees in group
Upper level	25	6	34	7
Middle level	50	57	47	36
Lower level	25	38	19	56

Source: see Table 1

Note: For classification in groups, see Table 2.

This seems to indicate that the mobility pattern revealed in the previous section did not hold for women. Differences in female and male average spells of employment gives further support to that conclusion. Women showed considerable shorter within-sector and within-firm spells than men, while the difference was small with respect to length of employment in current position (*Table 4*).

Table 4 Median years of employment by gender and position

	Female	Male
In current sector	10.6	16.1
In current firm	9.3	14.5
In current position	7.6	8.1

Sources: See table 1

Between-firm mobility relative to length of employment in current sector was slightly higher for women than for men, while within-firm mobility relative to length of employment in the firm was higher for men than for women. This pattern is even more evident in the data separated by position (*Table 5*).

Table 5 Median years of employment by gender and position

Position	Female employees in current			Male employees in current		
	sector	firm	position	sector	firm	position
Office managers	-	-	-	19.9	16.9	9.2
Accountants	-	-	-	27.0	26.3	11.8
Chief cashiers	-	-	-	17.1	15.6	6.9
Assistant cashiers	17.5	13.8	10.4	17.5	14.6	8.6
Head bookkeepers	8.8	7.7	7.0	12.3	10.6	6.9
Assistant bookkeepers	13.7	12.0	9.3	17.2	16.1	8.9
Foreign correspondence secretaries	13.0	12.2	8.5	13.2	11.9	8.1
Assistant correspondence secretaries	10.3	10.3	8.3	14.4	12.6	8.5
Typists	9.7	8.6	7.3	9.6	8.6	4.9
Accounts payable secretaries	7.9	6.5	5.6	-	-	-
Office employees performing specialized independent tasks	-	-	-	8.6	7.9	8.5
Office employees performing ordinary independent tasks	6.9	5.6	4.6	-	-	-

Sources: See table 1

In five out of the six positions, where information for both men and women is available, women's length of employment in current position exceeded that of men's. With respect to employment in current firm the picture is exactly the opposite; only in one case did the female length of employment exceed that of the male.

Table 5 reveals a typical pattern with a much more pronounced difference between length of employment in current firm and in current position for men than for women. Within-firm mobility was higher for men than for women, indicating that more men than women found their way to career ladders. This is consistent with the view of these workplaces as dual labour markets. The upper tier, which exhibited the characteristics of an internal labour market, was predominantly male. Women were crowded in the lower tier, which resembled an external labour market with low salaries, high rates of turnover and low upward mobility.

Differences in pay were significant between groups of employees. The median of the top quartile in the classification previously used in *Table 2* was more than three times the median of the middle group, which in turn

was double that of the bottom quartile. *Table 6* shows earnings differentials of five positions covering 75 per cent of the total number of the sample (71 per cent of the males and 79 per cent of the females). The salary differentials partly reflect dissimilarities in tenure. The average increase in earnings from a year of experience was 2.4 per cent. The salaries used in *Table 7* are adjusted for the experience premium.

Table 6 Annual salaries in kronor in selected positions adjusted for differences in time of employment in current firm. Index (office employees performing ordinary independent tasks = 100).

Position	Median salary	Index
Office managers	6 705	276
Cashiers	4 768	197
Assistant bookkeepers	4019	166
Office employees performing specialized independent tasks	3871	160
Office employees performing ordinary independent tasks	2421	100

Sources: See table 1

Table 7 shows that salary dispersion within positions was rather modest, and somewhat smaller among female than male employees.

Table 7 Dispersion of salaries between selected positions. Upper quartile to lower quartile (P_{75}/P_{25}).

Position	Men	Women	All
Office managers	1.78	2.45	2.45
Cashiers	1.58	2.40	2.40
Assistant bookkeepers	1.61	2.23	2.23
Office employees performing specialized independent tasks	1.52	1.98	1.98
Office employees performing ordinary independent tasks	1.78	1.92	1.92

Sources: See table 1

Note: Wage dispersion is calculated as the ratio of upper quartile to lower quartile (P_{75}/P_{25}). The total dispersion is calculated as the ratio of upper quartile in the male distribution to the lower quartile in the female distribution

Salary differentials within positions appear in *Table 8*. The reported figures are the ratios between median salaries of employees with 2-5 years and 10-20 years of employment in current position. The effect of tenure appears to have been stronger in lower than in higher positions, which indicates a seniority effect on salaries separate from career premium. Employees who had not been promoted were to some extent compensated by higher returns to experience in current position.

In his extensive study of salaries and employment of clerical employees Croner (1939:153) explicitly stated that “With regard to clerical employees --- it is totally clear that there was no relation between salary and education.” A similar conclusion was drawn in the report to the Board of Social Welfare: “It seems difficult --- to gather from the data any firm association between education, general or vocational, and salary.” (SOS 1938: 129). Accordingly, the conclusion is that promotion and tenure were the principal determinants of salary differentials.

Table 8 Ratio of median salaries of employees with 2-5 to 10-20 years of employment in current position.

Position	
Office managers	1.17
Cashiers	1.25
Assistant bookkeepers	1.24
Office employees performing specialized independent tasks	1.42
Office employees performing ordinary independent tasks	1.64

Sources: See table 1

Gender salary differentials may then be explained by differences in the distribution of women and men on positions and differences in tenure. A residual of unexplained variables may be hypothetically attributed to direct sex discrimination. *Table 9* presents gender wage ratios for five positions, divided as detailed as the data admit into groups according to time in current position. Regrettably the intervals are quite large. There are reasons to believe that within these intervals men generally had longer time of employment than women. Moreover, the classification into positions is also rather coarse with considerable variations in earnings between, for

example, workplaces of different sizes. An investigation of salary conditions in Swedish banks in 1937 testified that more women than men were employed in small offices with lower salaries (Banklönerna 1937:37).

Table 9 Ratio of female to male salaries in selected positions by years of employment in current sector

Position	< 2	2-5	5-10	10-20	> 20
Cashiers	0.66	0.82	0.68	0.72	0.80
Assistant bookkeepers	0.78	0.75	0.75	0.71	0.77
Office employees performing specialized independent tasks	0.84	0.89	0.85	0.81	0.82
Office employees performing ordinary independent tasks	0.85	0.89	0.94	0.91	0.79

Sources: See table 1

These deficiencies probably create an upward bias in the female-to-male wage ratio, which should be kept in mind when considering the figures in *Table 9*. The unadjusted female relative wage for the whole sample is 56 per cent. The weighted average for the subgroups reported in *Table 10* is 0.81. Only four values are below 0.75 and the majority amount to more than 0.80. The big differences between positions are worth noting. The ratio for cashiers and bookkeepers is 0.74, for office employees performing specialized independent tasks 0.83, and for office employees performing ordinary independent tasks 0.91. Part of the gap was probably due to the previously discussed upward bias that resulted from in-group differences in experience and workplace, but it may also reflect systematic differences in direct discrimination. It seems as if direct discrimination increased up the career ladder.

If the weighted average (0.81) were adjusted for the discussed biases, a reasonable guesstimate of the part of the gender salary gap that can be attributed to differences in tenure and in unequal distribution of men and women in positions would be 85-90 percent. Hence these two factors would explain about 80 per cent of the total gender salary gap.

Determinants of segregation

The previous analysis suggests that clerical work in the mid-1930s significantly matched the characteristics of a dual labour market. One fraction of

the positions was structured as career ladders to jobs in the upper tier, while another mainly consisted of dead-end-jobs in the lower tier. Men were systematically allocated to the former, women to the latter.

The gender-based segregation, together with differences in tenure explains the main part of the gender pay gap. Counterfactual calculation would probably provide a rough estimate of how much can be attributed to each one of the two. I shall refrain from that, because I believe that the two are too closely related to be meaningfully separated. Rather, the following search for second order determinants of gender-based promotion discrimination will concentrate on the mutual relation between segregation and forces that affect patterns of female labour force participation.

In the Thurow labour market model employers hire along a queue of applicants that are ranked according to the assessed relation between training costs and future productivity (Thurow, 1979:18). As stated before, a crucial factor conditioning the calculus is the presumed permanency of employment

For jobs in the upper segment of the labour market, employers prefer workers to have long expected tenure. This is so because employers are assumed to pay for the training of workers in internal labour market careers by offering salaries above the marginal productivity of the employees in the initial phase of employment. Training costs will then be recouped in a later phase when marginal productivity exceeds the wage. (See *Figure 1, left panel*)

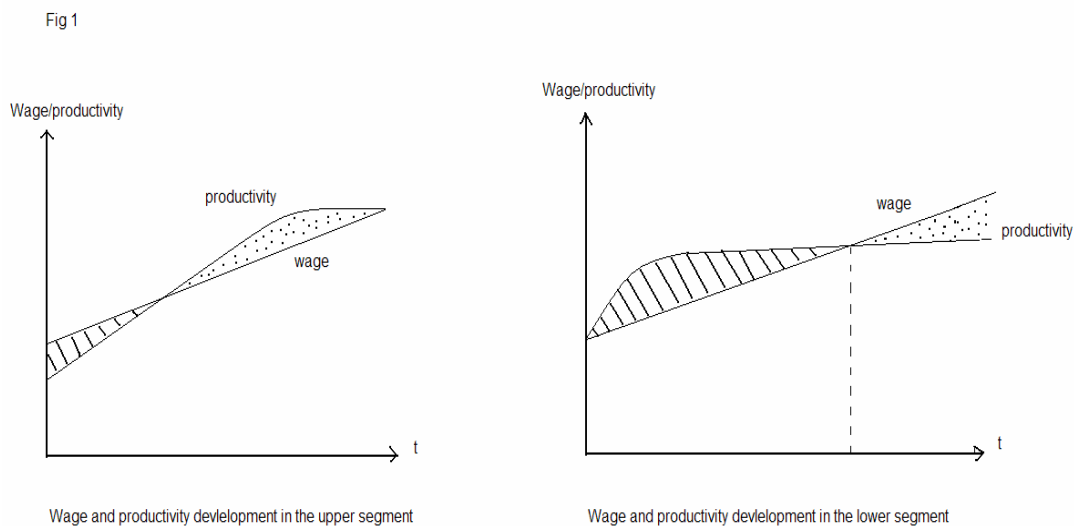
Since employers observe that women on average have shorter tenure than men, all other things being equal they prefer men to women in the upper segment of the labour market. The higher the employers' training costs and the greater the relative importance of internal training for marginal productivity, the more weight will be ascribed to expected tenure. Information that directly predicts future tenure is, however, difficult and costly to collect. This is why sex is taken as a proxy for such information and women are relegated to the back of the queue for upper segment jobs. The employers' application of such "statistical discrimination" is rational, if sex is sufficiently correlated with the unobservable characteristics, in this case future tenure (Phelps 1972).

Optimal turnover in the lower segment

The argument concerning the advantage of long expected tenure must not, however, be generalised to the entire labour market. There is a tendency to

overstate the costs and neglect the advantage of labour turnover. I shall argue that given the characteristics of the lower segment of a dual labour market, firms may even have an interest in promoting turnover and shorten the average length of employment. This means that it is rational for employers to prefer workers with short expected tenure for jobs featuring lower segment characteristics. In the event that learning curves are short, productivity crests are early, and given that the seniority principle to some extent is applied to long-term wage setting, wages will tend to exceed marginal productivity in the case of long employment duration. Consequently short tenure will be more profitable to the employer (*Figure 1*, right panel).²

Figure 1 Wage and productivity tracks in the upper and lower segment of a dual labour market



² When jobs of both segments exist in the same firm it is unlikely that conditions in the lower segment are totally unaffected by conditions in the upper. It is crucial to the line of argument presented below that the importance of seniority or tenure in the determination of the wage structure will spill over to some extent from the upper to the lower segment, even though the seniority principle is not an optimal institutional arrangement for wage setting in jobs with early productivity crests. Detailed data on the wage distribution in 1965 of female clerical workers at the second lowest level (BNT code 9007 in *Löner för tjänstemän*), provides an example. It shows that the peak of wage advancement was reached at the age of 50. Although the earnings profile flattened considerably after the age of 30, the wage of a female clerk of 45 was 10 per cent higher than that of a 35 year-old female doing the same job. (Own computations from SAF, *Löner för tjänstemän* 1965.)

A parliamentary commission described the effects of shifts in technology and organisation on work tasks in words that include a description of jobs with short learning curves and indicate seniority in long-term salaries, i.e. exactly the conditions that should make short expected tenure attractive to employers.: “Periods of learning are short and work tasks tend to be gradually more mechanised and demand swiftness and intensity, which can more easily be attained by young labour. Likewise the proportion of older employees who generally demand higher salaries and pension rights will diminish successively.” (SOU 1938:47: 320)

Employers may take a variety of measures in order to prevent the length of employment from exceeding that point, which means they may provoke what Cohn (1985) labelled “synthetic turnover”. One is the kind of selective employment that has been documented here for the lower segment of clerical work. Women were employed in these jobs not only because they were excluded from the upper segment but also because of a positive assessment of their characteristics, notably short expected tenure. Another strategy may be to introduce some kind of “tenure bars”, that is to restrict employment to a spell specified in advance. This, Cohn says, “may create fundamental problems of legitimacy” (Cohn 1985:94). In the present context there was, however, a group of employees who could legitimately and legally be dismissed: women at the time of marriage. This did not become illegal until 1939, and such dismissals seem to have been routine behaviour. The parliamentary investigation previously referred to reported that 45 per cent of all women employed in commercial and clerical work were dismissed at marriage. Formulations in the text indicate that dismissals were more frequent in clerical than in commercial activities. In banks and insurance companies dismissal at marriage was the rule (SOU 1938:13:13-14).

Hence, conditions in the lower segment of the labour market formed a rational basis for positive statistical discrimination against female applicants for these jobs on two grounds. First, predicted tenure was short because of a high natural turnover. Many women left their employment voluntarily at marriage. In addition, firms were able to “synthetically” add to the “natural” female turnover in order to reach an optimal level. This could only be legitimised for female employees. The result was that men and women were employed in low level positions which appeared to be quite similar, but *for men* these were integral parts of the internal labour markets, that is entry level positions to career ladders. *For women* they

were typically located in external labour markets, i.e. they were dead-end jobs.

This does not conflict with the observation that women themselves often chose to quit their employment at the time of marriage. On the contrary, the legitimacy that made routinely effected dismissals possible could not be based on legal rights only. It had to conform to the general value system of the society. In conclusion, for firms to dismiss female employees at marriage was economically rational, and also feasible, because it was legally as well as morally justified.

Just as employers could optimise female employment duration by means of “synthetic turnover”, benefits that served to increase the employment length were offered to employees on career tracks. The most frequently used were probably pension schemes that demanded *lång och trogen tjänst* (long and faithful service) (Harrysson 45-48).

Sociological and cultural determinants

But some women did climb the career ladder. To be sure, only very few reached the highest positions. Likewise, very few men stayed in the lowest positions. The exceptions demonstrate, however, that after all there were rival principles of organisation.

Female employees who reached middle level positions generally did so faster than men. One explanation may be that women often were equipped with more formal education so that they could compensate expected shorter tenure with higher investments in schooling. Cashiers, the middle level position in which most women were employed, obtained the lowest relative wage of all, which is true also when adjusted for experience. Lower salaries and higher formal education may have created a competitive advantage for female employees in these positions.

Not surprisingly, women who continued to be employed after 30 were relatively more successful in terms of career than women generally. Most of them were single, and so was a vast majority, close to 90 per cent, of the women who held positions above the lowest level. Presumed flexibility with regard to working hours in this group of women was appreciated by employers (SOU 1938:47, p. 114). In contrast, married women who remained employed were concentrated in the lowest positions. In conclusion, the few women who managed to climb a few steps on the career ladder were single and supplied well educated, flexible and cheap labour.

An additional question is how these relatively well educated women could be recruited to low paid positions with limited career prospects. In a

study of office culture ethnologist Birgitta Conradsson characterised the office as a workplace not associated with any particular profession. The professional identity of clerical workers was vague, and office work was often not a deliberate choice but rather a result of rejecting other alternatives. The choice, Conradsson believes, rather concerned the work environment and the conspicuous prestige of the office more than the work itself. (Conradsson, p. 73)

For young women who had acquired more than a basic education, office work was one of the few socially acceptable alternatives. Many came from middle class families, where industrial or domestic work was regarded as socially degrading (SOU 1938:47, p. 112). And women from the working class who had acquired a secondary education certainly had been supported by parents with social ambitions which excluded such alternatives.

An additional sociological determinant of the supply function for female labour to this segment of the labour market was the “pinmoney philosophy” that was rooted in the middle class. (SOU 1938:47, p. 113) Formerly, middle class girls had normally not been gainfully employed. They had been supplied with full board in their homes, and some pinmoney for their own expenses. As they entered the labour market the function of the pinmoney was transferred to the salary they earned (Conradsson, p. 78). Together with the lack of socially acceptable alternative jobs, this may have contributed to an eastward shift of the labour supply function.

Final remarks

The combined effect of job segregation by gender and gender differences in employment duration probably explains as much as 90 per cent of the gender salary gap in Swedish offices in the 1930s. These two determining factors have been analysed in this study as mutually reinforcing in a dual labour market model where statistical discrimination is practised to allocate female and male employees to positions in a hierarchy.

Office work was organised as dual labour markets. Positions were structured hierarchically, with clear career paths leading to positions in the upper segment. Entries to career ladders were through low level positions. Positions on the lowest level could be attained by both men and women. For men these positions served as entries to career ladders with internal education and on-the-job training, while for women they constituted dead end jobs. Formal schooling was not a significant determinant in the selec-

tion process. More important, and a main reason why men were placed up front in the queue to career paths was their longer expected employment duration. Firms invested in their human capital by paying salaries above their marginal productivity. The system required that they stayed long enough for the firm to reap the fruits of its investment as productivity would later exceed the salary.

Women were preferred for many lower level positions because of their expected shorter tenure. In the absence of training costs and with low female salaries in jobs characterised by short learning curves and early productivity crests, and given some seniority in wage setting, firms benefited from a high rate of turnover in these positions. This is why women were preferred and also why existing possibilities, legally or culturally justified, of speeding up the turnover were utilised. When interpreted within a dual labour market model, the discriminating behaviour of firms, which denied women access to career ladders and instead assigned them to dead-end-jobs, does seem economically rational. So does further stimulation of women's already high rate of turnover, which derived support from a set of self-reinforcing legal as well as cultural institutions primarily linked to the male-breadwinner family.

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